

By Mr. JARMAN:

H.R. 15341. A bill to abolish the U.S. Postal Service, to repeal the Postal Reorganization Act, to reenact the former provisions of title 39, United States Code, and for other purposes; to the Committee on Post Office and Civil Service.

By Mr. LITTON (for himself and Mr. MANN):

H.R. 15342. A bill to establish a Department of Social, Economic, and Natural Resources Planning in the executive branch of the Federal Government; to the Committee on Government Operations.

By Mr. MOAKLEY:

H.R. 15343. A bill to amend the Internal Revenue Code of 1954 to allow for a temporary period a deduction equal to the increase in residential electricity expenses occurring after January 1, 1973; to the Committee on Ways and Means.

H.R. 15344. A bill to amend the Internal Revenue Code of 1954 to allow for a temporary period a tax credit equal to one-half of the increase in residential electricity expenses occurring after January 1, 1973; to the Committee on Ways and Means.

By Mr. NELSEN:

H.R. 15345. A bill to prohibit the importation of fresh, chilled, or frozen cattle meat for a 6-month period; to the Committee on Ways and Means.

By Mr. O'NEILL (for himself, Mr. RHODES, Mr. McFALL, and Mr. ARENDS):

H.R. 15346. A bill to establish a National Commission on Supplies and Shortages; to the Committee on Banking and Currency.

By Mr. PARRIS:

H.R. 15347. A bill to prohibit foreign assistance to India until India becomes a signatory to the Treaty on the Non-Proliferation of Nuclear Weapons; to the Committee on Foreign Affairs.

By Mr. PETTIS:

H.R. 15348. A bill to amend the Internal Revenue Code of 1954 to provide that the tax rules now applicable to savings and loan associations, mutual savings banks, and so forth, shall also be applicable to the comparable mortgage programs now undertaken by national mortgage associations; to the Committee on Ways and Means.

By Mr. PRICE of Texas (for himself, Mr. RONCALIO of Wyoming, Mr. McSPADEN, Mr. KETCHUM, Mr. BURLESON of Texas, Mr. LOTT, Mr. THONE, Mr. VEXSEY, Mr. STEIGER of Arizona, Mr. OWENS, Mr. NICHOLS, Mr. JONES of Tennessee, Mr. CLEVELAND, Mr. HAMMERSCHMIDT, Mr. MONTGOMERY, Mr. RUNNELS, and Mr. RANDALL):

H.R. 15349. A bill to amend the Consolidated Farm and Rural Development Act to establish a loan insurance program for cattlemen; to the Committee on Agriculture.

By Mr. ROY:

H.R. 15350. A bill to amend the Consolidated Farm and Rural Development Act to establish a loan insurance program for producers of livestock; to the Committee on Agriculture.

H.R. 15351. A bill to amend the Internal Revenue Code of 1954 to exclude from gross income the amount of certain cancellations of indebtedness under student loan programs; to the Committee on Ways and Means.

By Mr. RUTH:

H.R. 15352. A bill to amend the Fair Labor Standards Act of 1938 to provide an exemption from the minimum wage and overtime requirements of that act for full-time babysitters; to the Committee on Education and Labor.

By Mr. SCHERLE:

H.R. 15353. A bill to provide for emergency financing for livestock producers; to the Committee on Agriculture.

By Mr. SMITH of New York:

H.R. 15354. A bill to provide for the Federal collection of certain State and local income taxes; to the Committee on Ways and Means.

By Mr. STRATTON (for himself, Mr. HUNT, Mr. NICHOLS, Mr. MITCHELL of New York, Mr. ASPIN, Mr. LEGGETT, Mr. DELLUMS, Mr. DAVIS of South Carolina, Mr. MOLLOHAN, and Mr. STEIGER of Wisconsin):

H.R. 15355. A bill to amend chapter 5 of title 37, United States Code, to revise the special pay structure relating to certain officers of the uniformed services; to the Committee on Armed Services.

By Mr. TALCOTT:

H.R. 15356. A bill to amend the Consolidated Farm and Rural Development Act to establish a loan insurance program for livestock producers; to the Committee on Agriculture.

By Mr. TAYLOR of North Carolina (for himself and Mr. SKUBBTZ):

H.R. 15357. A bill to amend the act of October 15, 1966, establishing a program for the preservation of additional historic properties throughout the Nation, and for other purposes; to the Committee on Interior and Insular Affairs.

By Mr. THOMPSON of New Jersey:

H.R. 15358. A bill to declare a portion of the Delaware River in Burlington County, N.J., nonnavigable; to the Committee on Interstate and Foreign Commerce.

By Mr. ANDERSON of California (for himself, Mr. SARASIN, Mr. MATSUNAGA, Mr. BELL, and Mr. ROE):

H.J. Res. 1055. Joint resolution to prohibit the Bureau of Labor Statistics from instituting any revision in the method of calculating the Consumer Price Index until such revision has been approved by resolution by either the Senate or the House of Representatives of the United States of America; to the Committee on Education and Labor.

By Mr. PATMAN:

H.J. Res. 1056. Joint resolution to extend by 30 days the expiration date of the Defense Production Act of 1950; to the Committee on Banking and Currency.

H.J. Res. 1057. Joint resolution to extend by 30 days the expiration date of the Export Administration Act of 1969; to the Committee on Banking and Currency.

H.J. Res. 1058. Joint resolution to extend by 30 days the expiration date of the Export-Import Bank Act of 1945; to the Committee on Banking and Currency.

PRIVATE BILLS AND RESOLUTIONS

Under clause 1 of rule XXII, private bills and resolutions were introduced and severally referred as follows:

By Mr. BROYHILL of Virginia:

H.R. 15359. A bill for the relief of Cedimir Markovic; to the Committee on the Judiciary.

By Mr. TALCOTT:

H.R. 15360. A bill to temporarily terminate the entitlement of Gwendolyn Artie and Wanda Lou Smithee to child's insurance benefits under section 202(d) of the Social Security Act; to the Committee on the Judiciary.

SENATE—Wednesday, June 12, 1974

The Senate met at 9:45 a.m. and was called to order by the President pro tempore (Mr. EASTLAND).

PRAYER

The Right Reverend Zoltan Beky, D.D., bishop emeritus, the Hungarian Reformed Church in America, offered the following prayer:

Almighty God our Heavenly Father.

We give Thee thanks for Thy creation, providence, and guidance. But especially for revealing Thyself to us in Thy word which has always been the foundation and strength of our Nation.

We pray today for Thy blessing upon all those who were called to lead this great Nation and to be guardians of the great heritage which is ours. May this great Nation always remain faithful to the basic principles upon which these United States were founded.

Save us from internal discord, moral decay, individual and corporal selfishness. Thou hast created this Nation out

of the multitude of cultures, races, and religions. Thou hast led millions to these shores to build a land of hope, freedom, and opportunity.

We pray for the deliberation of today in this noble body. Bless the thoughts, the words, and the work of all here present.

We pray in Thy name. Amen.

THE JOURNAL

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the reading of the Journal of the proceedings of Tuesday, June 11, 1974, be dispensed with.

The PRESIDENT pro tempore. Without objection, it is so ordered.

MESSAGE FROM THE HOUSE

A message from the House of Representatives by Mr. Allen, one of its read-

ing clerks, announced that the House had passed the following bills in which it requests the concurrence of the Senate:

H.R. 12165. An act to authorize the construction, operation, and maintenance of certain works in the Colorado River Basin to control the salinity of water delivered to users in the United States and Mexico; and

H.R. 12281. An act to continue until the close of June 30, 1975, the suspension of duties on certain forms of copper.

HOUSE BILL REFERRED

The bill (H.R. 12281) to continue until the close of June 30, 1975, the suspension of duties on certain forms of copper, was read twice by its title and referred to the Committee on Finance.

COMMITTEE MEETINGS DURING SENATE SESSION

Mr. MANSFIELD. Mr. President, I ask unanimous consent that all committees

may be authorized to meet during the session of the Senate today.

The PRESIDENT pro tempore. Without objection, it is so ordered.

EXECUTIVE SESSION

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the Senate go into executive session to consider the nominations on the Executive Calendar.

The PRESIDENT pro tempore. Without objection, it is so ordered.

DEPARTMENT OF STATE

The second assistant legislative clerk read the nominations in the Department of State, as follows:

Deane R. Hinton, of Illinois, to be Ambassador Extraordinary and Plenipotentiary of the United States of America to the Republic of Zaire.

William D. Wolfe, of Iowa, to be Ambassador Extraordinary and Plenipotentiary of the United States of America to the Sultanate of Oman.

Robert P. Paganelli, of New York, to be Ambassador Extraordinary and Plenipotentiary of the United States of America to the State of Qatar.

Pierre R. Graham, of Illinois, to be Ambassador Extraordinary and Plenipotentiary of the United States of America to the Republic of Upper Volta.

Robert A. Stevenson, of New York, to be Ambassador Extraordinary and Plenipotentiary of the United States of America to the Republic of Malawi.

Seymour Weiss, of Maryland, to be Ambassador Extraordinary and Plenipotentiary of the United States of America to the Commonwealth of the Bahamas.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the nominations be considered en bloc.

The PRESIDENT pro tempore. Without objection, the nominations are considered and confirmed en bloc.

OVERSEAS PRIVATE INVESTMENT CORPORATION

The second assistant legislative clerk read the nominations in the Overseas Private Investment Corporation, as follows:

Gustave M. Hauser, of New York, and James A. Suffridge, of Florida, to be members of the Board of Directors of the Overseas Private Investment Corporation for a term expiring December 17, 1976.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the nominations be considered en bloc.

The PRESIDENT pro tempore. Without objection, the nominations are considered and confirmed en bloc.

INTERNATIONAL BANK OFFICES

The second assistant legislative clerk read the nomination of William E. Simon, of New Jersey, to be U.S. Governor of the International Monetary Fund for a term of 5 years and U.S. Governor of the International Bank for Reconstruction and Development for a term of 5 years; Governor of the Inter-American Development Bank for a term of 5 years; and U.S. Governor of the Asian Development Bank.

Mr. MANSFIELD. Mr. President, I ask

unanimous consent that the nomination be considered and confirmed.

The PRESIDENT pro tempore. Without objection, the nomination is considered and confirmed.

U.S. ARMS CONTROL AND DISARMAMENT AGENCY

The second assistant legislative clerk read sundry nominations in the U.S. Arms Control and Disarmament Agency.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the nominations be considered en bloc.

The PRESIDENT pro tempore. Without objection, the nominations are considered and confirmed en bloc.

NOMINATIONS PLACED ON THE SECRETARY'S DESK

The second assistant legislative clerk proceeded to read sundry nominations in the Diplomatic and Foreign Service, which had been placed on the Secretary's desk.

The PRESIDENT pro tempore. Without objection, the nominations are considered and confirmed en bloc.

Mr. MANSFIELD. Mr. President, I request that the President be immediately notified of the confirmation of these nominations.

The PRESIDENT pro tempore. Without objection, it is so ordered.

LEGISLATIVE SESSION

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the Senate resume the consideration of legislative business.

The PRESIDENT pro tempore. Without objection, it is so ordered.

NOTICE OF MEETING OF SENATORS FROM BEEF-PRODUCING STATES

Mr. MANSFIELD. Mr. President, I am extending an invitation to Senators from the cattle-producing and cattle-feeding States to meet informally at 10 o'clock tomorrow morning in room S-207.

I do so because of the prices which confront the beef-producing industry at this time. I extend an invitation also in this manner to Senators from other States which are not so vitally interested in the production of cattle and the feeding of cattle.

Mr. President, on June 7 I addressed the following letter to the President of the United States:

DEAR MR. PRESIDENT: In recent days, presentations have been made to the White House staff in behalf of a seriously depressed livestock industry. I wish to join with my colleagues in asking that you give this situation your personal attention. We cannot permit such a vital element of our economy to flounder as it is now. Action must be taken to close the gap between prices received by the livestock producers and the prices charged by the packers and retailers.

The reasons for this predicament are varied. The main point is that something has to be done now to protect the ranchers of our Nation. I am joining with several of my western colleagues in the introduction of legislation to provide emergency assistance to the cattle industry under the Department

of Agriculture's loan program. These loans are vital to feed lot operators. I also concur in the recommendations that the Federal Government introduce a beef purchase program for military and school lunches. Most importantly, I ask that you exercise your authority in reimposing strict import quotas on beef and livestock products which compete with those in this Country. As you know, I have consistently supported this safety valve and the present situation underscores the need to reimpose these quotas.

Your cooperation and assistance in this matter are vital. I am convinced that we can have a strong and healthy livestock industry if some reasonable attitudes can be returned to the price of beef in the retail market.

Respectfully yours,

MIKE MANSFIELD.

ORDER OF BUSINESS

The PRESIDENT pro tempore. In accordance with the standing order, the Senator from Pennsylvania is now recognized.

NATIONAL SECURITY LEAKS

Mr. HUGH SCOTT. Mr. President, it is not only the professional prestidigitators who practice magic. For some time, one issue which has concerned many people has been leaks of national secrets—the freedom with which some people have felt that they could release any secret of the National Government, no matter how dangerous, to their friends or to others—and there seems to have grown up in the reporting of this type of reckless leaking an assumption that it is all right, and that what has to be condemned is the efforts made to prevent it.

This, of course, puts the cart before the horse. It is also a diversionary operation. It is an attempt to confuse the fact that a government has the right to keep its secrets, that a government has a right to protect itself from the release of vital information. Suddenly the issue is not whether the Government is entitled to protect itself, nor is it a question of how the information got out, but rather a question of who attempted to stop it and how the attempts to stop it were conducted. And suddenly the people who are put on trial are those who are alleged to have been responsible for attempting to stop the leaks.

This sounds like Alice in Wonderland, or would so sound if it were not actually happening. I think we ought to get back to certain fundamentals.

First, a nation is entitled to protect itself and its secrets.

Second, in so doing, the Nation is not required to release to all and sundry of the curious every conversation or every step taken in the course of the national protection.

Third, it is entirely proper to seek to prevent the release of highly secret information.

Those are genuine concerns of those charged with the protection of the Nation. They are genuine concerns of the American people. Yet one never hears them referred to; one never hears any expression of interest in the protection of the Nation, but rather the entire controversies turn on who ordered the pro-

tection, who sought to protect the Government of the United States, and, in doing so, did he give offense to those opposed to his ideology?

If he did give such offense, he is to be tried in the newspapers and found guilty, and characterized quite unfairly.

I say, let us get back to the fundamentals. We do have a right to protect our national secrets, and we do have a right to do those things which are necessary to protect them. If the action taken is itself wrong or criminal, that is another thing. But let us put all of these things in context, and above everything else, let us not risk the steps being taken toward peace in the Middle East by searches for a headline or by indulging in what the respected journalist Marquis Childs rightly characterizes as "police court reporting."

I think they have gone too far, and I think the country will be sick and disgusted with those tactics. And it ought to be known by now that when I am disgusted I say so.

The PRESIDENT pro tempore. Under the previous order, the Senator from Wisconsin (Mr. PROXMIRE) is recognized for not to exceed 15 minutes.

WHAT'S RIGHT WITH THE FEDERAL GOVERNMENT—THE RIGHTS OF THE POOR

Mr. PROXMIRE. Mr. President, the most significant of many moral achievements by the United States in the past 15 years has been the extension of legal rights and civil liberties to the poor and uneducated who have been the prime victims of injustice in every society in human history and in every country including our own.

Our achievements in civil rights, in stopping environmental pollution, in protecting consumer rights, in extending education and in other areas have represented proud moral steps forward for this country.

But the big achievement of this generation has been the court-led fight to provide a framework of genuinely equal justice for the friendless, the ignorant, the poor—the people who have been classically kicked around, sometimes beaten, often jailed, simply because they had no clout.

But how about the rights of our poorer citizens before the bar of justice, or at the ballot box? The fight for justice for all is never won. We have only taken the first steps, but what steps they have been:

The Supreme Court in *Miranda v. Arizona*, 384 U.S. 436 (1966), established the principle that the accused must be advised of his right to be silent, of the fact that any statements he makes may be used against him, and of his right to a lawyer's advice before questioning. These are rights that we are all entitled to, but they are more meaningful to the ignorant and friendless. The more affluent and advanced would generally have access to a lawyer's services and thus would be less likely to have these rights knowingly invaded.

In all fairness it should be noted that recent Supreme Court decisions have placed the right to counsel within sharp-

ly defined limits. In *Kirby v. Illinois*, 406 U.S. 682 (1972), the court held that no right to counsel existed when a defendant was placed in an identification "line-up" before indictment. The Court stated that the sixth amendment right to the assistance of counsel did not become operative until "the initiation of adversary judicial proceedings—whether by way of formal charge, preliminary hearing, indictment, information, or arraignment." The court carefully pointed out, however, that the decision would not affect the Miranda requirements, even if questioning began before the initiation of adversary proceedings, because the decision in *Miranda* rested not on the right to counsel but the privilege against self-incrimination. *Miranda* holds that a suspect has a right to counsel to insure that he will not be coerced into incriminating himself through a forced confession.

The Supreme Court in *Draper v. Washington*, 372 U.S. 487 (1963) laid the foundation for the right of a convicted felon, rich or poor, to appeal a court decision in these words:

In all cases the duty of the State is to provide the indigent as adequate and effective an appellate review as that given appellants with funds.

This right was abridged, the Supreme Court said in *Douglas v. California*, 372 U.S. 353 (1963), when the right to a lawyer on first appeal from conviction was conditioned on a finding by the appellate court that counsel would be of advantage to the appellant. The court felt that this was a standard that only applied to those who could not afford counsel and thus was contrary to the due process and equal protection clauses of the constitution.

In *Williams v. Illinois*, 399 U.S. 395 (1970), the Supreme Court held that it was a denial of equal protection for a State to extend the period of imprisonment beyond the statutory maximum because the defendant was unable to pay a fine which was levied upon conviction. The Court went further in *Tate v. Short*, 401 U.S. 395 (1971), and ruled that where no term of imprisonment is prescribed for an offense but only a fine, the court may not imprison for inability to pay the fine unless it is impossible to develop an alternative.

Finally, in a 1963 case the Court made its most historic commitment to the rights of the accused poor. The Court held in *Gideon v. Wainwright*, 372 U.S. 335 (1963), that—

Any person hauled into court who is too poor to hire a lawyer cannot be assured of a fair trial unless counsel is provided for him.

This principle, which applies in both State and Federal courts, has been buttressed by congressional action providing funds for the payment of lawyers representing those who cannot afford to pay.

The *Gideon* decision was enlarged upon in *Argersinger v. Hamlin*, 407 U.S. 25 (1972), the Court deciding that the right to counsel extends to every case where the defendant might be imprisoned if convicted, no matter how short the period of imprisonment.

The Congress has also created a program to provide legal advice, representa-

tion and counseling to the poor in civil cases under the Economic Opportunity Act. By fiscal 1974 this program was budgeted at \$71.5 million. That represented a tremendous increase in funds available for defending the poor, compared to the period of only 5 or 6 years before, when the Legal Aid Society was able to raise \$5 million. In other words, it increased twelvefold. It supported 256 local projects with more than 900 branch offices staffed by more than 2,000 full-time attorneys serving 500,000 clients a year. Of 1,500,000 separate legal problems 83 percent were settled out of court, while 85 percent of those cases that went to court were won.

The Supreme Court, in a series of cases, has shored up the rights of those who are welfare recipients. For example, the Court held in *Goldberg v. Kelly*, 397 U.S. 254 (1970), and a related case that the due process clause of the 14th amendment prohibits a State from terminating welfare assistance without offering notice and a hearing. The recipient of welfare is also entitled to counsel at the hearing. In *Shapiro v. Thompson*, 394 U.S. 618 (1969), the Court struck down a requirement that a person could not receive welfare from a given State unless he or she had lived there for a prescribed period. The Court held that a State could not discriminate between the poor on the basis of how long they had lived in the State.

Here, as in the series of cases arising from the *Miranda* decision, the Court has tended to be restrictive of the rights of welfare recipients in recent years. For instance in *Dandridge v. Williams*, 397 U.S. 471 (1970), the Court upheld a State formula for aid to dependent children payments which imposed upper limits on the amount one family could receive, regardless of the number of children in the family. In *Jefferson v. Hackney*, 406 U.S. 535 (1972) the Court decided that the State could legitimately apportion more funds to the aged and ill than to families with children, when the funds were limited, on the grounds that the aged are least able to bear the hardships of poverty.

Vagrancy statutes have long been a particular problem for the poor. From the Okies driven West in the Dust Bowl 1930's, who were barred at the California border because they had no job or fixed address, to today's migrant workers, the poor have always lived with the threat of being jailed because they did not have enough money to put a roof over their heads. The Supreme Court has reacted by either strictly interpreting the vagrancy statutes so that they punish well-defined acts (*Johnson v. Florida*, 391 U.S. 596 (1968)) or by striking down the statutes as being void for vagueness (*Papachristou v. City of Jacksonville*, 405 U.S. 156 (1972)).

Perhaps the most dramatic Supreme Court decision having to do with the rights of the poor, apart from the *Gideon* case, was the Court's decision to strike down the death penalty because it was being applied arbitrarily, with discrimination, and unpredictably. The Court noted that those sentenced to death are most frequently poor and members of minorities.

Another landmark case did not turn specifically on the rights of the poor, but reinforced the power of every American to have an equal voice in his government. I speak of the one-man-one-vote decision handed down by the Supreme Court in *Baker v. Carr*, 369 U.S. 186 (1962). This was the first of the reapportionment decisions of the 1960's which made sure that every citizen, rich or poor, had equal representation in the House of Representatives and in the statehouses of the Nation. The Congress not only beat back legislative efforts to annul these landmark decisions but started on its way a constitutional amendment abolishing the poll tax as a qualification in Federal elections. The Supreme Court later held that State poll taxes violated the equal protection clause of the constitution.

In passing the Voting Rights Act of 1965 the Congress made legislatively explicit the poll tax ban in these words:

Congress declares that the constitutional right of citizens to vote is denied or abridged in some areas by the requirement of the payment of a poll tax as a precondition to voting.

The act authorized the Attorney General to bring actions against States or political subdivisions for declaratory judgments or injunctive relief so as to implement this declaration.

What does all of this mean? It means that in spite of Watergate and inflation, political corruption and widespread cynicism, in the past 15 years the Federal Government has made the greatest progress in our history in providing genuine equality of justice including the ignorant, the friendless, the poor, and there is no better moral basis for judging society than this.

NATIONAL COMMISSION ON SUPPLIES AND SHORTAGES ACT OF 1974

The PRESIDENT pro tempore. Under the previous order, the Senate will now resume consideration of the unfinished business, S. 3523 which the clerk will state.

The assistant legislative clerk read as follows:

S. 3523, to establish a Temporary National Commission on Supplies and Shortages.

The Senate resumed the consideration of the bill.

Mr. MANSFIELD. Mr. President, is an amendment pending?

The PRESIDENT pro tempore. The pending question is on agreeing to the amendment by the Senator from Wisconsin (Mr. NELSON), on which there will be a vote not later than 12 o'clock noon today.

Mr. MANSFIELD. Mr. President, I suggest the absence of a quorum, with the time to be charged to both sides.

The PRESIDENT pro tempore. Without objection, it is so ordered, and the clerk will call the roll.

The second assistant legislative clerk proceeded to call the roll.

Mr. NELSON. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDENT pro tempore. Without objection, it is so ordered.

Mr. NELSON. Mr. President, I ask unanimous consent that Paula Stern, a member of my staff, be permitted the privilege of the floor during the consideration of the pending bill, S. 3523.

The PRESIDENT pro tempore. Without objection, it is so ordered.

COLORADO RIVER BASIN SALINITY CONTROL ACT

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of Calendar No. 878, S. 2940.

The PRESIDENT pro tempore. The bill will be stated by title.

The assistant legislative clerk read as follows:

A bill (S. 2940) to authorize the construction, operation, and maintenance of certain works in the Colorado River Basin to control the salinity of water delivered to users in the United States and Mexico.

The PRESIDENT pro tempore. Is there objection to the present consideration of the bill?

There being no objection, the Senate proceeded to consider the bill, which had been reported from the Committee on Interior and Insular Affairs with an amendment to strike out all after the enacting clause and insert:

That this Act may be cited as the "Colorado River Basin Salinity Control Act".

TITLE I—PROGRAMS DOWNSTREAM FROM IMPERIAL DAM

Sec. 101. (a) The Secretary of the Interior, hereinafter referred to as the "Secretary", is authorized and directed to proceed with a program of works of improvement for the enhancement and protection of the quality of water available in the Colorado River for use in the United States and the Republic of Mexico, and to enable the United States to comply with its obligations under the agreement with Mexico of August 30, 1973 (Minute No. 242 of the International Boundary and Water Commission, United States and Mexico), concluded pursuant to the Treaty of February 3, 1944 (TS 994), in accordance with the provisions of this Act.

(b) (1) The Secretary is authorized to construct, operate, and maintain a desalting complex, including (1) a desalting plant to reduce the salinity of drain water from the Wellton-Mohawk division of the Gila project, Arizona (hereinafter referred to as the division), including a pretreatment plant for settling, softening, and filtration of the drain water to be desalted; (2) the necessary appurtenant works including the intake pumping plant system, product waterline, power transmission facilities, and permanent operating facilities; (3) the necessary extension in the United States and Mexico of the existing bypass drain to carry the reject stream from the desalting plant and other drainage waters to the Santa Clara Slough in Mexico, with the part in Mexico, subject to arrangements made pursuant to section 101(d); (4) replacement of the metal flume in the existing main outlet drain extension with a concrete siphon; (5) reduction of the quantity of irrigation return flows through acquisition of lands to reduce the size of the division, and irrigation efficiency improvements to minimize return flows; (6) acquire on behalf of the United States such lands or interest in lands in the Painted Rock Reservoir as may be necessary to operate the project in accordance with the obligations of Minute No. 242, and (7) all associated facilities including roads, railroad spur, and transmission lines.

(2) The desalting plant shall be designed

to treat approximately one hundred and twenty-nine million gallons a day of drain water using advanced technology commercially available. The plant shall effect recovery initially of not less than 70 per centum of the drain water as product water, and shall effect reduction of not less than 90 per centum of the dissolved solids in the feed water. The Secretary shall use sources of electric power supply for the desalting complex that will not diminish the supply of power to preference customers from Federal power systems operated by the Secretary. All costs associated with the desalting plant shall be nonreimbursable.

(c) Replacement of the reject stream from the desalting plant and of any Wellton-Mohawk drainage water bypassed to the Santa Clara Slough to accomplish essential operation except at such times when there exists surplus water of the Colorado River under the terms of the Mexican Water Treaty of 1944, is recognized as a national obligation as provided in section 202 of the Colorado River Basin Project Act (82 Stat. 895). Studies to identify feasible measures to provide adequate replacement water shall be completed not later than June 30, 1980. Said studies shall be limited to potential sources within the States of Arizona, California, Colorado, New Mexico, and those portions of Nevada, Utah, and Wyoming which are within the natural drainage basin of the Colorado River. Measures found necessary to replace the reject stream from the desalting plant and any Wellton-Mohawk drainage bypassed to the Santa Clara Slough to accomplish essential operations may be undertaken independently of the national obligation set forth in section 202 of the Colorado River Basin Project Act.

(d) The Secretary is hereby authorized to advance funds to the United States section, International Boundary and Water Commission (IBWC), for construction, operation, and maintenance by Mexico pursuant to Minute No. 242 of that portion of the bypass drain with Mexico. Such funds shall be transferred to an appropriate Mexican agency, under arrangements to be concluded by the IBWC providing for the construction, operation, and maintenance of such facility by Mexico.

(e) Any desalted water not needed for the purposes of this title may be exchanged at prices and under terms and conditions satisfactory to the Secretary and the proceeds therefrom shall be deposited in the General Fund of the Treasury. The city of Yuma, Arizona, shall have first right of refusal to any such water.

(f) For the purpose of reducing the return flows from the division to one hundred and seventy-five thousand acre-feet or less, annually, the Secretary is authorized to:

(1) Accelerate the cooperative program of Irrigation Management Services with the Wellton-Mohawk Irrigation and Drainage District, hereinafter referred to as the district, for the purpose of improving irrigation efficiency. The district shall bear its share of the cost of such program as determined by the Secretary.

(2) Acquire, by purchase or through eminent domain or exchange, to the extent determined by him to be appropriate, lands or interests in lands to reduce the existing seventy-five thousand developed and undeveloped irrigable acres authorized by the Act of July 30, 1947 (61 Stat. 628), known as the Gila Reauthorization Act. The initial reduction in irrigable acreage shall be limited to approximately ten thousand acres. If the Secretary determines that the irrigable acreage of the division must be reduced below sixty-five thousand acres of irrigable lands to carry out the purpose of this section, the Secretary is authorized, with the consent of the district, to acquire additional lands, as may be deemed by him to be appropriate.

(g) The Secretary is authorized to dispose of the acquired lands and interests therein

on terms and conditions satisfactory to him and meeting the objective of this Act.

(h) The Secretary is authorized, either in conjunction with or in lieu of land acquisition, to assist water users in the division in installing system improvements, such as ditch lining, change of field layouts, automatic equipment, sprinkler systems and bubbler systems, as a means of increasing irrigation efficiencies: *Provided, however*, That all costs associated with the improvements authorized herein and allocated to the water users on the basis of benefits received, as determined by the Secretary, shall be reimbursed to the United States in amounts and on terms and conditions satisfactory to the Secretary.

(i) The Secretary is authorized to amend the contract between the United States and the district dated March 4, 1952, as amended, to provide that—

(1) the portion of the existing repayment obligation owing to the United States allocable to irrigable acreage eliminated from the division for the purposes of this title, as determined by the Secretary, shall be non-reimbursable; and

(2) if deemed appropriate by the Secretary, the district shall be given credit against its outstanding repayment obligation to offset any increase in operation and maintenance assessments per acre which may result from the district's decreased operation and maintenance base, all as determined by the Secretary.

(j) The Secretary is authorized to acquire through the Corps of Engineers fee title to, or other necessary interests in, additional lands above the Painted Rock Dam in Arizona that are required for the temporary storage capacity needed to permit operation of the dam and reservoir in times of serious flooding in accordance with the obligations of the United States under Minute No. 242. No funds shall be expended for acquisition of land or interest therein until it is finally determined by a Federal court of competent jurisdiction that the Corps of Engineers presently lacks legal authority to use said lands for this purpose. Nothing contained in this title nor any action taken pursuant to it shall be deemed to be a recognition or admission of any obligation to the owners of such land on the part of the United States or a limitation or deficiency in the rights or powers of the United States with respect to such lands or the operation of the reservoir.

(k) To the extent desirable to carry out sections 101(f) (1) and 101(h), the Secretary may transfer funds to the Secretary of Agriculture as may be required for technical assistance to farmers, conduct of research and demonstrations, and such related investigations as are required to achieve higher on-farm irrigation efficiencies.

(l) All cost associated with the desalting complex shall be nonreimbursable except as provided in sections 101(f) and 101(h).

Sec. 102. (a) To assist in meeting salinity control objectives of Minute No. 242 during an interim period, the Secretary is authorized to construct a new concrete-lined canal or, to line the presently unlined portion of the Coachella Canal of the Boulder Canyon project, California, from station 2 plus 26 to the beginning of siphon numbered 7, a length of approximately forty-nine miles. The United States shall be entitled to temporary use of a quantity of water, for the purpose of meeting the salinity control objectives of Minute No. 242, during an interim period, equal to the quantity of water conserved by constructing or lining the said canal. The interim period shall commence on completion of construction or lining said canal and shall end the first year that the Secretary delivers main stream Colorado River water to California in an amount less than the sum of the quantities requested by (1) the California agencies under contracts

made pursuant to section 5 of the Boulder Canyon Project Act (45 Stat. 1057), and (2) Federal establishments to meet their water rights acquired in California in accordance with the Supreme Court decree in Arizona against California (376 U.S. 340).

(b) The charges for total construction shall be repayable without interest in equal annual installments over a period of forty years beginning in the year following completion of construction: *Provided*, That, repayment shall be prorated between the United States and the Coachella Valley County Water District, and the Secretary is authorized to enter into a repayment contract with Coachella Valley County Water District for that purpose. Such contract shall provide that annual repayment installments shall be non-reimbursable during the interim period, defined in section 102(a) of this title and shall provide that after the interim period, said annual repayment installments or portions thereof, shall be paid by Coachella Valley County Water District.

(c) The Secretary is authorized to acquire by purchase, eminent domain, or exchange private lands or interests therein, as may be determined by him to be appropriate, within the Imperial Irrigation District on the Imperial East Mesa which receive, or which have been granted rights to receive, water from Imperial Irrigation District's capacity in the Coachella Canal. Costs of such acquisitions shall be nonreimbursable and the Secretary shall return such lands to the public domain. The United States shall not acquire any water rights by reason of this land acquisition.

(d) The Secretary is authorized to credit Imperial Irrigation District against its final payments for certain outstanding construction charges payable to the United States on account of capacity to be relinquished in the Coachella Canal as a result of the canal lining program, all as determined by the Secretary: *Provided*, That, relinquishment of capacity shall not affect the established basis for allocating operation and maintenance costs of the main All-American Canal to existing contractors.

(e) The Secretary is authorized and directed to cede the following land to the Cocopah Tribe of Indians, subject to rights-of-way for existing levees, to be held in trust by the United States for the Cocopah Tribe of Indians:

Township 9 south, range 25 west of the Gila and Salt River meridian, Arizona;
Section 25: Lots 18, 19, 20, 21, 22, and 23;
Section 26: Lots 1, 12, 13, 14, and 15;
Section 27: Lot 3; and all accretion to the above described lands.

The Secretary is authorized and directed to construct three bridges, one of which shall be capable of accommodating heavy vehicular traffic, over the portion of the bypass drain which crosses the reservation of the Cocopah Tribe of Indians. The transfer of lands to the Cocopah Indian Reservation and the construction of bridges across the bypass drain shall constitute full and complete payment to said tribe for the rights-of-way required for construction of the bypass drain and electrical transmission lines for works authorized by this title.

Sec. 103. (a) The Secretary is authorized to:

(1) Construct, operate, and maintain, consistent with Minute No. 242, well fields capable of furnishing approximately one hundred and sixty thousand acre-feet of water per year for use in the United States and for delivery to Mexico in satisfaction of the 1944 Mexican Water Treaty.

(2) Acquire by purchase, eminent domain, or exchange, to the extent determined by him to be appropriate, approximately twenty-three thousand five hundred acres of lands or interests therein within approximately five miles of the Mexican border on the Yuma Mesa: *Provided*, however, That any such

lands which are presently owned by the State of Arizona may be acquired or exchanged for Federal lands.

(3) Any lands removed from the jurisdiction of the Yuma Mesa Irrigation and Drainage District pursuant to clause (2) of this subsection which were available for use under the Gila Reauthorization Act (61 Stat. 628), shall be replaced with like lands within or adjacent to the Yuma Mesa division of the project. In the development of these substituted lands or any other lands within the Gila project, the Secretary may provide for full utilization of the Gila Gravity Main Canal in addition to contracted capacities.

(b) The cost of work provided for in this section, including delivery of water to Mexico, shall be nonreimbursable; except to the extent that the waters furnished are used in the United States.

Sec. 104. The Secretary is authorized to provide for modifications of the projects authorized by this title to the extent he determines appropriate for purposes of meeting the international settlement objective of this title at the lowest overall cost to the United States. No funds for any such modification shall be expended until the expiration of sixty days after the proposed modification has been submitted to the appropriate committees of the Congress, unless the Congress approves an earlier date by concurrent resolution. The Secretary shall notify the Governors of the Colorado River Basin States of such modifications.

Sec. 105. The Secretary is hereby authorized to enter into contracts that he deems necessary to carry out the provisions of this title in advance of the appropriation of funds therefor.

Sec. 106. In carrying out the provisions of this title, the Secretary shall consult and cooperate with the Secretary of State, the Administrator of the Environmental Protection Agency, the Secretary of Agriculture, and other affected Federal, State, and local agencies.

Sec. 107. Nothing in this Act shall be deemed to modify the National Environmental Policy Act of 1969, the Federal Water Pollution Control Act, as amended or, except as expressly stated herein, the provisions of any other Federal law.

Sec. 108. There is hereby authorized to be appropriated the sum of \$121,500,000 for the construction of the works and accomplishment of the purposes authorized in sections 101 and 102, and \$34,000,000 to accomplish the purposes of section 103, based on April 1973 prices, plus or minus such amounts as may be justified by reason of ordinary fluctuations in construction costs involved therein, and such sums as may be required to operate and maintain such works and to provide for such modifications as may be made pursuant to section 104. There is further authorized to be appropriated such sums as may be necessary to pay condemnations awards in excess of appraised values and to cover costs required in connection with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 90-646).

TITLE II—MEASURES UPSTREAM FROM IMPERIAL DAM

Sec. 201. (a) The Secretary of the Interior shall implement the salinity control policy adopted for the Colorado River in the "Conclusions and Recommendations" published in the Proceedings of the Reconvened Seventh Session of the Conference in the Matter of Pollution of the Interstate Waters of the Colorado River and Its Tributaries in the States of California, Colorado, Utah, Arizona, Nevada, New Mexico, and Wyoming, held in Denver, Colorado, on April 26-27, 1972, under the authority of section 10 of the Federal Water Pollution Control Act (33 U.S.C. 1160), and approved by the Administrator of the Environmental Protection Agency on June 9, 1972.

(b) The Secretary is hereby directed to expedite the investigation, planning, and implementation of the salinity control program generally as described in chapter VI of the Secretary's report entitled, "Colorado River Water Quality Improvement Program, February 1972".

(c) In conformity with section 201(a) of this title and the authority of the Environmental Protection Agency under Federal laws, the Secretary, the Administrator of the Environmental Protection Agency, and the Secretary of Agriculture are directed to cooperate and coordinate their activities effectively to carry out the objective of this title.

Sec. 202. The Secretary is authorized to construct, operate, and maintain the following salinity control units as the initial stage of the Colorado River Basin salinity control program.

(1) The Paradox Valley unit, Montrose County, Colorado consisting of facilities for collection and disposition of saline ground water of Paradox Valley including wells, pumps, pipelines, solar evaporation ponds, and all necessary appurtenant and associated works such as roads, fences, dikes, power transmission facilities, and permanent operating facilities.

(2) The Grand Valley unit, Colorado, consisting of measures and all necessary appurtenant and associated works to reduce the seepage of irrigation water from the irrigated lands of Grand Valley into the ground water and thence into the Colorado River. Measures shall include lining of canals and laterals, and the combining of existing canals and laterals into fewer and more efficient facilities. Prior to initiation of construction of the Grand Valley unit the Secretary shall enter into contracts through which the agencies owning, operating, and maintaining the water distribution systems in Grand Valley, singly or in concert, will assume all obligations relating to the continued operation and maintenance of the unit's facilities to the end that the maximum reduction of salinity inflow to the Colorado River will be achieved. The Secretary is also authorized to provide, as an element of the Grand Valley unit, for a technical staff to provide information and assistance to water users on means and measures for limiting excess water applications to irrigated lands: *Provided*, That such assistance shall not exceed a period of five years after funds first become available under this title. The Secretary will enter into agreements with the Secretary of Agriculture to develop a unified control plan for the Grand Valley unit. The Secretary of Agriculture is directed to cooperate in the planning and construction of on-farm system measures under programs available to that Department.

(3) The Crystal Geyser unit, Utah, consisting of facilities for collection and disposition of saline geyser discharges; including dikes, pipelines, solar evaporation ponds, and all necessary appurtenant works including operating facilities.

(4) The Las Vegas Wash unit, Nevada, consisting of facilities for collection and disposition of saline ground water of Las Vegas Wash, including infiltration galleries, pumps, desalter, pipelines, solar evaporation facilities, and all appurtenant works including but not limited to roads, fences, power transmission facilities, and operating facilities.

Sec. 203. (a) The Secretary is authorized and directed to—

(1) Expedite completion of the planning reports on the following units, described in the Secretary's report, "Colorado River Water Quality Improvement Program, February 1972":

- (i) Irrigation source control:
Lower Gunnison
Utah Basin
Colorado River Indian Reservation
Palo Verde Irrigation District
- (ii) Point source control:

- LaVerkin Springs
- Littlefield Springs
- Glenwood-Dotsero Springs
- (iii) Diffuse source control:
Price River
San Rafael River
Dirty Devil River
McElmo Creek
Big Sandy River

(2) Submit each planning report on the units named in section 203(a)(1) of this title promptly to the Colorado River Basin States and to such other parties as the Secretary deems appropriate for their review and comments. After receipt of comments on a unit and careful consideration thereof, the Secretary shall submit each final report with his recommendations, simultaneously, to the President, other concerned Federal departments and agencies, the Congress, and the Colorado River Basin States.

(b) The Secretary is directed—

(1) in the investigation, planning, construction, and implementation of any salinity control unit involving control of salinity from irrigation sources, to cooperate with the Secretary of Agriculture in carrying out research and demonstration projects and in implementing on-the-farm improvements and farm management practices and programs which will further the objective of this title;

(2) to undertake research on additional methods for accomplishing the objective of this title, utilizing to the fullest extent practicable the capabilities and resources of other Federal departments and agencies, interstate institutions, States, and private organizations.

Sec. 204. (a) There is hereby created the Colorado River Basin Salinity Control Advisory Council composed of no more than three members from each State appointed by the Governor of each of the Colorado River Basin States.

(b) The Council shall be advisory only and shall—

(1) act as liaison between both the Secretaries of Interior and Agriculture and the Administrator of the Environmental Protection Agency and the States in accomplishing the purposes of this title;

(2) receive reports from the Secretary on the progress of the salinity control program and review and comment on said reports; and

(3) recommend to both the Secretary and the Administrator of the Environmental Protection Agency appropriate studies of further projects, techniques, or methods for accomplishing the purposes of this title.

Sec. 205. (a) The Secretary shall allocate the total costs of each unit or separable feature thereof authorized by section 202 of this title, as follows:

(1) In recognition of Federal responsibility for the Colorado River as an interstate stream and for international comity with Mexico, Federal ownership of the lands of the Colorado River Basin from which most of the dissolved salts originate, and the policy embodied in the Federal Water Pollution Control Act Amendments of 1972 (86 Stat. 816), 75 per centum of the total costs of construction, operation, maintenance, and replacement of each unit or separable feature thereof shall be nonreimbursable.

(2) Twenty-five per centum of the total costs shall be allocated between the Upper Colorado River Basin Fund established by section 5(a) of the Colorado River Storage Project Act (70 Stat. 107) and the Lower Colorado River Basin Development Fund established by section 403(a) of the Colorado River Basin Project Act (82 Stat. 895), after consultation with the Advisory Council created in section 204(a) of this title and construction of the following items:

(i) benefits to be derived in each basin from the use of water of improved quality and the use of works for improved water management;

(ii) causes of salinity; and

(iii) availability of revenues in the Lower Colorado River Basin Development Fund and increased revenues to the Upper Colorado River Basin Fund made available under section 205(d) of this title: *Provided*, That costs allocated to the Upper Colorado River Basin Fund under section 205(a)(2) of this title not exceed 15 per centum of the costs allocated to the Upper Colorado River Basin Fund and the Lower Colorado River Basin Development Fund.

(3) Costs of construction of each unit or separable feature thereof allocated to the upper basin and to the lower basin under section 205(a)(12) of this title shall be repaid within a fifty-year period without interest from the date such unit or separable feature thereof is determined by the Secretary to be in operation.

(b) (1) Costs of construction, operation, maintenance, and replacement of each unit or separable feature thereof allocated for repayment by the lower basin under section 205(a)(2) of this title shall be paid in accordance with subsection 205(b)(2) of this title, from the Lower Colorado River Basin Development Fund.

(2) Section 403(g) of the Colorado River Basin Project Act (82 Stat. 896) is hereby amended as follows: strike the word "and" after the word "Act," in line 8; insert after the word "Act," the following "(2) for repayment to the general fund of the Treasury the costs of each salinity control unit or separable feature thereof payable from the Lower Colorado River Basin Development Fund in accordance with sections 205(a)(2), 205(a)(3), and 205(b)(1) of the Colorado River Salinity Control Act"; change paragraph (2) to paragraph (3).

(c) Costs of construction, operation, maintenance, and replacement of each unit or separable feature thereof allocated for repayment by the upper basin under section 205(a)(2) of this title shall be paid in accordance with section 205(d) of this title from the Upper Colorado River Basin Fund within the limit of the funds made available under section 205(e) of this title.

(d) Section 5(d) of the Colorado River Storage Project Act (70 Stat. 108) is hereby amended as follows: strike the word "and" at the end of paragraph (3); strike the period after the word "years" at the end of paragraph (4) and insert a semicolon in lieu thereof followed by the word "and"; add a new paragraph (5) reading:

"(5) the costs of each salinity control unit or separable feature thereof payable from the Upper Colorado River Basin Fund in accordance with sections 205(a)(2), 205(a)(3), and 205(c) of the Colorado River Salinity Control Act."

(e) The Secretary is authorized to make upward adjustments in rates charged for electrical energy under all contracts administered by the Secretary under the Colorado River Storage Project Act (70 Stat. 105, 43 U.S.C. 620) as soon as practicable and to the extent necessary to cover the costs of construction, operation, maintenance, and replacement of units allocated under section 205(a)(2) and in conformity with section 205(a)(3) of this title: *Provided*, That revenues derived from said rate adjustments shall be available solely for the construction, operation, maintenance, and replacement of salinity control units in the Colorado River Basin herein authorized.

Sec. 206. Commencing on January 1, 1975, and every two years thereafter, the Secretary shall submit, simultaneously, to the President, the Congress, and the Advisory Council created in section 204(a) of this title, a report on the Colorado River salinity control program authorized by this title covering the progress of investigations, planning, and construction of salinity control units for the previous fiscal year, the effectiveness of such units, anticipated work

needed to be accomplished in the future to meet the objectives of this title, with emphasis on the needs during the five years immediately following the date of each report, and any special problems that may be impeding progress in attaining an effective salinity control program. Said report may be included in the biennial report on the quality of water of the Colorado River Basin prepared by the Secretary pursuant to section 15 of the Colorado River Storage Project Act (70 Stat. 111; 43 U.S.C. 602n), section 15 of the Navajo Indian Irrigation project, and the initial stage of the San Juan Chama Project Act (76 Stat. 102), and section 6 of the Fryingpan-Arkansas Project Act (76 Stat. 393).

SEC. 207. Except as provided in section 205(b) and 205(d) of this title, with respect to the Colorado River Basin Project Act and the Colorado River Storage Project Act, respectively, nothing in this title shall be construed to alter, amend, repeal, modify, interpret, or be in conflict with the provisions of the Colorado River Compact (45 Stat. 1057), the Upper Colorado River Basin Compact (63 Stat. 31), the Water Treaty of 1944 with the United Mexican States (Treaty Series 994; 59 Stat. 1219), the decree entered by the Supreme Court of the United States in *Arizona against California and others* (376 U.S. 340), the Boulder Canyon Project Act (45 Stat. 1057), Boulder Canyon Project Adjustment Act (54 Stat. 774; 43 U.S.C. 618a), section 15 of the Colorado River Storage Project Act (70 Stat. 111; 43 U.S.C. 602n), the Colorado River Basin Project Act (82 Stat. 885), section 6 of the Fryingpan-Arkansas Project Act (76 Stat. 393), section 15 of the Navajo Indian Irrigation project and initial stage of the San Juan-Chama Project Act (76 Stat. 102), the National Environmental Policy Act of 1969, and the Federal Water Pollution Control Act, as amended.

SEC. 208. (a) The Secretary is authorized to provide modifications of the projects authorized by this title as determined to be appropriate for purposes of meeting the objective of this title. No funds for any such modification shall be expended until the expiration of sixty days after the proposed modification has been submitted to appropriate committees of the Congress, and not then if disapproved by said committees, except that funds may be expended prior to the expiration of such sixty days in any case in which the Congress approves an earlier date by concurrent resolution. The Governors of the Colorado River Basin States shall be notified of these changes.

(b) The Secretary is hereby authorized to enter into contracts that he deems necessary to carry out the provisions of this title, in advance of the appropriation of funds therefor. There is hereby authorized to be appropriated the sum of \$125,100,000 for the construction of the works and for other purposes authorized in section 202 of this title, based on April 1973 prices, plus or minus such amounts as may be justified by reason of ordinary fluctuations in costs involved therein, and such sums as may be required to operate and maintain such works. There is further authorized to be appropriated such sums as may be necessary to pay condemnation awards in excess of appraised values and to cover costs required in connection with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 90-646).

SEC. 209. As used in this title—

(a) all terms that are defined in the Colorado River Compact shall have the meanings therein defined;

(b) "Colorado River Basin States" means the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming.

Mr. MANSFIELD. Mr. President, I send to the desk a technical amendment.

Also, I wish to state that the bill reflects the name of Senator DOMENICI as a cosponsor. This is a printing error. It should read Senator DOMINICK instead of Senator DOMENICI.

The PRESIDENT pro tempore. The amendment will be stated.

The assistant legislative clerk read as follows:

On page 26, line 14, delete the word "with" and insert instead the word "within."

The PRESIDENT pro tempore. The question is on agreeing to the amendment.

The amendment was agreed to.

The PRESIDENT pro tempore. The question is on agreeing to the committee amendment in the nature of a substitute, as amended.

The committee amendment in the nature of a substitute, as amended, was agreed to.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of H.R. 12165, a companion bill passed by the House; that all after the enacting clause be stricken; and that the text of S. 2940, as amended, be substituted therefor, if it has been amended.

The PRESIDENT pro tempore. Is there objection to the request of the Senator from Montana?

There being no objection, the Senate proceeded to consider the bill (H.R. 12165) to authorize the construction, operation, and maintenance of certain works in the Colorado River Basin to control the salinity of water delivered to users in the United States and Mexico, which was read twice by its title.

Mr. MANSFIELD. Mr. President, the legislation now before the Senate has as its primary objective the implementation of the Colorado River desalinization agreement signed by the United States and Mexico on August 30 of last year. Both the agreement and the implementing legislation are—to say the least—of historic importance to both countries.

Let me briefly sketch the salinity issue as it has developed in recent years.

The Colorado River has an average annual flow ranging between 14 and 18 million acre-feet. Under the terms of the 1944 Water Treaty with Mexico, the United States guarantees that 1.5 million acre-feet of this water will be delivered annually to Mexico. At the time the treaty was approved, United States use of this water resource was so small that Mexico was in fact receiving far in excess of its 1.5 million yearly allotment.

In the early 1960's two things occurred to create a serious salinity problem with respect to the water delivered to Mexico. First, by this time, there was virtually no surplus water going to Mexico. Second, and most importantly, United States brought into operation the Wellton-Mohawk Irrigation and Drainage District in Arizona, which produced a return flow having a very high saline content, approximately 6,000 parts per million.

The combined result of these two factors was to double the average annual salinity of 800 to 900 parts per million in water going to Mexico. At certain times of the year, the salinity factor in Mex-

ico's Colorado River water increased to 2,500 parts per million.

In the course of the past decade, the United States has undertaken various "half measures" in an effort to reduce the saline content of water available to Mexico. From Mexico's standpoint, however, none of these has produced a lasting, satisfactory solution to the problem. Hence, throughout this time the problem has been a source of serious irritation in United States-Mexico relations.

Indeed, as those familiar with the salinity issue are aware, no other issue in recent times has so troubled our relations; no other problem has so taxed our determination to seek mutually satisfactory solutions to common problems; no other problem has so tested the sincerity and ingenuity of our diplomats; and no other problem has so challenged the mutual respect and goodwill that our two countries have for each other.

In the end, our deeds have matched our words. Looking back, I am convinced that it could not have been otherwise—given the solemn determination of President Nixon and President Echeverria to resolve this issue. Their enlightened leadership on it deserves the high praise. Likewise, a very special tribute is owed to former Attorney General Brownell and Foreign Secretary Rabasa, whose tireless efforts contributed so much to making the August 30 agreement a reality.

Legislation to implement the desalinization agreement arrived on Capitol Hill in February. In 5 short months it now has reached the stage of final passage. This is a legislative achievement of which we in the Congress can be justifiably proud—especially given the fact that the executive branch required 6 months just to formulate its legislation proposal.

The urgency with which Congress has handled this legislation can, I believe, be attributed in large part of the Mexico-United States Interparliamentary Conferences, which have been held annually since 1961. The 14th Conference was held just last month here in Washington, and as those who participated know, these conferences offer a vitally important sounding board to the parliamentarians of our respective legislatures. The deliberations, the discussions, the debates contribute immeasurably to a richer understanding of our mutual problems and concerns. They give us a genuine appreciation of the facts and this, in turn, serves to produce a political climate that virtually guarantees unanimous acceptance by the people's elected officials.

This was the pattern of the Chamizal Agreement in 1963. And it has proven successful again—as the legislation now before us so clearly demonstrates.

With the final passage of this implementing legislation, we once again extend to our Mexican friends—un abrazo fuertísimo.

Mr. President, I ask unanimous consent that excerpts from the report on the Colorado River Basin Salinity Control Act, S. 2940, be printed in the RECORD. The excerpts give a good history of the developments leading up to the present situation and also mark the honoring of the treaty of 1944 which guaranteed a

certain number of cubic feet of good water to the people living across the line in Mexico.

There being no objection, the excerpts were ordered to be printed in the RECORD, as follows:

[Excerpts From Colorado River Basin Salinity Control Act]

That this Act may be cited as the "Colorado River Basin Salinity Control Act".

TITLE I—PROGRAMS DOWNSTREAM FROM IMPERIAL DAM

SEC. 101. (a) The Secretary of the Interior, hereinafter referred to as the "Secretary", is authorized and directed to proceed with a program of works of improvement for the enhancement and protection of the quality of water available in the Colorado River for use in the United States and the Republic of Mexico, and to enable the United States to comply with its obligations under the agreement with Mexico of August 30, 1973 (Minute No. 242 of the International Boundary and Water Commission, United States and Mexico), concluded pursuant to the Treaty of February 3, 1944 (TS 994), in accordance with the provisions of this Act.

(b) (1) The Secretary is authorized to construct, operate, and maintain a desalting complex, including (1) a desalting plant to reduce the salinity of drain water from the Wellton-Mohawk division of the Gila project, Arizona (hereinafter referred to as the division), including a pretreatment plant for settling, softening, and filtration of the drain water to be desalted; (2) the necessary appurtenant works including the intake pumping plant system, product waterline, power transmission facilities, and permanent operating facilities; (3) the necessary extension in the United States and Mexico of the existing bypass drain to carry the reject stream from the desalting plant and other drainage waters to the Santa Clara Slough in Mexico, with the part in Mexico, subject to arrangements made pursuant to section 101(d); (4) replacement of the metal flume in the existing main outlet drain extension with a concrete siphon; (5) reduction of the quantity of irrigation return flows through acquisition of lands to reduce the size of the division, and irrigation efficiency improvements to minimize return flows; (6) acquire on behalf of the United States such lands or interest in lands in the Painted Rock Reservoir as may be necessary to operate the project in accordance with the obligations of Minute No. 242, and (7) all associated facilities including roads, railroad spur, and transmission lines.

(2) The desalting plant shall be designed to treat approximately one hundred and twenty-nine million gallons a day of drain water using advanced technology commercially available. The plant shall effect recovery initially of not less than 70 per centum of the drain water as product water, and shall effect reduction of not less than 90 per centum of the dissolved solids in the feed water. The Secretary shall use sources of electric power supply for the desalting complex that will not diminish the supply of power to preference customers from Federal power systems operated by the Secretary. All costs associated with the desalting plant shall be nonreimbursable.

(c) Replacement of the reject stream from the desalting plant and of any Wellton-Mohawk drainage water bypassed to the Santa Clara Slough to accomplish essential operation except at such times when there exists surplus water of the Colorado River under the terms of the Mexican Water Treaty of 1944, is recognized as a national obligation as provided in section 202 of the Colorado River Basin Project Act (82 Stat. 895).

Studies to identify feasible measures to provide adequate replacement water shall be completed not later than June 30, 1980. Said studies shall be limited to potential sources within the States of Arizona, California, New Mexico, and those portions of Nevada, Utah, and Wyoming which are within the natural drainage basin of the Colorado River. Measures found necessary to replace the reject stream from the desalting plant and any Wellton-Mohawk drainage bypassed to the Santa Clara Slough to accomplish essential operations may be undertaken independently of the national obligation set forth in section 202 of the Colorado River Basin Project Act.

(d) The Secretary is hereby authorized to advance funds to the United States section, International Boundary and Water Commission (IBWC), for construction, operation, and maintenance by Mexico pursuant to Minute No. 242 of that portion of the bypass drain with Mexico. Such funds shall be transferred to an appropriate Mexican agency, under arrangements to be concluded by the IBWC providing for the construction, operation, and maintenance of such facility by Mexico.

(e) Any desalted water not needed for the purposes of this title may be exchanged at prices and under terms and conditions satisfactory to the Secretary and the proceeds therefrom shall be deposited in the General Fund of the Treasury. The city of Yuma, Arizona, shall have first right of refusal to any such water.

(f) For the purpose of reducing the return flows from the division to one hundred and seventy-five thousand acre-feet or less, annually, the Secretary is authorized to:

(1) Accelerate the cooperative program of Irrigation Management Services with the Wellton-Mohawk Irrigation and Drainage District, hereinafter referred to as the district, for the purpose of improving irrigation efficiency. The district shall bear its share of the cost of such program as determined by the Secretary.

(2) Acquire, by purchase or through eminent domain or exchange, to the extent determined by him to be appropriate, lands or interests in lands to reduce the existing seventy-five thousand developed and undeveloped irrigable acres authorized by the Act of July 30, 1947 (61 Stat. 628), known as the Gila Reauthorization Act. The initial reduction in irrigable acreage shall be limited to approximately ten thousand acres. If the Secretary determines that the irrigable acreage of the division must be reduced below sixty-five thousand acres of irrigable lands to carry out the purpose of this section, the Secretary is authorized, with the consent of the district, to acquire additional lands, as may be deemed by him to be appropriate.

(g) The Secretary is authorized to dispose of the acquired lands and interests therein on terms and conditions satisfactory to him and meeting the objective of this Act.

(h) The Secretary is authorized, either in conjunction with or in lieu of land acquisition, to assist water users in the division in installing system improvements, such as ditch lining, change of field layouts, automatic equipment, sprinkler systems and bubbler systems, as a means of increasing irrigation efficiencies: *Provided*, however, That all costs associated with the improvements authorized herein and allocated to the water users on the basis of benefits received, as determined by the Secretary, shall be reimbursed to the United States in amounts and on terms and conditions satisfactory to the Secretary.

(i) The Secretary is authorized to amend the contract between the United States and the district dated March 4, 1952, as amended, to provide that—

(1) the portion of the existing repayment obligation owing to the United States allocable to irrigable acreage eliminated from the division for the purposes of this title, as determined by the Secretary, shall be nonreimbursable; and

(2) if deemed appropriate by the Secretary, the district shall be given credit against its outstanding repayment obligation to offset any increase in operation and maintenance assessments per acre which may result from the district's decreased operation and maintenance base, all as determined by the Secretary.

(j) The Secretary is authorized to acquire through the Corps of Engineers fee title to, or other necessary interests in, additional lands above the Painted Rock Dam in Arizona that are required for the temporary storage capacity needed to permit operation of the dam and reservoir in times of serious flooding in accordance with the obligations of the United States under Minute No. 242. No funds shall be expended for acquisition of land or interests therein until it is finally determined by a Federal court of competent jurisdiction that the Corps of Engineers presently lacks legal authority to use said lands for this purpose. Nothing contained in this title nor any action taken pursuant to it shall be deemed to be a recognition or admission of any obligation to the owners of such land on the part of the United States or a limitation or deficiency in the rights or powers of the United States with respect to such lands or the operation of the reservoir.

(k) To the extent desirable to carry out sections 101(f)(1) and 101(h), the Secretary may transfer funds to the Secretary of Agriculture as may be required for technical assistance to farmers, conduct of research and demonstrations, and such related investigations as are required to achieve higher on-farm irrigation efficiencies.

(l) All cost associated with the desalting complex shall be nonreimbursable except as provided in sections 101(f) and 101(h).

SEC. 102. (a) To assist in meeting salinity control objectives of Minute No. 242 during an interim period, the Secretary is authorized to construct a new concrete-lined canal or, to line the presently unlined portion of the Coachella Canal of the Boulder Canyon project, California, from station 2 plus 26 to the beginning of siphon numbered 7, a length of approximately forty-nine miles. The United States shall be entitled to temporary use of a quantity of water, for the purpose of meeting the salinity control objectives of Minute No. 242, during an interim period, equal to the quantity of water conserved by constructing or lining the said canal. The interim period shall commence on completion of construction or lining said canal and shall end the first year that the Secretary delivers main stream Colorado River water to California in an amount less than the sum of the quantities requested by (1) the California agencies under contracts made pursuant to section 5 of the Boulder Canyon Project Act (45 Stat. 1057), and (2) Federal establishments to meet their water rights acquired in California in accordance with the Supreme Court decree in Arizona against California (376 U.S. 340).

(b) The charges for total construction shall be repayable without interest in equal annual installments over a period of forty years beginning in the year following completion of construction: *Provided*, That, repayment shall be prorated between the United States and the Coachella Valley County Water District, and the Secretary is authorized to enter into a repayment contract with Coachella Valley County Water District for that purpose. Such contract shall provide that annual repayment installments shall be nonreimbursable during the interim

period, defined in section 102(a) of this title and shall provide that after the interim period, said annual repayment installments or portions thereof, shall be paid by Coachella Valley County Water District.

(c) The Secretary is authorized to acquire by purchase, eminent domain, or exchange private lands or interests therein, as may be determined by him to be appropriate, within the Imperial Irrigation District on the Imperial East Mesa which receive, or which have been granted rights to receive, water from Imperial Irrigation District's capacity in the Coachella Canal. Costs of such acquisitions shall be nonreimbursable and the Secretary shall return such lands to the public domain. The United States shall not acquire any water rights by reason of this land acquisition.

(d) The Secretary is authorized to credit Imperial Irrigation District against its final payments for certain outstanding construction charges payable to the United States on account of capacity to be relinquished in the Coachella Canal as a result of the canal lining program, all as determined by the Secretary: *Provided*, That, relinquishment of capacity shall not affect the established basis for allocating operation and maintenance costs of the main All-American Canal to existing contractors.

(e) The Secretary is authorized and directed to cede the following land to the Cocopah Tribe of Indians, subject to rights-of-way for existing levees, to be held in trust by the United States for the Cocopah Tribe of Indians:

Township 9 south, range 25 west of the Gila and Salt River meridian, Arizona;

Section 25: Lots 18, 19, 20, 21, 22, and 23;

Section 26: Lots 1, 12, 13, 14, and 15;

Section 27: Lot 3; and all accretion to the above described lands.

The Secretary is authorized and directed to construct three bridges, one of which shall be capable of accommodating heavy vehicular traffic, over the portion of the bypass drain which crosses the reservation of the Cocopah Tribe of Indians. The transfer of lands to the Cocopah Indian Reservation and the construction of bridges across the bypass drain shall constitute full and complete payment to said tribe for the rights-of-way required for construction of the bypass drain and electrical transmission lines for works authorized by this title.

Sec. 103. (a) The Secretary is authorized to:

(1) Construct, operate, and maintain, consistent with Minute No. 242, well fields capable of furnishing approximately one hundred and sixty thousand acre-feet of water per year for use in the United States and for delivery to Mexico in satisfaction of the 1944 Mexican Water Treaty.

(2) Acquire by purchase, eminent domain, or exchange, to the extent determined by him to be appropriate, approximately twenty-three thousand five hundred acres of lands or interests therein within approximately five miles of the Mexican border on the Yuma Mesa: *Provided, however*, That any such lands which are presently owned by the State of Arizona may be acquired or exchanged for Federal lands.

(3) Any lands removed from the jurisdiction of the Yuma Mesa Irrigation and Drainage District pursuant to clause (2) of this subsection which were available for use under the Gila Reauthorization Act (61 Stat. 628), shall be replaced with like lands within or adjacent to the Yuma Mesa division of the project. In the development of these substituted lands or any other lands within the Gila project, the Secretary may provide for full utilization of the Gila Gravity Main Canal in addition to contracted capacities.

(b) The cost of work provided for in this section, including delivery of water to Mexico, shall be nonreimbursable; except to the extent that the waters furnished are used in the United States.

Sec. 104. The Secretary is authorized to provide for modifications of the projects authorized by this title to the extent he determines appropriate for purposes of meeting the international settlement objective of his title at the lowest overall cost to the United States. No funds for any such modification shall be expended until the expiration of sixty days after the proposed modification has been submitted to the appropriate committees of the Congress, unless the Congress approves an earlier date by concurrent resolution. The Secretary shall notify the Governors of the Colorado River Basin States of such modifications.

Sec. 105. The Secretary is hereby authorized to enter into contracts that he deems necessary to carry out the provisions of this title in advance of the appropriation of funds therefor.

Sec. 106. In carrying out the provisions of this title, the Secretary shall consult and cooperate with the Secretary of State, the Administrator of the Environmental Protection Agency, the Secretary of Agriculture, and other affected Federal, State, and local agencies.

Sec. 107. Nothing in this Act shall be deemed to modify the National Environmental Policy Act of 1969, the Federal Water Pollution Control Act, as amended, or, except as expressly stated herein, the provisions of any other Federal law.

Sec. 108. There is hereby authorized to be appropriated the sum of \$121,500,000 for the construction of the works and accomplishments of the purposes authorized in sections 101 and 102, and \$34,000,000 to accomplish the purposes of section 103, based on April 1973 prices, plus or minus such amounts as may be justified by reason of ordinary fluctuations in construction costs involved therein, and such sums as may be required to operate and maintain such works and to provide for such modifications as may be made pursuant to section 104. There is further authorized to be appropriated such sums as may be necessary to pay condemnation awards in excess of appraised values and to cover costs required in connection with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 90-646).

TITLE II—MEASURES UPSTREAM FROM IMPERIAL DAM

Sec. 201. (a) The Secretary of the Interior shall implement the salinity control policy adopted for the Colorado River in the "Conclusions and Recommendations" published in the Proceedings of the Reconvened Seventh Session of the Conference in the Matter of Pollution of the Interstate Waters of the Colorado River and its Tributaries in the States of California, Colorado, Utah, Arizona, Nevada, New Mexico, and Wyoming, held in Denver, Colorado, on April 26-27, 1972, under the authority of section 10 of the Federal Water Pollution Control Act (33 U.S.C. 1160), and approved by the Administrator of the Environmental Protection Agency on June 9, 1972.

(b) The Secretary is hereby directed to expedite the investigation, planning, and implementation of the salinity control program generally as described in chapter VI of the "Secretary's report entitled, 'Colorado River Water Quality Improvement Program, February 1972'".

(c) In conformity with section 201(a) of this title and the authority of the Environmental Protection Agency under Federal laws, the Secretary, the Administrator of the Environmental Protection Agency, and the

Secretary of Agriculture are directed to cooperate and coordinate their activities effectively to carry out the objective of this title.

Sec. 202. The Secretary is authorized to construct, operate, and maintain the following salinity control units as the initial stage of the Colorado River Basin salinity control program.

(1) The Paradox Valley unit, Montrose County, Colorado, consisting of facilities for collection and disposition of saline ground water of Paradox Valley, including wells, pumps, pipelines, solar evaporation ponds, and all necessary appurtenant and associated works such as roads, fences, dikes, power transmission facilities, and permanent operating facilities.

(2) The Grand Valley unit, Colorado, consisting of measures and all necessary appurtenant and associated works to reduce the seepage of irrigation water from the irrigated lands of Grand Valley into the ground water and thence into the Colorado River. Measures shall include lining of canals and laterals, and the combining of existing canals and laterals into fewer and more efficient facilities. Prior to initiation of construction of the Grand Valley unit the Secretary shall enter into contracts through which the agencies owning, operating, and maintaining the water distribution systems in Grand Valley, singly or in concert, will assume all obligations relating to the continued operation and maintenance of the unit's facilities to the end that the maximum reduction of salinity inflow to the Colorado River will be achieved. The Secretary is also authorized to provide, as an element of the Grand Valley unit, for a technical staff to provide information and assistance to water users on means and measures for limiting excess water applications to irrigated lands: *Provided*, That such assistance shall not exceed a period of five years after funds first become available under this title. The Secretary will enter into agreements with the Secretary of Agriculture to develop a unified control plan for the Grand Valley unit. The Secretary of Agriculture is directed to cooperate in the planning and construction of on-farm system measures under programs available to that Department.

(3) The Crystal Geyser unit, Utah, consisting of facilities for collection and disposition of saline geyser discharges; including dikes, pipelines, solar evaporation ponds, and all necessary appurtenant works including operating facilities.

(4) The Las Vegas Wash unit, Nevada, consisting of facilities for collection and disposition of saline ground water of Las Vegas Wash, including infiltration galleries, pumps, desalter, pipelines, solar evaporation facilities, and all appurtenant works including but not limited to roads, fences, power transmission facilities, and operating facilities.

Sec. 203. (a) The Secretary is authorized and directed to—

(1) Expedite completion of the planning reports on the following units, described in the Secretary's report, "Colorado River Water Quality Improvement Program, February 1972":

- (i) Irrigation source control:
 - Lower Gunnison.
 - Utah Basin.
 - Colorado River Indian Reservation.
 - Palo Verde Irrigation District.
- (ii) Point source control:
 - LeVerkin Springs.
 - Littlefield Springs.
 - Glenwood-Dotsero Springs.
- (iii) Diffuse source control:
 - Price River
 - San Rafael River
 - Dirty Devil River
 - McElmo Creek
 - Big Sandy River

(2) Submit each planning report on the units named in section 203(a) (1) of this title promptly to the Colorado River Basin States and to such other parties as the Secretary deems appropriate for their review and comments. After receipt of comments on a unit and careful consideration thereof, the Secretary shall submit each final report with his recommendations, simultaneously, to the President, other concerned Federal departments and agencies, the Congress, and the Colorado River Basin States.

(b) The Secretary is directed—

(1) in the investigation, planning, construction, and implementation of any salinity control unit involving control of salinity from irrigation sources, to cooperate with the Secretary of Agriculture in carrying out research and demonstration projects and in implementing on-the-farm improvements and farm management practices and programs which will further the objective of this title;

(2) to undertake research on additional methods for accomplishing the objective of this title, utilizing to the fullest extent practicable the capabilities and resources of other Federal departments and agencies, interstate institutions, States, and private organizations.

SEC. 204. (a) There is hereby created the Colorado River Basin Salinity Control Advisory Council composed of no more than three members from each State appointed by the Governor of each of the Colorado River Basin States.

(b) The Council shall be advisory only and shall—

(1) act as liaison between both the Secretaries of Interior and Agriculture and the Administrator of the Environmental Protection Agency and the States in accomplishing the purposes of this title;

(2) receive reports from the Secretary on the progress of the salinity control program and review and comment on said reports; and

(3) recommend to both the Secretary and the Administrator of the Environmental Protection Agency appropriate studies of further projects, techniques, or methods for accomplishing the purposes of this title.

SEC. 205. (a) The Secretary shall allocate the total costs of each unit or separable feature thereof authorized by section 202 of this title, as follows:

(1) In recognition of Federal responsibility for the Colorado River as an interstate stream and for international comity with Mexico, Federal ownership of the lands of the Colorado River Basin from which most of the dissolved salts originate, and the policy embodied in the Federal Water Pollution Control Act Amendments of 1972 (86 Stat. 816), 75 per centum of the total costs of construction, operation, maintenance, and replacement of each unit or separable feature thereof shall be nonreimbursable.

(2) Twenty-five per centum of the total costs shall be allocated between the Upper Colorado River Basin Fund established by section 5(a) of the Colorado River Storage Project Act (70 Stat. 107) and the Lower Colorado River Basin Development Fund established by section 403(a) of the Colorado River Basin Project Act (82 Stat. 895), after consultation with the Advisory Council created in section 204(a) of this title and consideration of the following items:

(i) benefits to be derived in each basin from the use of water of improved quality and the use of works for improved water management;

(ii) causes of salinity; and

(iii) availability of revenues in the Lower Colorado River Basin Development Fund and increased revenues to the Upper Colorado River Basin Fund made available under

section 205(d) of this title: *Provided*, That costs allocated to the Upper Colorado River Basin Fund under section 205(a) (2) of this title shall not exceed 15 per centum of the costs allocated to the Upper Colorado River Basin Fund and the Lower Colorado River Basin Development Fund.

(3) Costs of construction of each unit or separable feature thereof allocated to the upper basin and to the lower basin under section 205(a) (2) of this title shall be repaid within a fifty-year period without interest from the date such unit or separable feature thereof is determined by the Secretary to be in operation.

(b) (1) Costs of construction, operation, maintenance, and replacement of each unit or separable feature thereof allocated for repayment by the lower basin under section 205(a) (2) of this title shall be paid in accordance with subsection 205(b) (2) of this title, from the Lower Colorado River Basin Development Fund.

(2) Section 403(g) of the Colorado River Basin Project Act (82 Stat. 896) is hereby amended as follows: strike the word "and" after the word "Act," in line 8; insert after the word "Act," the following "(2) for repayment to the general fund of the Treasury the costs of each salinity control unit or separable feature thereof payable from the Lower Colorado River Basin Development Fund in accordance with sections 205(a) (2), 205(a) (3), and 205(b) (1) of the Colorado River Salinity Control Act"; change paragraph (2) to paragraph (3).

(c) Costs of construction, operation, maintenance, and replacement of each unit or separable feature thereof allocated for repayment by the upper basin under section 205(a) (2) of this title shall be paid in accordance with section 205(d) of this title from the Upper Colorado River Basin Fund within the limit of the funds made available under section 205(e) of this title.

(d) Section 5(d) of the Colorado River Storage Project Act (70 Stat. 108) is hereby amended as follows: strike the word "and" at the end of paragraph (3); strike the period after the word "years" at the end of paragraph (4) and insert a semicolon in lieu thereof followed by the word "and"; add a new paragraph (5) reading:

"(5) the costs of each salinity control unit or separable feature thereof payable from the Upper Colorado River Basin Fund in accordance with sections 205(a) (2), 205(a) (3), and 205(c) of the Colorado River Salinity Control Act."

(e) The Secretary is authorized to make upward adjustments in rates charged for electrical energy under all contracts administered by the Secretary under the Colorado River Storage Project Act (70 Stat. 105, 43 U.S.C. 620) as soon as practicable and to the extent necessary to cover the costs of construction, operation, maintenance, and replacement of units allocated under section 205(a) (2) and in conformity with section 205(a) (3) of this title: *Provided*, That revenues derived from said rate adjustments shall be available solely for the construction, operation, maintenance, and replacement of salinity control units in the Colorado River Basin herein authorized.

SEC. 206. Commencing on January 1, 1975, and every two years thereafter, the Secretary shall submit, simultaneously, to the President, the Congress, and the Advisory Council created in section 204(a) of this title, a report on the Colorado River salinity control program authorized by this title covering the progress of investigations, planning, and construction of salinity control units for the previous fiscal year, the effectiveness of such units, anticipated work needed to be accomplished in the future to

meet the objectives of this title, with emphasis on the needs during the five years immediately following the date of each report, and any special problems that may be impeding progress in attaining an effective salinity control program. Said report may be included in the biennial report on the quality of water of the Colorado River Basin prepared by the Secretary pursuant to section 15 of the Colorado River Storage Project Act (70 Stat. 111; 43 U.S.C. 602n), section 15 of the Navajo Indian Irrigation project, and the initial stage of the San Juan Chama Project Act (76 Stat. 102), and section 6 of the Fryingpan-Arkansas Project Act (76 Stat. 393).

SEC. 207. Except as provided in section 205 (b) and 205(d) of this title, with respect to the Colorado River Basin Project Act and the Colorado River Storage Project Act, respectively, nothing in this title shall be construed to alter, amend, repeal, modify, interpret, or be in conflict with the provisions of the Colorado River Compact (45 Stat. 1057), the Upper Colorado River Basin Compact (63 Stat. 31), the Water Treaty of 1944 with the United Mexican States (Treaty Series 994; 59 Stat. 1219), the decree entered by the Supreme Court of the United States in Arizona against California and others (376 U.S. 340), the Boulder Canyon Project Act (45 Stat. 1057), Boulder Canyon Project Adjustment Act (54 Stat. 774; 43 U.S.C. 618a), section 15 of the Colorado River Storage Project Act (70 Stat. 111; 43 U.S.C. 620n), the Colorado River Basin Project Act (82 Stat. 885), section 6 of the Fryingpan-Arkansas Project Act (76 Stat. 393), section 15 of the Navajo Indian Irrigation project and initial stage of the San Juan-Chama Project Act (76 Stat. 102), the National Environmental Policy Act of 1969, and the Federal Water Pollution Control Act, as amended.

SEC. 208. (a) The Secretary is authorized to provide for modifications of the projects authorized by this title as determined to be appropriate for purposes of meeting the objective of this title. No funds for any such modification shall be expended until the expiration of sixty days after the proposed modification has been submitted to appropriate committees of the Congress, and not then if disapproved by said committees, except that funds may be expended prior to the expiration of such sixty days in any case in which the Congress approves an earlier date by concurrent resolution. The Governors of the Colorado River Basin States shall be notified of these changes.

(b) The Secretary is hereby authorized to enter into contracts that he deems necessary to carry out the provisions of this title, in advance of the appropriation of funds therefor. There is hereby authorized to be appropriated the sum of \$125,000,000 for the construction of the works and for other purposes authorized in section 202 of this title, based on April 1973 prices, plus or minus such amounts as may be justified by reason of ordinary fluctuations in costs involved therein, and such sums as may be required to operate and maintain such works. There is further authorized to be appropriated such sums as may be necessary to pay condemnation awards in excess of appraised values and to cover costs required in connection with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 90-646).

SEC. 209. As used in this title—

(a) all terms that are defined in the Colorado River Compact shall have the meanings therein defined;

(b) "Colorado River Basin States" means the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming.

I. BACKGROUND AND NEED FOR THE LEGISLATION

The increasing salinity of the Colorado River has been a prominent issue in both the United States and Mexico for many years. The river system is a source of municipal, industrial, and agricultural water which is vital to the economy of seven American States and a large area in Mexico.

A treaty between the United States and Mexico was consummated on February 3, 1944 (59 Stat. 1219) which guarantees Mexico the right to receive 1.5 million acre-feet of Colorado River water annually. Increasing salinity of deliveries under the treaty have been a long-standing controversy between the United States and Mexico and several interim agreements have been made to manage the deliveries to reduce the impacts of salinity.

As a direct result of the June 1972 visit of Mexican President Echeverria, in which he highlighted the problem in his address to the Congress, President Nixon appointed former Attorney General Brownell as his special representative to seek a permanent solution. General Brownell, assisted by an interagency task force, successfully concluded an agreement with Mexico. The agreement is set forth in "Minute No. 242 of the International Boundary and Water Commission" which was signed on August 30, 1973. (The "minute" constitutes an interpretation of the 1944 treaty.) Its text follows:

"The Commission met at the Secretariat of Foreign Relations, at Mexico, D.F., at 5:00 p.m. on August 30, 1973, pursuant to the instructions received by the two Commissioners from their respective Governments, in order to incorporate in a Minute of the Commission the joint recommendations which were made to their respective Presidents by the Special Representative of President Richard Nixon, Ambassador Herbert Brownell, and the Secretary of Foreign Relations of Mexico, Lic. Emilio O. Rabasa, and which have been approved by the Presidents, for a permanent and definitive solution of the international problem of the salinity of the Colorado River, resulting from the negotiations which they, and their technical and juridical advisers, held in June, July and August of 1973, in compliance with the references to this matter contained in the Joint Communique of Presidents Richard Nixon and Luis Echeverria of June 17, 1972.

"Accordingly, the Commission submits for the approval of the two Governments the following

Resolution

"1. Referring to the annual volume of Colorado River waters guaranteed to Mexico under the Treaty of 1944, of 1,500,000 acre-feet (1,859,234,000 cubic meters):

"(a) The United States shall adopt measures to assure that not earlier than January 1, 1974, and no later than July 1, 1974, the approximately 1,360,000 acre-feet (1,677,545,000 cubic meters) delivered to Mexico upstream of Morelos Dam, have an annual average salinity of no more than 115 ppm \pm 30 ppm U.S. count (121 ppm \pm 30 ppm Mexican count) over the annual average salinity of Colorado River waters which arrive at Imperial Dam, with the understanding that any waters that may be delivered to Mexico under the Treaty of 1944 by means of the All-American Canal shall be considered as having been delivered upstream of Morelos Dam for the purpose of computing this salinity.

"(b) The United States will continue to deliver to Mexico on the land boundary at San Luis and in the limitrophe section of the Colorado River downstream from Morelos Dam approximately 140,000 acre-feet (172,689,000 cubic meters) annually with a salinity substantially the same as that of the waters customarily delivered there.

"(c) Any decrease in deliveries under point 1(b) will be made up by an equal increase in deliveries under point 1(a).

"(d) Any other substantial changes in the aforementioned volumes of water at the stated locations must be agreed to by the Commission.

"(e) Implementation of the measures referred to in point 1(a) above is subject to the requirement in point 10 of the authorization of the necessary works.

"2. The life of Minute No. 241 shall be terminated upon approval of the present Minute. From September 1, 1973, until the provisions of point 1(a) become effective, the United States shall discharge to the Colorado River downstream from Morelos Dam volumes of drainage waters from the Wellton-Mohawk District at the annual rate of 118,000 acre-feet (145,551,000 cubic meters) and substitute therefor an equal volume of other waters to be discharged to the Colorado River above Morelos Dam; and, pursuant to the decision of President Echeverria expressed in the Joint Communique of June 17, 1972, the United States shall discharge to the Colorado River downstream from Morelos Dam the drainage waters of the Wellton-Mohawk District that do not form a part of the volumes of drainage waters referred to above, with the understanding that this remaining volume will not be replaced by substitution waters. The Commission shall continue to account for the drainage waters discharged below Morelos Dam as part of those described in the provisions of Article 10 of the Water Treaty of February 3, 1944.

"3. As a part of the measures referred to in point 1(a), the United States shall extend in its territory the concrete-lined Wellton-Mohawk bypass drain from Morelos Dam to the Arizona-Sonora international boundary, and operate and maintain the portions of the Wellton-Mohawk bypass drain located in the United States.

"4. To complete the drain referred to in point 3, Mexico, through the Commission and at the expense of the United States, shall construct, operate and maintain an extension of the concrete-lined bypass drain from the Arizona-Sonora international boundary to the Santa Clara Slough of a capacity of 353 cubic feet (10 cubic meters) per second. Mexico shall permit the United States to discharge through this drain to the Santa Clara Slough all or a portion of the Wellton-Mohawk drainage waters, the volumes of brine from such desalting operations in the United States as are carried out to implement the Resolution of this Minute, and any other volumes of brine which Mexico may agree to accept. It is understood that no radioactive material or nuclear wastes shall be discharged through this drain, and that the United States shall acquire no right to navigation, servitude or easement by reason of the existence of the drain, nor other legal rights, except as expressly provided in this point.

"5. Pending the conclusion by the Government of the United States and Mexico of a comprehensive agreement on groundwater in the border areas, each country shall limit pumping of groundwaters in its territory within 5 miles (eight kilometers) of the Arizona-Sonora boundary near San Luis to 160,000 acre-feet (197,358,000 cubic meters) annually.

"6. With the objective of avoiding future problems, the United States and Mexico shall consult with each other prior to undertaking any new development of either the surface or the groundwater resources, or undertaking substantial modifications of present developments, in its own territory in the border area that might adversely affect the other country.

"7. The United States will support efforts by Mexico to obtain appropriate financing

on favorable terms for the improvement and rehabilitation of the Mexicali Valley. The United States will also provide nonreimbursable assistance on a basis mutually acceptable to both countries exclusively for those aspects of the Mexican rehabilitation program of the Mexicali Valley relating to the salinity problem, including tile drainage. In order to comply with the above-mentioned purposes, both countries will undertake negotiations as soon as possible.

"8. The United States and Mexico shall recognize the undertakings and understandings contained in this Resolution as constituting the permanent and definitive solution of the salinity problem referred to in the Joint Communique of President Richard Nixon and President Luis Echeverria dated June 17, 1972.

"9. The measures required to implement this Resolution shall be undertaken and completed at the earliest practical date.

"10. This Minute is subject to the express approval of both Governments by exchange of Notes. It shall enter into force upon such approval; provided, however, that the provisions which are dependent for their implementation on the construction of works or on other measures which require expenditure of funds by the United States, shall become effective upon the notification by the United States to Mexico of the authorization by the United States Congress of said funds, which will be sought promptly.

"Thereupon, the meeting adjourned."

D. HERRERA J.,

Commissioner of Mexico.

J. F. FRIEDKIN,

Commissioner of the United States.

FERNANDO RIVAS S.,

Secretary of Mexican Section.

F. H. SACKSTEEDER, Jr.,

Secretary of the United States Section.

The principal provision of Minute No. 242 is a U.S. commitment to maintain a salinity differential of not more than 115 parts per million between Imperial Dam (the lowest major American diversion point) and Morelos Dam (the major Mexican diversion point). There are several other corollary points to the agreement.

The implementation of the agreement with Mexico would result in no appreciable benefit to water users in the United States. In fact, it would result in a net loss of water as a result of the bypassing of brines from the desalting operations without charging them to Mexico's allotment.

Much of the Colorado River Basin, and particularly the Lower Basin is heavily dependent upon the waters of the Colorado River to make the area habitable and productive. In addition, the significance of the Colorado River extends far beyond the physical boundaries of the basin, as it is an important source of water supply for such areas as southern California, Denver, and Salt Lake City. For some 60 years the efficient use and regulation of the river for the purposes of reclamation, flood control, and production of electric power has been a matter of concern to all of the States through which the river flows and increasingly, as salinity levels have risen, the quality of the water has become almost as crucial a question as its availability.

As the uses of Colorado River water increased over the years, so did salinity levels. In addition to an unusually high naturally occurring dissolved mineral load, increased uses by man have contributed loads of dissolved materials. The greatest contributing factor has been increased diversion and consumption of water for agricultural uses with related irrigation water return flows which have leached additional salts from soils, as about 2.4 million acres of lands within the basin and additional thousands of adjacent acres have been brought under ir-

rigation utilizing Colorado River water. Diversion of stream flows has had the effect of concentrating salts in the remaining water and municipal and industrial water consumption as well as reservoir evaporation, have contributed to increased salinity.

Salinity, particularly in the States of the lower basin has reached levels critical to the use of water for irrigation and municipal consumption. Present concentrations now average about 881 parts per million at Imperial Dam with projections for the year 2000 ranging from 1,160 to 1,300 parts per million if the salinity measures authorized by S. 2940 are not undertaken.

The Congress, the Executive, State government, and water consumers view with growing concern the continued increases in salinity and have been actively seeking the means of controlling the quality of water in the U.S. portion of the basin. In April of 1972, the Department of the Interior presented a salinity control program, developed by the Bureau of Reclamation, to the participants of an Enforcement Conference on the Pollution of Interstate Waters of the Colorado River. The measures which were included in the Department's recommendations are the basis of the general provisions of title II of S. 2490.

II. LEGISLATIVE HISTORY

Three bills were introduced in the 93d Congress relating to salinity control measures on the Colorado River. S. 1807, a bill introduced on May 14, 1973, by Senator Tunney with several cosponsors to authorize several salinity control measures within the basin not specifically associated with the Mexican agreement; S. 2940, a bill introduced on February 1, 1974, by Senators Fannin, Bible, and Dominick to authorize salinity control measures within the basin as well as those measures necessary to implement the intent of Minute No. 242 concluded pursuant to the Treaty of 1944; and S. 3094, a bill introduced on March 1, 1974, by Senator Jackson (by request), to authorize salinity control measures necessary to implement the intent of Minute No. 242 concluded pursuant to the Treaty of 1944.

Hearings before the Subcommittee on Water and Power Resources were held on April 26, 1974, on S. 1807, S. 2940, and S. 3094. Subsequently, the full committee met on June 3, 1974, in open executive session, and ordered S. 2940 reported with an amendment.

III. COMMITTEE AMENDMENTS

The Senate Committee on Interior and Insular Affairs, in considering S. 2940, attempted to conform the structure of the bill to that of H.R. 12165, a companion bill which had been reported by the House Interior Committee to facilitate the final resolution of the differences between the two measures. The committee amended S. 2940 by striking all after the enacting clause and inserting a new text. The new text includes many technical and clarifying language changes. The major amendments made to the bill as introduced were the following:

1. *Sec. 101(a)*. After the word "Mexico" the committee inserted the following language: "and to enable the United States to comply with its obligations under the agreement with Mexico of August 30, 1973 (Minute No. 242 of the International Boundary and Water Commission, United States and Mexico) concluded pursuant to the Treaty of February 3, 1944 (TS 994)."

The purpose of this amendment is to specifically recognize the intent of the bill to implement the agreement with Mexico, and to associate the work in title I with the terms of the agreement at an early point in the text.

2. *Sec. 101(b)(6)*. The authority for the

Secretary to regulate Gila River floodwaters entering the Wellton-Mohawk division of the Gila project was specifically limited to the authority to acquire lands in the reservoir area of the existing Painted Rock Dam.

3. *Sec. 101(c)*. The committee amended the measure to limit the authority granted by this section to study means of replacing the brine bypassed from the desalting plant.

The original language suggested the possibility of diversions from outside the Colorado Basin might be considered. The amended language restricts the study using the same language as section 202 of the Colorado River Basin Project Act of 1968.

4. *Sec. 101(e)*. The city of Yuma was given the right of first refusal for any desalted water not needed for purposes of satisfying the requirements of Minute No. 242.

5. *Sec. 101(f)*. The bill was amended to require the consent of the Wellton-Mohawk Irrigation and Drainage District to any acquisition of district irrigable lands in excess of the first 10,000 acres.

6. *Sec. 101(f)*. Authority to carry out flood control measures below the existing Painted Rock Dam were deleted.

7. *Sec. 102(e)*. A new section was added authorizing the Secretary to cede Federal lands to the Cocopah Indian Tribe and to construct bridges to mitigate the impact of the bypass drain carrying brine from the desalting plant which will cross the reservation.

8. *Sec. 103(a)*. The section was amended to delete the contingency placed upon the Secretary's authority to proceed with protective ground water pumping measures along the Mexican border.

9. *Sec. 103(a)(2) and (3)*. The Secretary was authorized to exchange lands for any lands removed from the Yuma Mesa Irrigation and Drainage District in connection with protective groundwater pumping measures along the Mexican border.

10. *Sec. 108*. The authorized appropriations of \$119,500,000 were increased by \$2 million for studies of brine replacement sources resulting in a new ceiling of \$121,500,000.

IV. SECTION-BY-SECTION ANALYSIS

TITLE I

Title I of S. 2940 includes the features which were proposed by the administration to carry out the intent of Minute No. 242 and other provisions associated with that work as described below:

Sec. 101(a) authorizes the Secretary of the Interior to proceed with a program of works for quality control in the Colorado River and states an objective of the work to be compliance with the terms of the agreement with Mexico incorporated in Minute No. 242.

Sec. 101(b) authorizes the construction, operation, and maintenance of a desalting complex including a desalting plant of the approximate capacity of 129 million gallons per day (mgd); a pretreatment facility; appurtenant pumps, pipeline and power transmission facilities; an extension of the existing drainage bypass to the Santa Clara Slough in Mexico; roads and railroads; and the replacement of a metal flume in the present bypass with a concrete structure.

Also included are two programs designed to limit the amount of drainage outflow from the Wellton-Mohawk project. Under the first program the size of the irrigation district will be reduced to at least 65,000 acres and work will be instituted to increase the efficiency of water use on the remaining lands. The second program will involve the acquisition of sufficient reservoir right-of-way for Painted Rock Reservoir on the Gila River to enable operation of that structure so as to prevent released flood waters from entering the Wellton-Mohawk drainage system and overloading the desalting plant.

This subsection also requires that the desalting plant be designed to effect recovery of at least 70 percent of the drainage feed water and to remove at least 90 percent of the impurities. The legislation also requires that the electric power supply for the desalting plant, approximately 35 megawatts, be obtained from sources that do not diminish the supply of power to preference customers of Federal power systems.

It is the intention of the committee that to the greatest extent possible the Secretary shall make his plans for obtaining energy for the desalting plant known to the electric utilities in the region so that any utilities affected by the decision will have ample planning information.

Sec. 101(c) requires that the reject brine from the desalting plant plus any unavoidable bypasses shall be replaced as a national obligation and that studies to identify means of providing replacement shall be completed by June 30, 1980. Such studies shall be limited to the States of Arizona, California, New Mexico, Colorado and the portions of Nevada, Wyoming and Utah in the natural basin of the Colorado River. Such studies may be undertaken independently of the augmentation studies authorized by Section 202 of the Colorado River Project Act.

Sec. 101(d) authorizes the Secretary of the Interior to advance funds to the United States Section of the International Boundary and Water Commission with which to construct, operate and maintain that portion of the reject brine channel located in the Republic of Mexico. The International Boundary and Water Commission shall, under appropriate arrangement, transfer the funds to an agency of the Mexican government for actual accomplishment of the work.

Sec. 101(e) authorizes the Secretary of the Interior to exchange surplus desalted water with holders of perfected rights or contractual rights to water supplies from the Colorado River; and to give the city of Yuma, Arizona, the right of first refusal to such surplus water.

Sec. 101(f) authorizes measures for limiting the return flows from the Wellton-Mohawk division to 175,000 a.f. per year, the approximate capacity of the desalting plant. The programs are:

(1) An accelerated cooperative program of irrigation management services having as their purpose the improvement of irrigation efficiencies; and

(2) A program of land acquisition whereby the irrigable acreage of the division is reduced by the approximate amount of 10,000 acres. If a reduction greater than 10,000 acres is required to limit the drainage returns to 175,000 a.f. per year, additional lands may be acquired with the consent of the district.

Sec. 101(g) authorizes the Secretary to dispose of lands acquired under authority of the preceding subsection for any purpose meeting the objectives of this legislation.

Sec. 101(h) authorizes the Secretary to assist water users of the Wellton-Mohawk division in the installation of system improvements such as ditch lining, sprinkler systems, automatic equipment, field layout and bubbler systems—all as aids to improved efficiency in irrigating. The costs of such improvements will be reimbursed to the Secretary by the water users on the basis of benefits to the water users as determined by the Secretary.

Sec. 101(i) authorizes the secretary to amend the repayment contract with the Wellton-Mohawk Irrigation and Drainage District to reduce the existing repayment obligation of the district in accordance with the reduction in irrigable acreage accomplished under this Act, and to provide that such reduction in amount shall be nonre-

imburseable; also the amended contract may give the district a credit against its repayment obligation for any increase in operation and maintenance assessments per acre that is caused by the reduced operation and maintenance base.

Sec. 101(j) authorizes acquisition of additional reservoir right-of-way above Painted Rock Dam on the Gila River so that water may be detained in storage during times of flooding. This authority is not to be used until the courts determine that the Corps of Engineers, Department of the Army, lacks legal authority to utilize the lands for this purpose.

Sec. 101(k) authorizes the Secretary of the Interior to transfer funds to the Secretary of Agriculture as may be required for technical assistance to water users, conduct of research and demonstrations, and related investigations required to achieve higher on-farm irrigation efficiencies.

Sec. 101(l) declares all costs of the desalting complex and related measures authorized by section 101, to be nonreimbursable except for the programs of accelerated cooperative irrigation management services authorized by subsection 101(f) and the program of on-farm irrigation practices authorized by subsection 101(h).

Sec. 102(a) authorizes lining or reconstruction of about 49 miles of the Coachella Canal to reduce conveyance losses. An amount of water equal to the amount of water salvaged through this program will be utilized by the United States as a source of substitution water for by-passed Wellton-Mohawk drainage water until the desalting plant becomes operational. After the plant becomes operational, an amount of water equal to the amount of salvaged water will be used to replace reject brine from the desalting plant and be credited against earlier releases to replace the bypassed Wellton-Mohawk water. The use of credits for the Coachella Canal salvage by the United States is temporary and ends when the Secretary of the Interior delivers less water to California users than requested by those users. This is expected to occur when the Central Arizona Project becomes operative.

Section 102(b) requires that the cost of lining or reconstructing Coachella Canal will be repaid in forty years without interest, except that annual installments shall be nonreimbursable during the period that the United States has interim use of an amount of water equal to the amount of salvaged water. After the interim period, the Coachella Valley County Water District will repay all or a portion of the reimbursable installments.

Sec. 102(c) authorizes the acquisition of lands within the Imperial Irrigation District on the Imperial East Mesa and return of such lands to the public domain. These are lands which have been granted capacity rights to receive service through the Coachella Canal; which service will no longer be available under this legislation. The United States will acquire no rights to water as a result of this transaction.

Sec. 102(d) authorizes an adjustment in the outstanding obligations of the Imperial Irrigation District for relinquishment of its capacity rights in the Coachella Canal; and also provides that such relinquishment will not affect the distribution of operation and maintenance costs among the users of the main All-American Canal.

Sec. 102(e) provides authority for the Secretary of the Interior to transfer to the Cocopah Tribe of Indians approximately 360 acres of public domain lands to be added to the Cocopah Reservation and to be held in trust for the tribe. This transfer is to be considered full and complete payment for the right-of-way across the Indian reservation

for the bypass drain and appurtenant roads and power lines. The subsection also provides that three bridges shall be provided across the bypass drain on the reservation.

The committee considered the request of the counsel to the tribe for additional lots to be added to those now in the bill. The committee understands the additional lots to be presently within the reservation but having some question as to the title. In the absence of a complete record on this matter or an official statement from the responsible Federal agencies, the committee did not include the additional lots. Instead, the committee urges the Indian tribe and the Secretary of the Interior to submit a separate proposal to clarify the legal situation in regard to these lands to be considered by the appropriate subcommittee.

Sec. 103(a) authorizes the Secretary to construct, operate and maintain a wellfield for groundwater pumping in a five-mile zone adjacent to the International Boundary near San Luis, Arizona. The wellfield will have the capacity to produce approximately 160,000 a.f. per year, the estimated amount now being produced by wells in Mexico adjacent to the border. Water produced from the wellfield is to be delivered to Mexico for credit against the Treaty obligation. The subsection also authorizes the acquisition of lands for the wellfield. Further, it authorizes the Secretary to replace any lands presently within the boundaries of the Yuma-Mesa Irrigation and Drainage District which may be utilized for the installation of the boundary wellfield authorized by section 103 of this Act.

Sec. 103(b) provides that the cost of the boundary pumping program, including the installation and operation of the necessary wells, of the collection and delivery system, and operation of the existing pumping plant at the International Boundary commencing with the date of first delivery to Mexico, shall be nonreimbursable. Costs of the wellfield shall be reimbursable to the extent that water from the wellfield authorized by section 103 of this Act are used in the United States.

Sec. 104 authorizes the Secretary to propose modifications to the programs authorized by this title as he finds to be essential to the purposes of the International Agreement. Such modifications may not be implemented until 60 days after notice of such modification has been given to the appropriate committee of the Congress. The Interior and Insular Affairs Committee of the Senate believes that such notification should be given to both the Committee on Appropriations and the Committees on Interior and Insular Affairs of the Senate and the House of Representatives.

Sec. 105 authorizes the Secretary of the Interior to enter into contracts for carrying out the provisions of this title in advance of appropriation of funds therefor.

Sec. 106 requires the Secretary of the Interior to consult with the Secretary of State, Secretary of Agriculture, the Administrator of the Environmental Protection Agency and other State and Federal officials in carrying out the provisions of the title.

Sec. 107 is a disclaimer of intent to modify or repeal any existing Federal law except as specifically provided.

Sec. 108 authorizes the appropriation of \$121,500,000 to provide for the construction and other measures authorized in connection with the desalting complex including \$2 million for the studies required by Section 101(c) and \$5 million for land acquisition at Painted Rock Reservoir as authorized by section 101(j). An additional amount of \$34 million is authorized for the boundary pumping program.

TITLE II

Title II of S. 2940 includes provisions for the control of salinity of the Colorado River which are not directly related to the agreement of the United States and Mexico. The measures, however, would benefit all of the users of the river in both the United States and Mexico.

Sec. 201(a) authorizes the Secretary of the Interior to implement the policy adopted by the Enforcement Conference. In effect, this is a policy commitment to undertake programs which would prevent salinity levels from exceeding the present levels in the river below Hoover Dam as future utilization is made of the water resources of the upper basin.

Sec. 201(b) authorizes and directs the Secretary of the Interior to expedite the investigation, planning and implementation of the program of salinity control measures which has been identified by previous studies.

Sec. 201(c) directs that the Administrator, Environmental Protection Agency and the Secretary of Agriculture coordinate their activities to carry out the objectives of title II.

Sec. 202 authorizes the Secretary of the Interior to construct, operate and maintain four specific salinity control projects as an initial stage of an overall salinity control program. The programs are:

(1) *Paradox Valley Unit, Colorado*; a program to intercept saline groundwater and convey it to a solar evaporation basin. The project cost is estimated at \$16 million and will eliminate an estimated 180,000 tons of salt from the Colorado River.

(2) *The Grand Valley Basin Unit, Colorado*; a program to reduce salinity inflow to the Colorado River from an irrigated area of about 76,000 acres. This will be accomplished by the combining and lining of ditches and the adoption of more efficient water use practices.

The estimated cost of the program authorized by this subsection is \$59 million and it will reduce salt inflow to the river by the estimated amount of 200,000 tons, annually.

(3) *The Crystal Geyser Unit, Utah*; a program to intercept the flow of saline water from an abandoned oil test well to the river by the estimated amount of 150 acre-feet annually.

The estimated cost of the program is \$500,000 and the estimated salt reduction to the Colorado River system is 3,000 tons annually.

(4) *The Las Vegas Wash Unit, Nevada*; a program to intercept saline groundwater entering Las Vegas Wash and convey it to a solar evaporation site.

The estimated cost of the program is \$49,600,000 and the estimated salt reduction to Lake Mead is 138,000 tons, annually.

Sec. 203(a) authorizes and directs expedited consideration of 12 other identified sources of salinity pollution to the Colorado River System.

Sec. 203(b) directs the Secretary to cooperate with the Department of Agriculture in research and demonstration programs leading to control of salinity through improved on-farm irrigation practices.

Sec. 204 creates an Advisory Council to coordinate cooperation among the Federal agencies and the States; to receive, review and comment on reports; and to make recommendations to the Secretary as appropriate.

Sec. 205 establishes the allocations of costs and responsibility for repayment of the works undertaken pursuant to title II.

Sec. 205(a) declares that 75 percent of the cost of construction, operation and maintenance shall be nonreimbursable.

The subsection also provides that the remaining 25 percent shall be allocated be-

tween the Upper and Lower Colorado River Basins; that this amount shall be suballocated between the basins; establishes criteria for suballocating between the basins; and provides that not more than 15 percent of the reimbursable amount shall be charged to the Upper Basin.

The subsection establishes a repayment period of 50 years and declares the investment to be non-interest bearing.

Sec. 205(b) provides that the reimbursable amount allocated to the Lower Basin may be defrayed from the Lower Colorado River Basin Development Fund and amends the Colorado River Basin Project Act accordingly.

Sec. 205(c) provides that the amounts allocated for reimbursement by the Upper Basin may be defrayed from the Upper Colorado River Basin Fund.

Sec. 205(d) amends the Colorado River Storage Project Act to enable use of the Upper Colorado River Basin Fund as a source of repayment for this title.

Sec. 205(e) authorizes rate increases for power marketed by the Secretary under authority of the Colorado River Storage Project Act and directs that these revenues shall be used exclusively for repayment, operation, maintenance, and replacement of salinity control units.

Sec. 206 requires biannual reports to be prepared by the Secretary and establishes their content and distribution.

Sec. 207 disclaims repeal, modification, or interpretation of the Compacts, Decrees and Statutes comprising the "Law of the River," except as specifically provided.

Sec. 208 authorizes the Secretary to modify plans subject to the modifications being submitted to appropriate committees of Congress for 60 days.

It also authorizes appropriations in the amount of \$125,100,000 with indexing from April 1973 price levels. Additional sums are authorized for payment of excess awards in condemnation cases and to cover the cost in connection with the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

Sec. 209 contains definitions.

V. COSTS OF THE MEASURE

The investment costs of S. 2940 as reported by the committee are as follows:

Title I:

Desalting complex and associated measures	\$100,050,000
Coachella Canal lining	21,450,000
Protective pumping at the board	34,000,000
Subtotal, title I	155,500,000

Title II:

Paradox Valley, Colo.	16,000,000
Grand Valley, Colo.	59,000,000
Crystal Geyser, Utah	500,000
Las Vegas Wash, Nev.	49,600,000
Subtotal, title II	125,100,000
Total	280,600,000

VI. COMMITTEE RECOMMENDATIONS

The Committee on Interior and Insular Affairs, by unanimous vote of a quorum present at an open executive session on June 3, 1974, recommends that S. 2940, as amended, be enacted.

VII. EXECUTIVE COMMUNICATIONS

The reports of the Department of the Interior, the Department of State, and the Environmental Protection Agency on S. 2940 and related bills, a letter from the Department of State transmitting the draft of a proposed bill "to authorize implementation of an agreement with the Government of Mexico to resolve the international problem

of the salinity of the Colorado River waters delivered by the United States to Mexico under the Water Treaty of 1944," and the "Report of the President's Special Representative for Resolution of the Colorado River Salinity Problem With Mexico," follow:

The PRESIDENT pro tempore. The bill is open to further amendment. If there be no further amendment to be proposed, the question is on the engrossment of the amendment and the third reading of the bill.

The amendment was ordered to be engrossed and the bill to be read a third time.

The bill (H.R. 12165) was read the third time and passed.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that S. 2940 be indefinitely postponed.

The PRESIDENT pro tempore. Without objection, it is so ordered.

Mr. MANSFIELD. Mr. President, I move to reconsider the vote by which the bill (H.R. 12165) was passed.

Mr. GRIFFIN. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. MANSFIELD. Mr. President, this is another achievement in which the Mexican-United States Interparliamentary Group, which has existed since 1961, has served a useful purpose, just as it did in connection with the Chamizal dispute which lasted for many decades whereas the Colorado salinity problem lasted for a considerably less period of time. It is my hope that this milestone in the relationship between our two countries will be satisfactory to all concerned.

I wish to pay a special tribute to former Attorney General Brownell, who was called back from retirement by President Nixon to undertake the delicate negotiations to bring about results at a difficult time in Mexico City last year. I also commend President Nixon for being responsible for bringing this matter to a head. He has followed in the footsteps of his predecessors in bringing about a better relationship, more understanding, and a better climate between our two countries. It is to be hoped that the problems will be less and the understanding more, and the relationship between our countries closer with the passage of time.

A special commendation should go to Senator HENRY JACKSON, chairman of the Interior Committee, who worked hard to achieve this bill and who has shown a deep understanding of its need at this time. The Senate and the people of both our countries owe him a vote of thanks. He has earned it and it is well deserved.

QUORUM CALL

Mr. MANSFIELD. Mr. President, I suggest the absence of a quorum.

The PRESIDENT pro tempore. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. NELSON. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDENT pro tempore. Without objection, it is so ordered.

NATIONAL COMMISSION ON SUPPLIES AND SHORTAGES ACT OF 1974

The Senate continued with the consideration of the bill (S. 3523) to establish a Temporary National Commission on Supplies and Shortages.

Mr. NELSON. Mr. President, I ask unanimous consent that I may withdraw amendment No. 1406.

The PRESIDENT pro tempore. Without objection, it is so ordered.

Mr. NELSON. Mr. President, it is my intention to make a motion later this morning to recommit the bill with instructions.

The PRESIDENT pro tempore. Who yields time on the bill?

Mr. MANSFIELD. Mr. President, I suggest the absence of a quorum, with the time to be charged to both sides.

The PRESIDENT pro tempore. Without objection, it is so ordered. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDENT pro tempore. Without objection, it is so ordered.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the vote on the recommittal motion to be offered by the distinguished Senator from Wisconsin (Mr. NELSON) and the distinguished Senator from Colorado (Mr. HASKELL) occur not later than 12 o'clock noon.

The PRESIDENT pro tempore. Without objection, it is so ordered.

Mr. NELSON. Mr. President, it is my intention, as I mentioned a few moments ago, to move to recommit the bill, S. 3523, a bill to establish a Temporary National Commission on Supplies and Shortages.

This bill, in my judgment, inadequately addresses itself to the critical questions of the nationwide and worldwide problems and shortages in various areas of critical resources, and it seems to me that we need to establish a permanent agency with the responsibility of inventorying our resources, collecting the data, evaluating it, making annual reports, and 5- and 10-year predictions, so that the executive branch, Congress, and the country will have some information that will enable us to guide ourselves in our decisionmaking in respect to the utilization of resources.

Mr. President, we have reached a critical juncture in the economic history of the Nation. The economy is oscillating between shortages and surpluses and the governmental apparatus for predicting these disequilibria is clearly inadequate.

Time has long since passed for Congress to take action on this issue. We are in the midst of a worldwide crisis respecting many resources, and the Nation to whom all others look for guidance and

leadership—the United States of America—has no agency responsible for collecting the necessarily detailed information and predicting trends for the future.

I might say at this point, Mr. President, that the distinguished Senator from Colorado (Mr. HASKELL) and I submitted for the RECORD a detailed evaluation and discussion of what we considered to be the inadequacies of S. 3523, including a discussion of what we believe ought to be done under the circumstances. I shall not take space in the RECORD by reprinting that statement, but make reference to it for those who are interested in examining that evaluation of the bill and our objections to it.

Everybody who has addressed this question agrees we need an agency to systematically deal with this monumental problem. Everyone agrees that we need this responsible mechanism, not another commission to study the advisability of such a mechanism.

The Paley Commission's recommendation 22 years ago, the National Commission on Materials Policy reporting in 1973, a Library of Congress study conducted this year at my request, and finally the GAO report of April 1974 on "U.S. Actions Needed to Cope with Commodity Shortages" are unanimous in their conclusion.

The Paley Commission cited the need for a single organization discharging the overall functions of cataloging and projecting America's resources and needs. The National Commission on Materials Policy proposed "a comprehensive Cabinet-level agency be established for materials, energy, and the environment." The Library of Congress study concluded that—

The most pressing management requirement in the field of materials policy is increased information about the basic parameters of materials supply and demand.

The GAO called on Congress to "consider the need for legislation to establish a centralized mechanism for developing and coordinating long-term policy planning." And Comptroller General Elmer Staats specifically stated at the joint hearings in April of the Commerce and Government Operations Committees:

I would favor . . . Senator Nelson's point (of) having at least a monitoring and oversight responsibility in an independent agency to be sure that it does get done.

The issue of resources for the future is an issue of planetary dimensions. It encompasses every discipline imaginable—ecology, economy, geology, agronomy, meteorology, biology, zoology, botany, demography, statistics—and perhaps a little astrology.

Population growth, greater affluence, technological explosion, and a generally increased tempo of human activity have combined, at our moment in history, to burden the world's resources to an extent our forefathers never imagined.

The United States is in a poor position to cope with global shortages developing in food, fibers, and minerals. The energy crisis, the ill-fated Russian wheat deal,

and the soybean embargo of last June together with dozens of other crises caused by shortages of critical materials including paper, lumber, automobile, and other manufacturing parts, protein, asphalt, baling wire, chlorine, cotton, wool, and various minerals, have all demonstrated that the Federal Government does not have the ability to measure the depth of world resources and the demands on them, or to forecast the short- and long-term consequences of decisions affecting those resources.

This Government under the last four administrations, has not had a policy for dealing with forecasting. And it does not have one today.

The most dramatic evidence of the critical need for a monitoring and forecasting system is the energy crisis. A handful of resource experts warned that it was coming, but they were like voices crying in the wilderness.

What we needed was a sophisticated and trusted system that would have recognized the danger signals—like the soaring rise in energy consumption, the startling lack of refinery capacity, the slump in U.S. domestic production, the political deterioration in the Middle East, the Government refusal to consider conservation methods, and the complete failure to seek alternative sources of energy.

We did not have such a system and drifted into an energy crisis.

The Russian wheat deal offers equally compelling evidence of the need for a forecasting system.

In the wheat deal, the United States agreed to sell the Soviet Union millions of tons of wheat. We oversold the wheat without even knowing it. Ultimately the sale caused a wheat shortage in the United States and drove up the price of bread and other wheat products.

There was no agency, committee, commission, or other authoritative body or individual in the Government responsible for looking at the totality of the transactions before they occurred to predict the ultimate effect.

Mr. President, how much time does this side have left?

The PRESIDENT pro tempore. On what? On the bill?

Mr. NELSON. We have agreed to vote no later than noon on a motion to recommit. My question is, how much time has been charged against this side?

The PRESIDENT pro tempore. The agreement as to time on the bill provides 20 minutes on a motion to recommit, but there was no formal arrangement that all time until noon be on the motion. Is the Senator asking that all time until noon be on the motion to recommit?

Mr. NELSON. That is what I had understood to be the situation.

The PRESIDENT pro tempore. It was not done.

Mr. NELSON. I see. So there is no time limitation.

The PRESIDENT pro tempore. There are 10 minutes to each side after the motion has been made. It has not been made.

Mr. NELSON. There is no time limitation imposed on debate at this time then, except that we will vote at noon; is that correct? All I am trying to find out is am I going to run out of time. How much time have I remaining?

The PRESIDENT pro tempore. The Senator from Montana has unanimous consent that the vote come at noon—no later than noon. That was the only request made. There was no arrangement as to time.

Mr. NELSON. I thank you, Mr. President.

Mr. ROBERT C. BYRD. Mr. President, will the Senator yield to me briefly?

Mr. NELSON. I yield.

Mr. ROBERT C. BYRD. Would the Senator like to establish a time limitation on his motion to recommit now?

Mr. NELSON. That would be satisfactory. The understanding is, I think, that it probably will be about noon.

Mr. ROBERT C. BYRD. The vote?

Mr. NELSON. The vote, yes I did not want to end up by taking so much time that the Senator from Colorado would not have an opportunity to make any remarks.

It is agreeable to me that the time limitation be at 12 o'clock or earlier.

The PRESIDENT pro tempore. The Senator from Wisconsin has not made the motion.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that the Senator from Wisconsin be recognized at the hour of 11:40 a.m. today for the purpose of making a motion to recommit. Is it not already ordered that time on any debatable motion will be limited to 20 minutes?

The PRESIDENT pro tempore. The Senator is correct.

Mr. ROBERT C. BYRD. Then, the 20 minutes would expire precisely at 12 noon and, in the meantime, time can be used on the bill for debate; am I not correct?

The PRESIDENT pro tempore. That is correct.

Mr. NELSON. How much time is there for debate on the bill?

Mr. ROBERT C. BYRD. Two hours from the time debate started.

The PRESIDENT pro tempore. Some time was used yesterday and on the quorum this morning.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that the time used for quorums thus far today not be charged against the bill.

The PRESIDENT pro tempore. Without objection, it is so ordered.

Mr. GRIFFIN. Will the distinguished Senator yield?

Mr. ROBERT C. BYRD. Yes.

Mr. GRIFFIN. I do not think there will be any problem with the Senator from Wisconsin having as much time as he needs. I might indicate that whenever he finishes, the Senator from Ohio (Mr. TART) will use some of the time remaining between now and 12 o'clock to explain an amendment or amendments that he will offer after the vote on the NELSON motion to recommit.

Mr. ROBERT C. BYRD. If the motion does not succeed.

Mr. GRIFFIN. If it does not succeed.

Mr. ROBERT C. BYRD. So at 20 minutes of 12 the Senator from Wisconsin will be recognized to make his motion.

I thank the Presiding officer.

Mr. NELSON. Thank you, Mr. President.

The soybean embargo decision also demonstrated poor planning. The United States had made commitments around the world to sell regular customers soybeans. Then in June of last year the Government, in a slap-dash manner, put an almost total embargo on soybean shipments, aggravating the already serious world food shortage.

These examples all reveal that the U.S. Government has been derelict in its duty to equip itself with the tools and techniques needed to keep tabs on material vital to national and international well being.

In the well chosen words of Nobel prize-winning economist Wassily Leontief of Harvard University:

The resulting scene reminds one of a Ringling Brothers act with four frantic characters in a car, one pressing on the gas, another on the brake, the third clutching the steering wheel, and the fourth blowing the horn.

Leontief believes—

It is high time to revive President Franklin D. Roosevelt's National Resources Planning Board which was created in 1939.

He states:

Our technical capabilities for monitoring the state of all the branches of the economy in their mutual interrelationships and for analyzing in great detail the available options—not from the point of view of an individual company or sector but of the system as a whole—are much greater today than they were forty years ago.

I agree with Professor Leontief that "most of the necessary factual information is available, and what is missing can be readily obtained."

On March 21, Senator RIBICOFF and I introduced the National Resource Information Act to accomplish the end described by Leontief. S. 3209 would establish a system to coordinate all related data and monitor, analyze, and forecast supplies of and demand for important world resources and the implications for the U.S. economy.

The problem we face can be simply stated: An abundance of shortages and a shortage of information. The information shortage complicates the market shortage of scarce items. And the Government is overburdened with an abundance of agencies with a paucity of coordinated information.

The General Accounting Office document entitled "U.S. Actions Needed to Cope with Commodity Shortages, is the most important single document detailing Government inadequacy in this area. I am particularly pleased that at the conclusion of the 300-page study, GAO recommends that Congress "consider the need for legislation to establish a centralized mechanism for developing and coordinating long-term policy planning."

S. 3209 would establish such a system to maintain a careful inventory of critical national and world resources so that we will have a reliable data base for both short- and long-term planning.

It is an elementary step we must take to fill an astounding information void caused by our perpetually optimistic belief that Mother Nature would never run out of resources that mankind needs. We have been gluttons at the table of Mother Nature. And now we know differently.

The energy crisis presents a classic case of blissful ignorance combined with mismanagement and lack of planning on the part of Government and industry, abetted by the American belief in endless abundance and technological magic.

Energy, its sources, its availability, its uses, is an enormously complicated matter.

Nevertheless, for a quarter century resource experts have warned about the coming energy crunch. And even long before that many others have discussed the limit of these natural resources on the planet. The problem is that resource experts read what resource experts write but decisionmakers do not.

Resource experts throughout history have become a chorus of Cassandra. They have the blessed gift of being able to predict the future and curse of no one believing them. But unless we act, the entire world will suffer the dire consequences of Cassandra's predicament.

If the Government had established a central data collection agency with the responsibility for collecting statistics on energy resources, projecting consumption rates, reporting refining capacity, evaluating current technology and making annual reports to the Congress, the President and the public, we could have made plans to meet this crisis 15 or 20 years ago. Certainly, we would have passed an energy resource and development act 15 years ago instead of 3 months ago. By now we would have explored new energy sources, developed efficient methods of coal gasification, coal liquefaction, shale oil extraction, and instituted long-range energy conservation plans.

Our failure was not lack of availability of the critical statistics. They were available to be collected and used. It was, rather, a failure to establish a mechanism to forcefully thrust this important issue upon the attention of the President, the Congress and the country. If that had been done we would have acted years ago instead of waiting until a crisis forced the issue to our attention. The Energy Information Act which is pending before the Interior Committee will provide us with the tools we need to guide us in future decisionmaking on energy matters.

However, this should be only a first step in the critically important process of establishing a comprehensive program of evaluating the status, availability and use of all-important resources.

The energy crisis is only symptomatic of a much broader and far more serious phenomenon. That phenomenon, in fact, encompasses a series of approaching

crises involving many resources vital to all nations, developed or developing.

Twenty-five years ago Aldous Huxley was predicting a worldwide shortage. "World resources," he said in 1949, "are inadequate to world production."

In the early 1950's, mineral shortage authorities began predicting shortages in metals. Then, in 1969, a U.S. Interior Department study concluded that the U.S. had become dependent on other countries for more than 63 percent of 30 minerals and metals designated as critical to national security. Fred Bergsten of the Brookings Institution points out that the United States today depends on imports for over half of its supply of 6 of 13 basic raw materials (chromium, nickel, rubber, aluminum, tin and zinc). And Interior Department projections suggest the number will rise to 9 by 1983. This represents, according to Bergsten, "the culmination of a long-term trend: the United States changed from a net exporter of raw materials to a net importer in the 1920's, and our dependence on foreign sources has been growing ever since." In fact, U.S. imports of all non-fuel minerals cost \$6 billion in 1971 and are estimated to rise to \$20 billion by 1985 and \$52 billion by the turn of the century.

A Library of Congress study on resource supply and demand conducted at my request, reports that—

U.S. population will probably increase by approximately 50% by the year 2000, and world population may double. Per capita consumption (of materials) is also increasing dramatically, with U.S. per capita consumption demand possibly doubling by the year 2000. . . . Total U.S. materials consumption may double or triple by the year 2000 with similar trends in the rest of the world . . . what is certain (from all of this) is that there will be constraints upon the world supply of materials throughout the remainder of the 20th century. There will probably be periodic materials shortages, and materials costs are likely to rise.

Complicating the whole issue is the possibility of a handful of raw material-exporting nations banding together in an Arab oil producers OPEC arrangement to withhold resources from the rest of the world. The possibility is not so farfetched. Guinea, Australia, Guyana, Jamaica, and Surinam, the principal producers of bauxite, a basic ingredients in aluminum, recently discussed such an arrangement. Zaire and Zambia, suppliers of 70 percent of the world's tin exports could also make a similar arrangement. This week the four biggest copper exporters—Chile, Peru, Zaire, and Zambia—inspired by the principal bauxite countries to take concerted action will meet in Austria to draw up their demands. And the pattern could be repeated by the four countries controlling more than half the supply of natural rubber.

FOOD SHORTAGE

Mineral shortage is only a part of our scarcity problem. On the agricultural side, the prestigious journal "Foreign Policy" recently said that a combination of factors "suggest that the world food economy is undergoing a fundamental

transformation and that food scarcity is becoming chronic."

Protein supplies are overburdened, and most arable cropland already is being farmed. The ocean, viewed historically as an inexhaustible source of protein in fish and algae, also is being depleted—a condition few expected until 5 years ago. And climate experts led by Dr. Reid Bryson of the University of Wisconsin predict long-range worsening weather conditions that could spell famine for tens of millions of people. Changing weather, Bryson points out, is a major contributing factor to starvation conditions in the Sahel in Africa and in northern India.

The world is experiencing a disastrous food crunch—all the rosy public relations announcements about the Green Revolution notwithstanding. Agriculture development expert William Pad-dock has stated that—

The truth is that, while the new wheat and rice varieties are excellent, high yielders under certain specialized conditions (controlled irrigation, high fertilization), they have done little to overcome the biological limits of the average farm.

Population growth has exceeded increases in food production in those areas of the world where the Malthusian food production squeeze has always been the most acute. Andrew J. Mair, of the Office of Food for Peace of the AID has recently stated that agricultural production, on a per capita basis, had actually fallen 2 percent in the underdeveloped countries over the 10-year period 1963-72. He concluded:

Without an eventual reduction in the rate of growth of world population, there can be no long-run solutions to the world food problem. Food expert Lester Brown seconds that conclusion: "At the global level, population growth still generates most of the additional demand (for food). Expanding at about 2% per year, world population will double in little more than a generation. If growth does not slow dramatically, merely maintaining current per capita consumption levels will require a doubling of food production over the next generation.

Increasing demand for food is also generated by growing affluence and new tastes for meat in some developing nations. The average person in a poor country, where the diet is predominantly cereal, eats 400 pounds of grain a year. Of this total, only about 150 pounds are consumed directly in bread, cake or breakfast cereal. The rest is consumed indirectly in the form of meat, milk and eggs, which inefficiently convert grain to protein.

We in the United States are experiencing shortages in the form of spiraling food prices; 1973 was the year of the biggest jump in grocery prices in more than 25 years. However, the London Economist's index of world commodity prices shows that while food prices were up last year by 20 percent in this country, food prices were up an average of 50 percent worldwide. (Prices for fibers have risen 93 percent and metals 76 percent).

Whereas the American consumer will have to pay more for his food, millions of human beings in this world cannot afford any food at all. For individuals living on marginal incomes—the vast majority of the world population—the fact that food prices are up less than other prices is no comfort. When one spends about 80 percent of one's income on food, as a large portion of mankind does, any price rise—and indeed a price hike of 50 percent—"drive(s) a subsistence diet below the subsistence or survival level," according to Lester Brown.

INFORMATION SHORTAGE

Shortages of basic minerals and proteins are matched by the equally serious shortage of knowledge about U.S. and world reserves of essential materials and foodstuff. For a quarter of a century resource experts have been writing, speaking and pleading for the preservation of our resources, but few at the political level bothered to listen. Similarly, for a quarter of a century the United States has ignored warnings of an information shortage.

The last four Presidents and the Congress consistently failed to recognize that our knowledge is insufficient for wise policy choices concerning the world's resources. Twenty-two years ago the Paley Commission, the familiar title for the President's Materials Policy Commission concluded in its report, "Resources for Freedom" dated June 1952 that—

No single organization is today discharging these over-all functions (of cataloging and projecting America's resources and needs.)

It recommended the establishment of a high level organization to fill this void. Since the Paley Commission filed its report 22 years ago, nothing yet has been done to implement its recommendations. In June 1973, history repeated itself with the National Commission on Materials Policy proposal that "a comprehensive Cabinet-level agency be established for materials, energy and the environment." The Library of Congress study conducted at my request, echoed the conclusion that—

The most pressing management requirement in the field of materials policy is increased information about the basic parameters of materials supply and demand.

The time is long past due for adjusting the Government apparatus to the problems of resource scarcity. In fact, there are many agencies in the Government charged with the task of monitoring the status of the Nation's major commodities. But therein lies the problem. Monitoring and forecasting capability is fragmented and scattered throughout the Government including the Departments of Agriculture, Commerce, Interior, State, and even the CIA. A November 1968 Library of Congress report counted 58 U.S. governmental agencies with, in the words of the report, "a materials function."

The Department of Agriculture has 500 experts concerned with agricultural commodities. There are 50 people looking at cotton alone. In the Department of

Commerce, there are 160 people in the Office of Business Research and Analysis, 20 to 30 of whom are concerned with industrial commodities; two of them are Ph. D.'s. The State Department has six people involved in commodity questions. And the Department of the Interior has a vast staff of resource experts, geologists, et cetera.

And yet—all these experts notwithstanding—the United States has been plagued by shortages in every sector of the economy. The problem is poor coordination of would-be valuable information. For example, we and the rest of the world face serious fertilizer shortages, shortages which will last for years. In this period of grave world food shortages, fertilizer is all the more essential a factor. No U.S. fertilizer plants have been opened since 1970; only two are under construction now. Fertilizer depends on natural gas for energy and phosphates and nitrogen as basic raw materials; the availability of these items, therefore, involves the Departments of the Interior and Commerce. Moreover, the Agriculture Department is also concerned with fertilizer for the Nation's crop production. Plus the State Department is no doubt involved in jawboning foreign demand on fertilizer.

Furthermore, official information often suffers from the fact that agencies address client audiences more than the general public. For example, the chemical experts at the Commerce Department seem to be reporting to the chemical industry. The cotton people at the Department of Agriculture serve as a reporting network for the cotton industry.

The disastrous consequences of limiting distribution of agency information was demonstrated in the Russian wheat deal. Starting in June 1972, one-fifth of America's wheat crop was sold to the Russians without the appropriate U.S. Government authorities even knowing. According to GAO investigators, as late as September 1972, Agriculture officials "told us (they) were still unaware of the magnitude of the sales made by the trade." There is evidence, however, that some individuals in the government were knowledgeable but that their information was not properly, channeled to the public or even the upper echelons of the Government, including the office of Henry Kissinger.

The grain deal disaster was followed by the June 1973 soybean embargo.

The administration, convinced that the U.S. faced a domestic shortage of soybeans, slapped an almost total embargo on soybean shipments. The outcome showed again the devastating inability to predict effect. Had the Government been properly monitoring supply and demand on soybeans and soybean-related products, the drastic measure of export controls perhaps would have been unnecessary.

The soybean embargo intensified a world food shortage, undercut a concerted U.S. drive to increase agricultural exports, weakened our long term balance of payments situation, squeezed the flow of foreign currency the United States

needs to pay for mineral and petroleum imports, discouraged agriculture production, and reduced U.S. credibility.

Agriculture Secretary Butz admitted the decision resulted in a fiasco.

Treasury Secretary Shultz called the controls a mistake.

Henry Kearns, former president of the Export-Import Bank, damned them as "a bunch of baloney. You can't get in and out of markets," he said, "you have to develop a market, earn it and keep it."

The Senate Banking Committee said the controls were "tardy and hastily conceived."

Secretary of State Kissinger explained that the decision was "taken so rapidly that the foreign policy agencies did not get either adequate warning or an adequate opportunity to express themselves. He had to admit that the adverse effect was not taken fully into account."

The Nixon administration, imposed the export controls in a shockingly seat-of-the-pants, patchwork, short-term, stop-gap, crisis-reaction way.

The decision was made in an information vacuum.

It was based on inadequate information unsystematically gathered. In fact, no individual or agency is statutorily entrusted with export control decision-making. There is an ad hoc interagency commission that meets occasionally—usually motivated by impending crises—but no staff or committee has the formal task of looking to commodity supply and demand.

Thus there was no prior, intelligent, systematic analysis of the impact that the soybean control might have on the economy. There seems to be no evidence of any written decision that spelled out the ramifications of his momentous decision.

The Government does not have a clearcut statement of procedure or systematic requirements for reporting. There is inadequate model building and systems analysis to deal with forecasting per se. The tools for such a system do exist. Sophisticated systems to measure, analyze, and forecast are routinely used by industry, the academic community, and Government at various levels. Now we have a responsibility to so equip the U.S. Government.

Reporting is purely crisis-oriented. For example, in the Commerce Department, experts are spread thin and jump from commodity to commodity depending upon how many inquiries and complaints they receive from industry, Congress, and so forth.

Decisions—when they are made—are based on inadequate information gathered unsystematically and in an ill-coordinated fashion. Simply stated, there is no coordinated reporting and forecasting system in the U.S. Government.

It will give one agency sole monitoring responsibility for collecting all data in the Government on supply and demand of major raw materials and foodstuffs.

It will make an annual report to Congress and the public on critical resources.

It will make regular projections of

future demand and supply for major resources based on such factors as per capita consumption rates and population growth for, for example, the next 5, 10, 15 years.

It will have authority to contract for research in academic institutions to augment agency work.

It will have the authority to subpoena industrial information necessary for maintaining accurate and adequate national resource inventories.

It will provide for guarding confidentiality of company information of a competitive nature.

With thorough information, sophisticated analysis and constant monitoring we can overcome our ignorance about world reserves of essential materials and food and the demands on them.

We will have created a distant early warning system to prevent us from blundering into more painful crises. It will tell us what and when to conserve, how much to produce, how to avoid shortages or gluts now caused by ignorance, when to begin significant research programs.

Mankind has reached such a state of interdependence and technological sophistication that the need for such an information system is critical.

Mr. President, the Senate has before it four measures on which hearings have been held. All of them would set up permanent systems and responsibilities for monitoring resources. If the motion I am making, to recommit S. 3523, is carried, the work and the thought that has gone into those measures can also be cranked into the committee's consideration of the amendment, No. 1406, which is the measure that we principally wish to have considered.

One bill is Senator TUNNEY's S. 2966, the Domestic Supply Information Act. It gives the monitoring responsibility to the Department of Commerce. But it assigns responsibilities now; it does the job now, not later.

Then there is amendment No. 1069, by Senators MAGNUSON and STEVENSON. It is called the Domestic Supply Information Act also, and is an amendment to the Tunney bill. It would give the monitoring job to a specially created arm of the Council of Economic Advisers.

Another proposal is amendment No. 1195, by Senator HART, the Shortages Prevention Act of 1974. It would assign to the General Accounting Office the task of monitoring supplies and predicting shortages.

Those three measures, along with S. 3209, the bill which I introduced for myself, Senator RIBICOFF and others, have all been the subject of hearings.

S. 3209 also established a resources monitoring system in the Department of Commerce—although I have since come to advocate an independent agency, as is proposed in the fifth-draft version of the energy information bill which is pending in the Interior Committee, in markup, and on which our amendment is primarily patterned.

Every one of these measures answers the question, "Do we need a monitoring system?" with the answer "yes"—and every one sets up a system, with subpoena powers and other necessary powers.

Under our amendment, as under S. 3209, there would be a permanent mechanism, a National Resources and Materials Monitoring System. This summer we should be establishing that System, not establishing a Commission to study whether we need that System. The System can and should do these things, and would under the proposed amendment as well as some of the other pending bills.

I think it is a mistake for Congress to establish a commission to study whether we need to establish such an agency when it is clear that we do, when we have the necessary legislation pending that can be marked up by the appropriate committees of Congress, and when, furthermore, if we establish a temporary commission it will be at least 2 years from now, even if the commission acts expeditiously and Congress acts upon the commission's recommendations, before we can establish this critically important monitoring agency.

That is too long to delay. We have toyed with this issue for a quarter of a century. In my judgment, it is time for Congress to act now, this summer.

Mr. President, I yield the floor.

Mr. HASKELL. Mr. President, I support the desire of the distinguished Senator from Wisconsin to refer this measure to the appropriate committees so that a permanent agency may be established now, rather than having a study to see if we need one.

The distinguished Senator from Wisconsin has detailed the bills which are in the Committee on Commerce and the Committee on Interior and Insular Affairs dealing with this subject.

I would like to give the President and another Senator a recent example of the necessity for such agency.

Before the Arab cutoff of oil, we were told that the United States imported 6 percent of its crude oil from Arab sources. That was correct. But we then concluded that we were 6 percent dependent upon Arab sources. That was not correct. The information that we did not have was the amount of refined product coming into this country which, in turn, had been derived from Arab crude.

Mr. President, had we had an agency such as the one the distinguished Senator from Wisconsin is discussing, we would have known the source of the crude to those refineries because those refineries outside the continental limits of the United States were, in fact, operated by multinational corporations subject to the jurisdiction of the United States.

That is just a recent example of the need for an agency to be established now. Of course, my example applies solely to the energy field but, as the distinguished Senator says, we may run short of protein. We may need to know what the raw materials are that go into what kind of production, or the substitute materials that can be obtained, on

what the cost of the substitute materials would be. We need all that kind of information.

To me, at least, it is abundantly clear that such information must be available for the use and benefit not only of the United States but also of the world.

That is the reason why I enthusiastically support the motion which the distinguished Senator from Wisconsin will make, to refer to Government Operations, Commerce, and Interior S. 2523, together with amendment No. 1406, in the hope that it will be in the judgment of those committees that we need a permanent monitoring agency. Suitable legislation to establish such an agency would then come to the floor for our consideration.

The statement which the Senator from Wisconsin (Mr. NELSON) and I submitted yesterday describes the situation in detail; that is, it describes the background need in detail and the reason why we are making this motion.

Mr. President, I have no desire to take up the time of the Senate in reference to this discussion. For that reason, I yield the floor and would suggest the absence of a quorum.

The PRESIDING OFFICER (Mr. BURDICK). The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. TAFT. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. TAFT. Mr. President, what is the situation with regard to time on the amendment?

The PRESIDING OFFICER. There is no amendment pending, but time on the bill is available.

Mr. TAFT. Mr. President, who has control of the time on the bill?

The PRESIDING OFFICER. The Senator from Michigan (Mr. GRIFFIN).

Mr. TAFT. Mr. President, I yield myself 5 minutes on behalf of the distinguished minority whip.

The PRESIDING OFFICER. The Senator from Ohio is recognized for 5 minutes.

Mr. TAFT. Mr. President, I should like to invite the attention of the Senate, first, to the issues that have been raised by the distinguished Senator from Wisconsin (Mr. NELSON) and to express my general agreement with them. I feel that we are turning up here with a small boy to do a man-sized job.

I said yesterday that I thought the delay of 1 year that would be involved was something we should try to avoid and that we ought to try to go into an agency that had some specific monitoring authority and some specific responsibility, not only in the material shortages field but also covering other areas. The agency should be concerned with all of the aspects of shortages, prices, business practices, and employment practices relating to the supply problems we have that help cause inflation.

Inflation is certainly the current most serious domestic problem, as every Amer-

ican who goes to the supermarket or to any other purchasing establishment knows from his own experience daily.

I do not think the approach which the distinguished Senator from Illinois yesterday was advocating, that of having a commission merely to study the structural problems and come in with a report in 6 months deals adequately with supply-related problems.

Moreover, any commission that comes in with such a report will face the same kind of protracted debate and differences that we already have had on the international economic policy bill, which resulted in the defeat the other day of the Muskie amendment.

This is a political decision that I think Congress is not going to delegate to anyone else, so I fear we will be wasting time if we take the approach advocated. For that reason, I voted for the Tunney amendment to expand the period of time or to make the period of time a period of 2 years so that the commission could undertake the broader responsibilities which it seems to me are clearly laid out for it in the draft of the bill.

The shortening up of the commission's functions which was advocated by its sponsors to a 6-month period and a 1-year period, it seems to me, is wholly inadequate to meet the need. Furthermore, as I have stated, I would have to go beyond the distinguished Senator from Wisconsin and indicate that I feel the scope of such commission should not be limited to material shortages. That is an important fact, but there are other factors as well which relate to our supply problems and the inflation problems they cause.

Mr. President, for a few minutes I should like to talk about an amendment which I have submitted, No. 1408, which deals with the problem of existing decontrol commitments. This problem has not been addressed in the bill and there is a complete void presently in the law. My amendment would append to the pending legislation, if it is passed, a provision which would at least give the President specific authority to enforce the commitments that were made to the Cost of Living Council at the time when wage and price controls were still in effect. The commitments are allegedly still in effect but there is no mechanism for seeing that they are carried out.

Mr. President, this amendment 1408 would allow the President to enforce the commitments to inflation restraint actions, including some commitments to expand productive capacity or to limit exports and thus combat domestic supply problems, which were given by industries and firms during the price decontrol process. I do not think many Members of the Congress fully realize that commitments were obtained voluntarily from hundreds of firms in various industries by the Cost of Living Council during the decontrol process. In 17 sectors of our economy, the Council obtained such commitments from the leading firms to take serious and constructive measures to alleviate various inflation-related problems existing in their industry. In all but two, fertilizer and zinc, the major

firms committed themselves voluntarily to some degree of price and/or profit restraints.

The PRESIDING OFFICER (Mr. BURDICK). The time of the Senator from Ohio has expired.

Mr. TAFT. Mr. President, I yield myself an additional 5 minutes.

The PRESIDING OFFICER. The Senator from Ohio is recognized for an additional 5 minutes.

Mr. TAFT. Mr. President, commitments to increase production and to expand capacity—exactly what the bill before us is all about—were agreed upon by firms producing fertilizer, cement, zinc, semiconductors, petrochemicals, tires, and tubes, canned fruits, and vegetables, and coal. Firms in industries such as fertilizer, petrochemicals, paper, and aluminum, made various commitments designed to limit exports or to maintain historic patterns of domestic sales, which are also in keeping with the purposes of this bill. Improved price reporting to the Bureau of Labor Statistics was agreed upon by firms producing cement, semiconductors, and tires. Firms in the petrochemical sector committed themselves to preparing customer allocation plans, and to submit these plans to the Government.

I believe that for Congress not to provide the government machinery to monitor and enforce these commitments is to weaken the fight against inflation and to undermine further the Government's credibility. The recent announcement by the Ford Motor Co. of price increases which could conceivably be in compliance with such a commitment only through an escape clause, with mere prior notice and alleged justification to the Government, should serve as an indication of the fragility of these commitments unless specific legislation is passed.

I cannot emphasize too much that my amendment involves more than a question of economics, although it could certainly make a contribution to inflation control and also to the alleviation of shortages in some of these fields. Americans are already questioning the Government's resolve and ability to combat inflation, while at the same time the effectiveness of the entire Government is brought under heavy fire. The Senate, in its action on S. 2986, tabling the entire proposal, after frustrating debate, helped to confirm that impression.

Yet, in the case where an agency of the Government already has taken actions which will help somewhat to restrain prices, Congress has not taken the first steps either to back up these actions or to protect companies which adhere to their commitments from competitors which may not do so. The message to the American people about Congress resolve to fight inflation and to enforce the Government's own earlier actions is unmistakably clear.

My amendment would insure that these agreements with the Government are legally binding as they should be, particularly since they were made voluntarily in exchange for specific Government actions. It does so in a manner which takes

into account objections expressed about previous proposals. While the Muskie amendment, debated last month, provided unlimited authority to reimpose controls on violators of decontrol commitments and thus spurred fears of irresponsibly punitive Government actions, my amendment limits use of this remedy "to the extent necessary to apply appropriate corrective action" and requires a statement from the President explaining how he has complied with this requirement. In recognition of industry's arguments that major changes in the economic picture necessitate changes in the terms of various decontrol commitments, the President is given explicit authority to modify any commitment if he determines that modification is in the national interest and publishes the reasons for that determination in the Federal Register. However, although the President could receive advice on such matters from affected industries, the decision to modify a commitment would clearly be the Government's alone.

With these modifications, I can see no further objections to the provisions specifically allowing enforcement of decontrol commitments. Furthermore, I believe that S. 3523 is an ideal vehicle for this amendment. As I have pointed out, some of the decontrol commitments deal directly with the problem of alleviating future domestic shortages and were designed to increase domestic supplies. Others generally deal with the goal of facilitating domestic price stability, a major goal also of the temporary national commission on supplies and shortages.

Mr. President, I expect to call up this amendment after the vote that is already scheduled, and I hope the Senate will give it attention and favorable consideration at that time.

Mr. President, I reserve the remainder of my time, and I yield the floor.

The PRESIDING OFFICER. Who yields time?

Mr. ROBERT C. BYRD. Mr. President, I suggest the absence of a quorum, and I ask unanimous consent that the time be charged against both sides on the bill.

The PRESIDING OFFICER. Without objection, it is so ordered.

The clerk will call the roll.

The legislative clerk called the roll.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

NATIONAL SECURITY LEAKS

Mr. NELSON. Mr. President, I yield temporarily to the distinguished Senator from New Mexico and ask unanimous consent that his remarks appear in the RECORD at the conclusion of the discussions on S. 3523 by myself and the Senator from Colorado.

Mr. GOLDWATER. I thank my good friend,

Mr. NELSON. With the understanding that I do not give up my right to the floor.

Mr. GOLDWATER. I thank my friend. At one time Arizona was a part of New Mexico [laughter] but we broke away. I am honored to be associated with that State. I wish we had remained.

Mr. NELSON. I made a wager that the Senator would not notice the mistake. I apologize.

Mr. GOLDWATER. Mr. President, in all of the controversy concerning Secretary of State Henry A. Kissinger's possible role in the so-called wiretapping dispute, I feel the news media and many of my colleagues are overlooking the most important fact. The issue that strikes me as vitally important to this Nation is the issue of security; not the issue of nitpicking over exactly what Dr. Kissinger said when he was questioned by the Senate Foreign Relations Committee prior to his confirmation.

I notice in the morning paper, Mr. President, that the Secretary's critics are calling upon leaked documents from a dead man, secondhand. Apparently anything goes nowadays. Any Government employee with any kind of information apparently feels free to hand it over to the nearest Washington Post reporter he can find. The motivation is something of a puzzle. Do these Government employees sell the information or do they just enjoy the privilege of performing acts of a traitorous nature while the Nixon administration is in office? In all events, the fuss now seems to involve a memorandum by former FBI Director J. Edgar Hoover to the effect that Dr. Kissinger asked him to find out who was leaking national security information of a classified nature. Dr. Kissinger, it seems, denied before the Senate Foreign Relations Committee that he had ordered the imposition of specific wiretaps made during the years 1969 to 1971. Perhaps the problem is that Dr. Kissinger is a diplomat, not a policeman. He apparently found himself confronted by a situation in which highly secret information of an international nature was being leaked and he took necessary steps to have it halted. Personally, I believe he would have been derelict in his duty if he had not done everything in his power—including suggesting the imposition of wiretaps—to discover the source of dangerous leaks in the Government. I think the President of the United States and all the members of his Cabinet have a duty to this country to protect its secrets, and if they have any reason to believe that members of their staffs are the sources of these leaks, I believe they should use every means at their command to detect who those people might be and to punish them accordingly.

Mr. President, in most of the accounts I have read about Dr. Kissinger's testimony before the Foreign Relations Committee, very little attention is ever given to the overriding reasons why security measures had become necessary. It was a time when the climate was such that

a man named Ellsberg could steal top secret papers from the Pentagon and distribute them to newspapers without the kind of public condemnation such as a treasonable act deserves. It was a time also when information was being supplied to the press from sources obviously within the White House or offices closely connected with the White House. And in my opinion, these two conditions required action to find out who was guilty in every case where leakage of sensitive information took place.

Had I been the President of the United States at that time, I would have used every means at my command to see that the leaking of top classified material was stopped and the perpetrators punished. I would have done the same thing in the case of Mr. Ellsberg, although I certainly would not have permitted resort to illegal methods. As we all know, because some of the people working on the problem of leaks got carried away with their efforts to find out about Ellsberg, he has gone scot free and has been made something of a hero by people who see nothing wrong with leaking top secrets to our potential enemies if they happen to involve policies with which these people disagree.

Mr. President, if this has become the frame of mind of the people who worked for the Government in Washington; and if this has become the frame of mind of the average American citizen, then I suggest this country has gone a long, long way down the road toward self-ruination.

Mr. President, I think it is time we stopped this incessant nit-picking and stopped directing abuse, innuendos and accusations toward people like Dr. Kissinger and start, instead, a determined inquiry as to how and why leaks of sensitive government information are still dripping all over the place.

Mr. President, I am not attempting to defend Dr. Kissinger if he did, indeed, tell a falsehood when he testified on his nomination. I do not know whether he did or not, but I can certainly see how something of this sort might have appeared to happen and is now being magnified by people who frankly dislike Dr. Kissinger because he has been an outstanding performer for the Nixon administration.

In all events, I urge Dr. Kissinger and others who have been subjected to the harassment of interrogation by the news media, that they lay the case out in a plain and simple fashion so that any newsman will be able to understand it. What I mean is that it is time that we decide once and for all whether it is more important to protect secret information relative to our Government or more important to provide more circulation for newspapers, more viewers and listeners to the electronic media, and more money and adulation for people willing to turn against their Government?

I thank the distinguished Senator from Wisconsin for yielding. In fact, as I was talking and thinking about his

associating me with New Mexico, I became "muy simpatico."

RECESS UNTIL 11:40 A.M.

Mr. ROBERT C. BYRD. Mr. President, I move that the Senate stand in recess until 11:40 a.m. today.

The motion was agreed to; and, at 11:16 a.m., the Senate took a recess until 11:40 a.m.; whereupon, the Senate reassembled when called to order by the Presiding Officer (Mr. BURDICK).

NATIONAL COMMISSION ON SUPPLIES AND SHORTAGES ACT OF 1974

The Senate continued with the consideration of the bill (S. 3523) to establish a Temporary National Commission on Supplies and Shortages.

Mr. ROBERT C. BYRD. Mr. President, without prejudice to the distinguished junior Senator from Wisconsin (Mr. NELSON), I suggest the absence of a quorum, the time to be charged equally to both sides on the bill.

The PRESIDING OFFICER. The clerk will call the roll.

The second assistant legislative clerk proceeded to call the roll.

Mr. NELSON. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. NELSON. Mr. President, I move that S. 3523 be re-referred jointly to the Committee on Government Operations, the Committee on Commerce, and the Committee on Interior and Insular Affairs until July 19, 1974, to be reported back on that day with recommendations on amendment No. 1406 and such other amendments as may, to the committees, seem appropriate; and that on that day should no report be made, the committees be considered as having been discharged from further consideration of the bill, and that that bill, together with amendment No. 1406, be placed on the calendar.

Mr. President, the Senator from Colorado (Mr. HASKELL) and the Senator from Ohio (Mr. TAFT) join with me in this motion.

The PRESIDING OFFICER. Will the Senator please send the motion to the desk?

There are 20 minutes on this question, equally divided. Who yields time?

Mr. TUNNEY. Mr. President, the Committee on Commerce opposes this motion on the ground that yesterday the Senate spoke rather clearly. It indicated that it felt that a 1-year commission was appropriate under the circumstances and that with the 6-month reporting period there could be action to establish a permanent commission within 18 months if it is deemed that such a permanent commission is desirable.

Yesterday, the vote was almost 2 to 1 in favor of the 1-year commission, and

the leadership in the Senate reached an agreement with the administration that this was the appropriate way to proceed.

I find myself in a difficult position because, as an individual Senator, I support the motion that has been made by the junior Senator from Wisconsin. I personally think it will be most appropriate to have the relevant committees report back soon to the Senate a recommendation for a permanent mechanism in order to monitor material shortages.

We have had all the studies that we need. Congress is perfectly capable now, through the hearing process, to develop a permanent structure. We do not need the advice of any more commissions. We have had three of them, and some of the recommendations they have made are very specific.

However, my own individual views were not supported by the Senate yesterday when, as I indicated, by a vote of 2-to-1 a decision was made to go ahead with a 1-year commission.

It would be my hope, as an individual, that a majority of Senators would feel it appropriate to allow the relevant Senate committees to get to work on this problem and, within a period of about 6 weeks, report back to the Senate a specific recommendation. As a spokesman for the Commerce Committee, however, I take the position that we should support the decision that was made by the Senate yesterday.

Mr. NELSON. Mr. President, in response to the comments of the distinguished Senator from California, in evaluating yesterday's vote, I want to dissent from his conclusion that the 2-to-1 margin—that was the margin by which the Tunney amendment was rejected, thereby limiting the time of the commission to 1 year—I wanted to dissent from his interpretation of that vote as an indorsement of the temporary commission.

I voted for the Percy amendment not because I favor a temporary commission. I do not. I am going to vote against it unless the bill is sent back to the committee.

I voted for the temporary commission and argued in behalf of it—the 1-year limitation—with other Senators on the ground that if we are going to have a commission that is not going to do very much, the less time we give them to do it the better off we are, so that, the more quickly, we can address ourselves to doing what we should have done 20 years ago.

So I would favor a 1-month commission or a 1-day commission or no commission. That is why I voted for the 1-year limitation, not as an indorsement of the temporary commission, because I am opposed to it.

The distinguished Senator from California has spent much time on this question, and I know his views. He has a deep understanding of what the issue is all about. He has conducted hearings in behalf of his committee. He knows and has said that it is important that we stop having study commissions and that we commence now to establish a permanent

agency to monitor and evaluate the status of the critical resources that are within our boundaries and that are available elsewhere in the world.

This whole thing has been talked about for a quarter of a century or more. Not only the Paley Commission of 1952, but Harrison Brown's book of 1954, warned about the coming shortages. Oil shortages were warned about 10 or 15 years ago or more.

We know what the problem is. We have had extensive hearings in several committees on this issue.

The Energy Information Act, which deals with precisely the same problem—that is, resources specifically confined to energy, but it is a resource problem—is in its fifth draft before the Interior Committee. It has been discussed, evaluated, written, and rewritten for a period of months. It provides a very fine format or framework for establishing a monitoring agency right now. As a matter of fact, at the hearings on the Energy Information Act, the administration spokesmen appeared and endorsed the concept of the bill. Well, if it applies to coal and oil, the same concept applies to metals, proteins and fibers.

The administration itself urges the creation of an Energy Information Agency to do the same things we are talking about here respecting all other resources.

So it is time we started now. This Congress, probably rightfully, is earning a reputation for lathering about problems but never shaving. We talk, talk, talk, establish commissions, and discuss and discuss, but nothing happens.

I think it is time Congress stood up and acted on this issue, passed the legislation, and laid it on the President's desk, so that we will not continue to be criticized for an incapacity, an incapability of addressing ourselves to critically important national and international issues.

If this commission proposition is adopted, it will be 2 years before a bill will pass Congress. In the meantime, we do not know what our status is respecting oil and natural gas, metals, fibers, proteins—all kinds of resources, vital, in fact critical, to the operation of our highly sophisticated industrial system.

So why do we not act? That is the issue.

I hope that Congress will send the bill back to the committees which have been working on this issue for half a year and request that they send us a bill. They have the staff; they can conduct further hearings if it is necessary. I do not know of any member of those committees who will tell us privately that the bill does anything. They say it does not do much; it just postpones action. Well, if that is the case, why pass it? Let us pass a real bill.

Mr. President, I ask unanimous consent to have printed in the Record, so that it will be available for those who wish to study it, Amendment No. 1406, which was proposed by myself and the Senator from Colorado (Mr. HASKELL).

There being no objection, the amendment (No. 1406) was ordered to be printed in the RECORD, as follows:

(1) Following line 2 of page 1 (the enacting clause and short title), insert the following new sections and title heading:

"FINDINGS AND PURPOSES"

"Sec. 2. (a) The Congress hereby finds that—

"(1) The development of coherent and effective national resources and materials policies to provide for the future needs of the United States is a matter of overriding national importance;

"(2) The Federal Government must take the lead in formulating and implementing such policies to avert future shortages of resources and materials;

"(3) Present understanding of the United States resources and materials supply system, including its related problems, and the formulation and management of national resources and materials policies, have suffered from a lack of credible, standardized, and relevant information on resources and materials supplies and consumption;

"(4) The existing collection of resources and materials data and statistics by scores of Federal agencies is uncoordinated, fosters duplication of reporting, and relies too heavily on unverified information from industry sources; and

"(5) Management of the finite and non-renewable resources supplies of the United States on the basis of adequate, accurate, standardized, coordinated, and credible information concerning all aspects of resources and materials availability, extraction, production, distribution, and use is of overriding national importance for the public health, safety and welfare, and for the national security of the United States.

"(b) The purposes of this Act are—

"(1) To provide for an improved national capability for the coordinated collection, collation, comparison, analysis, tabulation, standardization, and dissemination of resources and materials information.

"(2) To provide for periodic, standardized, and centralized collection of information by the Federal Government from the resources and materials industries so as to minimize duplication of reporting concerning resources, related operations, usage of resources in all forms, and holdings of resources and materials.

"(3) To establish within the Federal Government centralized National Resources and Materials Information System to assure the availability of standardized, accurate, and credible resources and materials information to the Congress, to Government agencies responsible for resources and materials policy decisions, and to others.

"(4) To create an independent National Commission on Supplies and Shortages to administer the National Resources and Materials Information System, to study the materials and resources supply and consumption patterns of the United States and other nations, and to coordinate the resources and materials information collection activities of other Federal agencies so as to minimize and, to the maximum extent practicable, eliminate duplication of reporting by resources and materials enterprises.

"(5) To provide, to the greatest extent practicable, for public access to the information gathered pursuant to this Act subject to the safeguards provided by this Act.

"DEFINITIONS"

"Sec. 3. As used in this Act—

"(a) 'Resources and materials industries' mean all resources enterprises and all materials enterprises.

"(b) 'Resources enterprise' means a person or agency engaged in any of the following lines of commerce: (1) ownership or control of resources; (2) exploration for or development or extraction of resources; or (3) production of raw materials.

"(c) 'Materials enterprise' means a person or agency engaged in any of the following lines of commerce: (1) production of semifinished or finished materials; (2) the storage or transportation by any means whatsoever of raw, semifinished, and finished materials; or (3) the wholesale or retail distribution of raw, semifinished, or finished materials.

"(d) 'Resource' means any unproduced, undeveloped, or unextracted natural resource that is or is capable of becoming a source of raw materials. The term includes, but not by way of limitation, mineral deposits of all kinds, land, marine and inland fisheries, water supplies, forests, and nonmineral resources which have been identified or developed as sources of energy, including but not limited to water, geothermal, solar, tidal, or wind energy.

"(e) 'Raw material' means any commodity or product of any extractive industry in its first state after extraction or production from a resource. The term includes, not necessarily by way of limitation, all raw commodities produced by all industries of the Agriculture, Forestry, and Fishing Division and the Mining Division of the Standard Industrial Classification.

"(f) 'Semifinished material' means any commodity or product that has been produced by one or more steps of refining, manufacturing, or otherwise processing a raw material, but which is not a finished material. The term includes but is not limited to all unfinished products, other than raw products of the two Divisions of the Standard Industrial Classification mentioned in subsection (e), and the Manufacturing Division. The term expressly includes all unfinished fuels and electricity generated for wholesale distribution or resale, by whatever means.

"(g) 'Finished material' means any commodity or product made from a raw material or semifinished material that is capable of being used or consumed without further refining, processing, or manufacture. The term expressly includes, but not by way of limitation, all fuels and electricity ready for end use.

"(h) 'Person' means any legal entity (other than an agency) capable of contracting, suing, or being sued, including but not limited to any natural person, corporation, partnership, association, consortium, or any entity organized for a common business purpose, wherever situated, domiciled, or doing business, who directly or through affiliates is engaged in or affecting commerce.

"(i) 'Federal agency' shall have the meaning of the term 'executive agency' as defined in section 105 of title 5 of the United States Code.

"(j) 'Agency' means a Federal agency or a comparable division or entity of a State, local, or foreign government.

"(k) 'Standard Industrial Classification' (and the abbreviation thereof, 'SIC') have the same meanings as in the Standard Industrial Classification Manual 1972 prepared by the Statistical Policy Division, Office of Management and Budget, Executive Office of the President: *Provided*, That the Commission or the Administrator by regulation, may submit a later edition of such manual or a later publication officially designated as the successor in function to the Standard Industrial Classification Manual.

"(l) 'Company', unless the context otherwise clearly requires, has the same meaning as 'company' and 'enterprise' as used in the Standard Industrial Classification.

"(m) 'Establishment', when referring to companies, has the same meaning as in the Standard Industrial Classification. When referring to any agency or instrumentality of the Federal Government, the term 'establishment' shall have the meaning of the term 'independent establishment' as defined in section 104 of title 5 of the United States Code.

"(n) 'Affiliate' means a person (or an establishment not legally a person but a part or branch of a person) that controls, is controlled by, or is under common control with one or more other persons.

"(o) 'Control' means, in the case of a business establishment, the ability to determine its business policy, including but not limited to such ability based on ownership, contract, agreement, or a combination thereof. In the case of a resource, 'control' means the ability to determine whether, when, and how such resource will be extracted or developed, including but not limited to such ability based on ownership of the fee in, or a lease of, land or submerged land, or a combination of ownership and lease, or on any contract or agreement.

"(p) 'Commerce' and 'corporation' have the meanings set forth in section 44 of title 15, United States Code.

"(q) 'Public lands' means all lands owned by the United States, including mineral deposits owned by the United States in lands that surface of which is in other ownership, and including the submerged lands and waters over the submerged lands of the oceans, to the outer boundaries of United States jurisdiction.

"TITLE I—NATIONAL COMMISSION ON SUPPLIES AND SHORTAGES"

(2) On page 1, at line 8, redesignate section 2 as section 101.

(3) on page 3, at line 16, redesignate section 3 as section 102.

(4) On page 3, following line 16, insert the words "to establish and initiate operation of the National Resources and Materials Information System authorized by title II of this Act, and",

(5) On page 3, beginning at line 19, strike out all through line 2 of page 4 (all of clause (1) of section 3(a), hereinabove redesignated section 102(a)) and insert in lieu thereof the following:

"(1) the existence or possibility of any long- or short-term shortages of resources, or market adversities affecting resources, or any other shortages or market adversities affecting the supply of any raw, semifinished, or finished material:

"(2) any possible impairment of productive capacity which may result from shortages, in resources, or from shortages of raw, semifinished, or finished materials, or from market adversities, including, but not by way of limitation, shortages, deficiencies or misallocations of capital investment;"

(6) On page 4, at lines 3 and 8, redesignate clauses (2) and (3) as clauses (3) and (4), respectively, and, on line 5 of page 4 (third line of clause (2) hereinabove redesignated as clause (3)) strike out the words "paragraph (1)" and insert in lieu thereof the words "paragraphs (1) and (2)".

(7) On page 4, strike out lines 15 and 16 (clause (4), as originally numbered, of section 3(a), hereinabove redesignated section 102 (a)) and insert in lieu thereof the following:

"(5) the operation of and any needed improvements in the National Resources and Materials Information System authorized by title II of this Act, including the permanent placement of such System within the Federal Government."

(8) On page 4, strike out all of lines 16 through 19 inclusive (all of subsection (b) following "with respect to institutional

adjustments," and before the words "United States and in relation to the rest of the world.") and insert in lieu thereof the following: "and its own analysis of supplies and shortages of resources and materials in the economy of the".

(9) On page 5, at line 4, redesignate section 4 as section 103.

(10) On page 5, at line 11, redesignate section 5 as section 104.

(11) On page 5, at line 15 (clause (1) of section 5(a), hereinabove redesignated section 104(a)), following the word "Director" insert the words "of the Commission and an Administrator of the National Resources and Materials Information System".

(12) On page 6, at line 7, redesignate section 6 as section 105.

(13) On page 6, strike out lines 14 through 18, inclusive (section 7 in its entirety) and insert in lieu thereof the following:

"TITLE II—NATIONAL RESOURCES AND MATERIALS INFORMATION SYSTEM

"ESTABLISHMENT OF SYSTEM

"SEC. 201. (a) The Commission shall establish a National Resources and Materials Information System (hereinafter referred to in this Act as the 'System'), which shall be operated and maintained by the Commission during the existence of the Commission and thereafter by such other Federal agency as the Congress shall create or designate. The System shall be independent of the executive departments and under the control and direction of an Administrator. The Administrator shall be appointed as provided in paragraph (1) of subsection 104(a) of this Act during the existence of the Commission and thereafter in such manner or by such authority as the Congress shall by law provide.

"(b) (1) The functions and powers of the System shall be vested in and exercised by the Administrator, subject to the direction and control of the Commission during its existence.

"(2) The Administrator may, from time to time, and to the extent permitted by law, consistent with the purposes of this Act, delegate such of his functions as he deems appropriate.

"(c) The System shall have a General Counsel appointed by the Commission, who may also, in the Commission's discretion, serve as General Counsel of the Commission. The General Counsel shall be the chief legal officer of the System and shall receive compensation at the rate provided for level IV of the Executive Schedule (5 U.S.C., sec. 5315).

"(d) The Administrator may appoint, employ, and fix the compensation of such officers and employees, including attorneys, as are necessary to perform the functions vested in him, and prescribe their authority and duties.

"FUNCTIONS AND POWERS OF THE ADMINISTRATOR AND THE SYSTEM

"SEC. 202. (a) (1) The function of the System shall be the collection, collation, comparison, analysis, tabulation, standardization, and dissemination of resources and materials information pursuant to this Act.

"(2) The Administrator is authorized to request, acquire, and collect resources and materials information from any person in such form and in such manner as he may deem appropriate in order to fulfill the requirements of the System and to achieve the purposes of this Act.

"(b) (1) The Administrator may prepare schedules, and may determine the inquiries, and the number, form, and subdivisions thereof, for the reports, surveys, and statistics required or authorized by this Act.

"(2) The Administrator, by regulation, shall prescribe the forms on which the reports required by paragraph (1) of sub-

section 208(c), and any other reports prescribed by the Administrator pursuant to this Act, shall be made. Such forms shall be drafted in consultation with advisory committees established pursuant to section 205, the General Accounting Office, and such other Federal agencies as either the Administrator or the Comptroller General of the United States may deem requisite.

"(3) The Administrator may, through contract or otherwise, conduct such mechanical and electronic development work as he determines is needed to carry out the purposes of this Act.

"(c) The Administrator may utilize, with their consent, the services, personnel, equipment, and facilities of Federal, State, regional, local, and private agencies and instrumentalities, with or without reimbursement therefor, and may transfer funds made available pursuant to this Act, to Federal, State, regional, local, and private agencies and instrumentalities, as reimbursement for utilization of such services, personnel, equipment, and facilities.

"(d) The Administrator may accept unconditionally for the benefit and use of the System gifts or donations of money or property, real, personal, or mixed, tangible or intangible.

"(e) The Administrator may enter into and perform contracts, leases, cooperative agreements, or other similar transactions with any public agency or instrumentality or with any person.

"(f) The Administrator may perform such other activities as may be necessary for the effective fulfillment of his administrative duties and functions.

"(g) In any civil action, the Administrator is required to appear in a court of the United States. The Administrator may elect to appear on his own behalf or by an attorney designated by him for such purposes, after formally notifying and consulting with and giving the Attorney General ten days to take the action proposed by the Administrator.

"(h) The Administrator, with consent of the Commission, may issue such rules, regulations, and orders in the manner prescribed by the Administrative Procedure Act (5 U.S.C. 551 et seq.) as he deems necessary or appropriate to carry out the provisions of this title.

"(i) (1) Except as provided in subsection 208(1) any interested person may seek judicial review of rules, regulations, or orders promulgated under this Act only by filing within thirty days of the implementation of such rule, regulation, or order a petition for review in the United States court of appeals for the circuit in which such interested person resides or has his principal place of business, or in which the Administrator is located, or in the United States Court of Appeals for the District of Columbia.

"(2) Notwithstanding the amount in controversy, the district courts of the United States shall have exclusive original jurisdiction of all other cases or controversies arising under this Act, or under rules, regulations, or orders issued thereunder.

"(j) The System shall have a seal containing such device as the Commission may select. A description of the seal with an impression thereof shall be filed in the Office of the Secretary of State. The seal shall remain in the custody of the Administrator and shall be affixed to all certificates and attestations that may be required from the System. Judicial notice shall be taken of the seal.

"COORDINATION AND TRANSFER OF AGENCY ACTIVITIES

"SEC. 203. (a) The Administrator shall coordinate existing resources and materials information collection activities of all Federal agencies and may enter into agreements to assume all or part of such activities ex-

cept where such activities are authorized by statute: *Provided, however,* That nothing in this section shall be construed to limit the collection of resources and materials information by Federal agencies for the purposes of law enforcement or to constrain investigations carried out by independent regulatory agencies.

"(b) Within one year from the date of enactment of this Act, the Administrator shall make recommendations to the Commission, and the Commission shall make recommendations to the President and the Congress, for the further consolidation and, to the greatest extent practicable, centralization of resources and materials information activities of all Federal agencies.

"(c) (1) The President may transfer to the System all or part of the resources and materials information activities being carried on by a Federal agency if he finds that such transfer will further the purposes of this Act.

"(2) The plan for such transfer shall be transmitted by the President to the Congress and shall take effect pursuant to the provisions of subsection (d) of this section.

"(d) A transfer plan shall be effective at the end of the first period of sixty calendar days of continuous session of Congress after the date on which the plan is transmitted to it unless, between the date of transmittal and the end of the sixty-day period, either House passes a resolution stating in substance that that House does not favor the plan. For the purpose of this section—

"(1) continuity of session is broken only by an adjournment of the Congress sine die; and

"(2) the days on which either House is not in session because of an adjournment of more than three days to a day certain are excluded in the computation of the sixty-day period.

"ANALYTICAL CAPABILITY AND INFORMATION SCOPE

"SEC. 204. (a) The Administrator shall maintain within the System the capability to perform analysis and verification of resources and materials information to the extent necessary to serve the purposes of this Act. This capability may include such scientific, professional, engineering, and other specialized personnel and equipment as the Administrator may deem requisite.

"(b) The Administrator shall maintain within the System the capability to carry out independent interpretations of the significance and evaluations of the usefulness of the resources and materials information provided to the Commission and the System pursuant to this Act in relation to (1) the purposes of this Act and (2) the performance of the analyses and verification described in this section. Such evaluations may include, but need not be limited to:

"(1) studies which identify the types, levels of detail, comparability, and levels of accuracy of the resources and materials information required to perform the analyses mentioned in subsection (c) of this section.

"(2) the development and evaluation of models characterizing various sectors of the economy, and lines of commerce and segments of business of the resources and materials industries deemed significant by the Administrator; and

"(3) the development of an energy accounting system capable of describing the flow of energy through the United States economy.

"(c) The System shall contain such information as is required to provide a description of and facilitate analysis of resources and materials supply and consumption within and affecting the United States on the basis of such geographic areas and economic sectors as may be appropriate, and to meet

adequately the needs of the Congress and of those Federal agencies which are responsible for resources and materials policy analysis and formulation and for related regulatory functions, including energy-related regulation. At a minimum, the System shall contain such information as is required to define and to permit analysis of—

"(1) the institutional structure of the resources and materials supply systems, including patterns of ownership and control of resources and resources companies, and the production, distribution, and marketing of raw, semifinished, and finished materials;

"(2) the depletion of resources and the consumption of raw, semifinished, and finished materials by such classes, sectors, and regions as the Administrator shall determine are appropriate to the purposes of this Act;

"(3) the sensitivity of resource exploration, development, production, transportation, and consumption to economic factors, environmental constraints, technological improvements, and substitutability of resources and materials in various uses;

"(4) the capital requirements of the public and private institutions and establishments responsible for the production and distribution of materials and the development of resources;

"(5) the methods of comparing and reconciling resources and materials statistics that have been compiled and published by different sources, and under different systems and methods, for immediate interpretation and use, and with a view to developing at the earliest practicable date methods, rules, and regulations for the standardization of resources and materials information, accounting, and statistics;

"(6) industrial, labor, and regional impacts of changes in patterns of resources and materials supply and consumption;

"(7) international aspects, economic and otherwise, of the evolving resources and materials situation; and

"(8) long-term relationships between resources and materials supply and consumption in the United States and world communities.

"ADVISORY AND INTERAGENCY COMMITTEES"

"Sec. 205. (a) The Administrator shall establish, with the approval of the Commission and the heads of the Federal agencies affected, interagency committees to advise and make recommendations to him.

"(b) In addition to any advisory committees established by the Commission under section 103 of this Act, the Administrator is authorized to establish boards, task forces, commissions, committees, or similar groups not composed entirely of full-time Government employees, to advise with respect to the administration of this Act or actions taken pursuant to this Act which affect the resources and materials industries and lines of commerce or business segments thereof. The Administrator shall endeavor to insure that each such group is reasonably representative of the various points of view and functions of each resources or materials industry with which such group is concerned, including residential, commercial, and industrial materials consumers, and shall include, where appropriate, representation from both State and local governments.

"(c) Each meeting of such board, task force, commission, committee, or similar group, shall be open to the public and interested persons shall be permitted to attend, appear before and file statements with, such group, except that the Administrator may determine that such meeting shall be closed in the interest of national security. Such determination shall be in writing, shall contain a detailed explanation of reasons in justification of the determination, and shall be made available to the public.

"(d) All records, reports, transcripts, mem-

oranda, and other documents, which were prepared for or by such group, shall be available for public inspection and copying at a single location in the offices of the System.

"(e) Advisory committees established or utilized pursuant to this Act shall be governed in full by the provisions of the Federal Advisory Committee Act (Public Law 92-463, 86 Stat. 770), except as inconsistent with this section.

"UNAUTHORIZED DISCLOSURES; THEFT OF INFORMATION; PENALTIES"

"Sec. 206. (a) (1) Any employee of the Commission or the System who makes an unauthorized disclosure of information (A) to which public access is restricted pursuant to this Act, or (B) furnished to the Administrator by another Federal agency subject to restrictions pursuant to section 208, shall be fined not more than \$1,000, or imprisoned for not more than one year, or both; and shall be removed from office or employment.

"(2) The Administrator may by regulation prescribe rules and procedures for exchange and communication of information the public disclosure of which is restricted pursuant to section 208.

"(b) Any officer or employee of the United States other than employees referred to in paragraph (1) of subsection (a), any officer or employee of any State or political subdivision or agency of either, or any other person who has access to information to which public access is restricted or denied pursuant to this Act, who, having obtained from the System by reason of his employment or for official use any such information to which public access is restricted or denied pursuant to this Act publishes, releases, or communicates such information otherwise than in accordance with regulations promulgated by the Administrator, shall be fined not more than \$1,000 or imprisoned for not more than one year, or both, and if a Federal employee, removed from office or employment.

"(c) Any person who steals or intercepts electronically stored or transmitted resources and materials information, or other information, contained in the System by any conventional, mechanical, or electronic means, or who otherwise obtains information from the System to which he is not entitled under this Act, shall be fined not more than \$10,000 or imprisoned not more than five years, or both.

"PENALTIES FOR PROVIDING FALSE INFORMATION OR REFUSING TO FURNISH INFORMATION"

"Sec. 207. (a) Any individual who knowingly submits or causes to be submitted, a materially false or fraudulent answer, response, or report in response to any lawful request for resources and materials information made under this Act, shall, notwithstanding section 1001 of title 18 of the United States Code, be fined not more than \$20,000 or imprisoned not more than five years, or both, for each such offense.

"(b) Any individual that refuses to submit an answer, response, or report in response to any lawful request for resources and materials information made under this Act shall be subject to a civil penalty of not more than \$10,000 for each such refusal.

"(c) Any individual who shall knowingly submit an incomplete or inaccurate answer in response to any lawful request or demand for resources and materials information under this Act, shall be subject to a civil penalty of not more than \$5,000 for each such answer or violation.

"ACQUISITION AND DESIGNATION OF INFORMATION BY SOURCE, TYPE AND ACCESS CATEGORIES"

"Sec. 208. (a) Pursuant to section 202(h) of this Act, the Administrator shall issue regulations under which resources and materials information and other information will be acquired for the System and will be desig-

nated and indexed by source and by type or subject. Those regulations shall also provide for designation of the restrictions, if any, on access to, exchange of, or use that may be made of particular items or groups of items of related information in the System. The regulations shall also provide for designation of the categories of information, and access, set forth in this section, and for such additional categories and subcategories, consistent with this section, as the Administrator may find to be requisite.

"(b) The Administrator's regulations shall designate as 'Federal agency information' all resources and materials information and other information possessed by Federal agencies which is relevant to the purposes of this Act. The regulations shall also provide for the designation of the following subcategories of Federal agency information:

"(1) The term 'excluded Federal agency information' shall designate Federal agency information to which the administrator may not have access and which shall accordingly be excluded from the System. That designation shall be applied only to

"(A) information which the head of a Federal agency certifies in writing to the Administrator is privileged or confidential, was obtained by the agency for law enforcement purposes, and would adversely affect law enforcement procedures if made available to the System, even in the category of statistical Federal agency information;

"(B) information the disclosure of which by the possessing Federal agency to another Federal agency is expressly prohibited by an act of Congress;

"(C) information which includes or consists of trade secrets, commercial, financial, geological, or demographic information which is privileged or confidential and was acquired by a Federal agency from a person for statistical purposes, the disclosure of which to another Federal agency would frustrate the development of accurate statistics by the acquiring agency.

"(2) The term 'statistical Federal agency information' shall designate Federal agency information which the Administrator may obtain from other Federal agencies for inclusion in the System, subject to the safeguards and limitations of this subsection. Statistical Federal agency information shall include all Federal agency information that—

"(A) is classified for reasons of national defense or foreign policy pursuant to statute or Executive order; or

"(B) constitutes or involves restricted data as that term is defined in the Atomic Energy Act of 1954, as amended (42 U.S.C., sec. 2011 et seq.).

"(3) In furtherance and not in limitation of any other authority, the Administrator is authorized, for the purposes of carrying out his responsibilities under this Act, to request from any Federal agency, and such agency shall provide him, any or all Federal agency information, other than excluded Federal agency information, that it may possess.

"(4) Federal agencies shall furnish statistical Federal agency information to the Administrator only pursuant to an agreement or memorandum in writing between the head of the Federal agency and the Administrator describing the use of and access to, and the limitations on use of and access to, such information in the System. Statistical Federal agency information shall be furnished to the Administrator in the same form in which it was acquired by the Federal agency, unless the head of the Federal agency and the Administrator otherwise agree, which shall be within the Administrator's sole discretion; but such information, in its original form, shall be available only to the Administrator or his delegate, to the Comptroller General of the United States or his delegate under section 401 of this Act, to

committees of the Congress upon request by the chairman, or to other individuals designated by the President pursuant to section 2(A) or section 2(B) of Executive Order 11652, dated March 3, 1972, 'Classification and Declassification of National Security Information and Material.' All persons receiving statistical Federal agency information pursuant to this paragraph shall use such information, in its original form, only in a manner which preserves the degree of confidentiality accorded such information by the Federal agency supplying it to the Administrator. Nothing in this paragraph shall prevent any person receiving statistical Federal agency information pursuant to this paragraph from making such information available to the public in the form of statistical summaries prepared in such a way as to prevent any person not having lawful access to such information in its original form from identifying, learning or inferring information or data furnished by any particular person.

"(c) The Administrator's regulations shall designate as 'official use information' all resources and materials information and other information relevant to the purposes of this Act, acquired by the Administrator from any source and included in the System, which is neither statistical Federal agency information nor public information, as defined in this section. Such regulations shall provide for descriptions of official use information, and limitations on its access and use, which shall be consistent with this subsection. The regulations shall also provide for the designation of the following subcategories of official use information:

"(1) The term 'proprietary company information' shall be used in the Administrator's regulations to designate official use information which the Administrator acquires on a privileged or confidential basis, which pertains to a particular company, in which such company has a lawful proprietary interest, and concerning which the Administrator finds on the basis of clear and convincing evidence that the public disclosure thereof would cause substantial harm to the competitive position of such company.

"(A) When all the criteria of the first sentence of this paragraph are met, the Administrator's regulations may provide for the designation as proprietary company information of any of the following subcategories of such information:

"(i) Any 'trade secret', a term which shall be used in the Administrator's regulations to designate an unpatented, secret, commercially valuable plan, appliance, formula, or process which is used for the making, preparing, compounding, or treating of articles or materials which are trade commodities;

"(ii) 'Geological information', a term which shall be used in the Administrator's regulations to designate information of a geological, geophysical, or engineering nature concerning resources including, but not limited to: location; lithology; paleontology; types of entrapment, results obtained by the use of torsion balances, gravimeters, magnetometers, seismographs, and other geophysical or geochemical instruments; surface and well logs (electric or radioactive); core samples and porosity; pay thickness; fluid analyses and pressure performance; production mechanism; recovery efficiency; and reservoir performance;

"(iii) 'Company financial information', a term which shall be used in the Administrator's regulations to designate information pertaining to a company's investments, assets, sales, costs, profits, and other accounting data, and accounting systems and procedures, on either a consolidated basis or by segments of business;

"(iv) 'Company commercial information', a term which shall be used in the Administrator's regulations to designate information pertaining to a company's suppliers, custom-

ers, and commercial contracts, on either a consolidated basis or by segments of business; and

"(v) Such other subcategories as the Administrator may find to be requisite.

"(B) In furtherance and not in limitation of any other authority, the Administrator is authorized, for the purposes of this Act, to require from any company, and such company shall provide him, proprietary company information. Subject to any authority and to all safeguards and limitations contained in this Act, the Administrator may also acquire proprietary company information from sources other than the company to which such information pertains: *Provided*, That (i) when the Administrator's sole source for any information pertaining to a company is a Federal agency and such information is described in paragraph (2) of subsection (b) of this section such information shall be designated and handled as statistical Federal agency information; and (ii) when the Administrator's sole source for any information pertaining to a company is an agency, as defined in section 3(j) of this Act, and the acquisition of such information is described in paragraph (2) of this subsection, such information shall be designated and handled as restricted governmental information.

"(C) In order that proprietary company information acquired by the Administrator from companies shall be of maximum value to the System for the purposes of this Act, the Administrator's regulations shall designate—

"(i) 'Segments of business' which shall facilitate comparisons on a standardized basis among resources enterprises and materials enterprises. In the designation of segments of business, the Administrator shall give consideration, to the maximum extent practicable, to: (a) Standard Industrial Classification; (b) the physical establishments of a company; (c) the identified organizational structure of a company, including all ownership and control relationships among establishments, divisions, subsidiaries, and other segments; (d) the product classes, products, and, when appropriate, product brands of a company; (e) any unusual or peculiar circumstances of particular industries and companies; and (f) the established and accustomed accounting standards, practices, and systems of particular industries and companies;

"(ii) 'Resources enterprises,' which alone or with their affiliates are involved in one or more lines of commerce or segments of business in the resources industries, so that the collection of resources information pertaining to the resources industries shall provide a statistically accurate profile of each line of commerce or segment of business for the resources industries within the United States and, to the extent practicable, outside the United States;

"(iii) 'Materials enterprises,' which alone or with their affiliates are involved in one or more lines of commerce or segments of business in the materials industries, so that the collection of materials information pertaining to the materials industries shall provide a statistically accurate profile of each line of commerce or segment of business for the materials industries within the United States and, to the extent practicable, outside the United States.

The Administrator shall require designated resources enterprises, designated materials enterprises, and designated segments of business of such enterprises to report within one year of the date of enactment of this Act and annually thereafter so much of their proprietary company information, and other information, as shall be necessary for the formulation of accurate statistics on the resources and materials controlled, produced

and consumed, revenues, costs, profits, assets, liabilities, and other information, of such enterprises and segments.

"(D) Proprietary company information in the System shall, in general, be available in its original form only to—

"(i) officers and employees of the executive, legislative, and judicial branches and the independent establishments of the Federal Government having official use for the information; and

"(ii) any official, body, or commission, lawfully charged with the administration of any energy program of any State, if the information is to be used in furtherance of such administration.

The Administrator's regulations shall establish procedures whereby those seeking access to proprietary company information may identify themselves and the information they seek and establish their right thereto under this paragraph. All persons receiving such information shall use it only in a manner which preserves the degree of confidentiality accorded such information by the Administrator's regulations. Nothing in this paragraph shall prevent the Administrator or other authorized person from making proprietary company information available to the public in the form of statistical summaries prepared in such a way as to prevent any person not having lawful access to such information in its original form from identifying, learning, or inferring information or data furnished by any particular company. Proprietary company information may be made available to the public in its original form only when the Administrator has redesignated it as public information in accordance with regulations promulgated under subsection (i) of this section.

"(2) The term 'restricted governmental information' shall designate official use information which the Administrator acquires on a privileged or confidential basis from any Federal agency or from an official source within any State or local or foreign government or any agency or subdivision thereof, which the Administrator deems valuable to the System, and which the Administrator has determined cannot be acquired for the System or cannot be acquired in a sufficiently timely or inexpensive manner as public information. The Administrator's regulations shall establish procedures for and necessary limitations on the acquisition, use and exchange of restricted governmental information.

"(3) The Administrator's regulations shall provide that no information may be designated as official use information when the sole reason for such designation is that public disclosure thereof would cause personal embarrassment to any public or company official. Such regulations shall provide for the prompt redesignation as public information of any official use information when the Administrator determines that the conditions of the preceding sentence have come to apply to such information.

"(d) The Administrator's regulations shall designate as 'public information' all resources and materials information and other information acquired by the Administrator and included in the System concerning which no limitations or restrictions on use or access (other than rules concerning office hours and usage fees) are presently in effect. Such regulations shall provide for access to public information in accordance with this subsection.

"(1) Public information shall be available to the public for inspection and copying at reasonable cost during normal business hours and may be published or otherwise disseminated by the Administrator or others. The Administrator shall endeavor to establish fee schedules which cover or approach covering the costs of public use of the System; but the

regulations may, in the Administrator's discretion, provide for reduction or waiver of fees in the case of scholars, nonprofit organizations, and others whose use of public information is determined by the Administrator to be likely to enhance the System by making useful new inputs to the System, or otherwise to further the purposes of this Act.

"(2) The Administrator shall develop and maintain filing, coding, and indexing systems that identify the public information in the System, and all such systems shall themselves be public information.

"(c) Pursuant to subsection (i) of this section, the Administrator's regulations shall provide for the designation or redesignation as public information of any item or group of related items of information in the System claimed to constitute or previously designated as proprietary company information or any subcategory thereof, when the Administrator finds that—

"(1) any one or more of the criteria set forth in the first sentence of paragraph (c) (1) of this section does not apply or has ceased to apply to such information; or

"(2) the benefit to the public interest in designating or redesignating such information as public information outweighs the demonstrated harm to the competitive position of the company; or

"(3) denial of public access to such information would result in an adverse effect on the public health or safety.

"(f) Pursuant to subsection (i) of this section, the Administrator's regulations shall provide for the designation or redesignation as public information of any geological information claimed to constitute or previously designated as proprietary company information, when the Administrator finds that—

"(1) any one or more of the criteria set forth in the first sentence of paragraph (c) (1) of this section does not apply or has ceased to apply to such information; or

"(2) such geological information has been in the System for more than two years and continuation of the proprietary company information designation may tend to lessen the value to the public of resources in the public lands, or may tend to deprive the public of needed or desirable development of new sources of raw materials; or

"(3) such geological information is more than five years old and has been in the System for more than one year; or

"(4) such geological information is more than ten years old.

"(g) Pursuant to subsection (i) of this section, the Administrator's regulations shall provide for the designation or redesignation as public information of any company financial information claimed to constitute or previously designated as proprietary company information, when the Administrator finds that—

"(1) such information pertains to a segment of business of the company involving assets of \$10,000,000 or more or gross sales or other gross business receipts of \$10,000,000 a year or more; and

"(2) the nature and extent of itemization or detail of the information pertaining to such segment of business, which is to be designated or redesignated as public information, is substantially similar to or not substantially greater than the itemization or detail that would normally be included in or inferable from a public annual report filed with the Securities and Exchange Commission under section 13 or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C., secs. 78m and 78o) by a hypothetical registered company which had, as its sole business property and operations, property and operations substantially identical to the property and operations of the segment of business of the company in question.

"(h) In addition to and not in limitation of the powers and duties conferred by subsections (e), (f), and (g), but pursuant to

subsection (i) of this section, the Administrator shall review annually all official use information in the System and shall redesignate as public information any of such official use information for which he finds that—

"(1) all reasons for restricting access to such information have ended; or

"(2) such information is company financial information and is more than five years old; or

"(3) such information is company commercial information and is more than ten years old; or

"(4) such official use information has become readily available to the public from sources other than the System in substantially the same form and detail as such information is contained in the System.

"(i) No designation or redesignation as public information of any information claimed to constitute or previously designated as official use information shall be made by the Administrator unless he shall furnish the source of such information, and in the case of proprietary company information shall also furnish the company to which such information pertains if different from such source, direct notice by mail and notice in the Federal Register not less than thirty days prior to any such designation or redesignation, and shall afford such source, and such company if different from such source, an opportunity for oral and written submission of views and argument. The Administrator's regulations shall provide for such notice and for hearings on any such designation or redesignation and on any rule, regulation, question, or dispute concerning the designation or redesignation of information in the System by access category. Except as inconsistent with this subsection, the Administrative Procedures Act (5 U.S.C., sec. 551 et seq.) shall govern such hearings. The Administrator's regulations shall afford to any interested person an opportunity for oral and written submission of views, data, and argument. All such hearings shall be open to the public, except that a private formal hearing may be conducted solely for the purpose of preventing the disclosure of information in the System other than public information to any persons not authorized under this section to have access to such information. In such proceedings, the Administrator shall designate or continue the designation as proprietary company information of any such information described in subsections (g) and (h) of this section, notwithstanding the age of such information as mentioned in such subsections, when he finds on the basis of clear and convincing evidence that—

"(1) a company's lawful proprietary interest in the denial or continued denial of public access to such proprietary company information is more substantial than any public benefit that would be associated with designation or redesignation of such information as public information, in the light of the purposes of this Act; and

"(2) designation or redesignation of the proprietary company information in question as public information would result in substantial and clearly inequitable harm to the competitive position of the company, considered in the light of proprietary company information, similar in nature and in age, possessed by competitors of the company in question, which would remain unavailable to the public and to the company in question.

"(j) In proceedings under this section, the Administrator shall employ and utilize the services of attorneys and such other personnel as may be required in order properly to represent the public interest in the designation of a maximum practicable percentage of all the information in the System as public information.

"(k) In the event that the Administrator requires excluded Federal agency informa-

tion for the System, or requires statistical Federal agency information for public use in a form other than anonymous statistical aggregates, the Administrator may acquire such information directly from the original source pursuant to authority conferred upon him by this Act, subject to the provisions of this section concerning the designation or redesignation as public information of any information claimed to constitute or previously designated as official use information.

"(1) (A) On complaint by any person, the district court of the United States in the district in which the complainant resides or has his principal place of business, or in which the System's records are situated, or in the District of Columbia, has jurisdiction to enjoin the Administrator from withholding resources and materials information and to order such information be designated or redesignated as public information. In such a case the court shall consider the case de novo, with such in camera examination of the contested information as it finds appropriate to determine whether such information as it finds appropriate to determine whether such information or any part thereof may be designated or redesignated as public information in accordance with the standards set forth in this section, and the burden is on the Administrator to sustain his action. (B) An interested party may intervene in such an action.

"(2) Notwithstanding any other provisions of law, the defendant shall serve an answer or otherwise plead to any complaint made under this subsection within twenty days after the service upon the Administrator of the pleading in which such complaint is made, unless the court otherwise directs for good cause shown.

"(3) Except as to causes the court considers of greater importance, proceedings before the district court, as authorized by this subsection, and appeals therefrom, take precedence on the docket over all causes and shall be assigned for hearing and trial or for argument at the earliest practicable date and expedited in every way.

"(4) The court may assess against the United States reasonable attorney fees and other litigation costs reasonably incurred in any case under this subsection in which the complainant has substantially prevailed. In exercising its discretion under this subsection, the court shall consider the benefit to the public, if any, deriving from the case, the commercial benefit to the complainant and the nature of his interest in the resources and materials information sought, and whether the Administrator's classification of such information as confidential or secret had a reasonable basis pursuant to this section.

"(5) Whenever records are ordered by the court to be designated or redesignated as public information under this section, the court, upon consideration of the recommendation of the agency, shall on motion by the complainant find whether the designation of such records as other than public information was without reasonable basis in law and which Federal officer or employee was responsible for the wrongful designation. Before such findings are made, any officers or employees named in the complainant's motion shall be personally served a copy of such motion and shall have twenty days in which to respond thereto, and shall be afforded an opportunity to be heard by the court. If such findings are made, the court shall direct that the appropriate official of the agency which employs such responsible officer or employee suspend him without pay for a period of not more than sixty days or take other appropriate disciplinary or corrective action against him.

"(6) In the event of noncompliance with the order of the court, the district court may punish for contempt the responsible

employee, and in the case of a uniformed service, the responsible member.

"ACQUISITION OF INFORMATION BY SAMPLING"

"SEC. 209. The Administrator may acquire information for the System by using the statistical method known as sampling whenever the adoption of such a method would significantly reduce the cost to the Federal Government and burden upon those supplying information without sacrificing the accuracy required to achieve the purposes of this Act: *Provided*, That, when such method is employed to obtain required information on any line of commerce, the sample used shall, to the utmost extent practicable, include the universe of resources enterprises and materials enterprises operating in such line of commerce and having total annual sales or total assets in all lines of \$100,000,000 or more, and the universe of segments of business of such enterprises (including foreign segments which are affiliates of United States enterprises) operating in such line of commerce and having or accounting for annual sales or assets of \$10,000,000 or more.

"INSPECTION OF RECORDS AND PREMISES; SUBPENAS; ENFORCEMENT OF SUBPENAS"

"SEC. 210. (a) All persons owning or operating facilities or business premises who are engaged in any phase of resources ownership, control, or development, or materials supply or major materials consumption shall make available to the Administrator such information and periodic reports, records, documents, and other data, relating to the purposes of this Act, including full identification of all data and projections as to source, time, and methodology of development, as the Administrator may prescribe by regulation or order as necessary or appropriate for the proper exercise of functions under this Act.

"(b) The Administrator may require, by general or special orders, any person engaged in any phase of resources ownership, control, or development, or materials supply or major materials consumption, to file with the Administrator in such form as he may prescribe, reports or answers in writing to such specific questions, surveys, or questionnaires as may be necessary to enable the Administrator to carry out his functions under this Act. Such reports and answers shall be made under oath, or otherwise, as the Administrator may prescribe, and shall be filed with the Administrator within such reasonable period as he may prescribe.

"(c) The Administrator, to verify the accuracy of information he has received or otherwise to obtain information necessary to serve the purposes of this Act, is authorized to conduct investigations, and in connection therewith, to conduct, at reasonable times and in a reasonable manner, physical inspections at facilities and business premises of resources enterprises and materials enterprises, or of persons that are major materials consumers, to inventory and sample any stocks of materials, to verify geological information concerning resources by geological or engineering tests or otherwise, to inspect and copy records, reports, and documents from which resources and materials information has been or is being compiled, and to question such persons as he may deem necessary.

"(d) (1) To assist in carrying out his responsibilities to collect resources and materials information, the Administrator may sign and issue subpoenas for the attendance and testimony of witnesses and the production of relevant books, records, papers, statistics, and other documents, not to include file copies of information from other Federal agencies the disclosure of which is specifically prohibited by statute; and may administer oaths.

"(2) Witnesses summoned under the provisions of section shall be paid the same

fees and mileage as are paid to witnesses in the courts of the United States.

"(e) In case of contumacy by, or refusal to obey a subpoena, interrogatory, request for written report, or other information served upon, any person subject to this Act, the Administrator may invoke the aid of any district court of the United States within the jurisdiction of which such person is found or transacts business, in requiring the production of the books, documents, papers, statistics, data, information, and records referred to in this section. Such district court of the United States may, in case of contumacy or refusal to obey a subpoena issued by the Administrator, issue an order requiring such person to produce the information and the books, documents, papers, statistics, data, information, and records containing or pertaining to the same; and any failure to obey such order of the court shall be punished by the court as a contempt thereof.

REPORTS

"SEC. 211. (a) The Administrator shall make regular periodic reports to the Commission, the Congress and the public, including but not limited to—

"(1) such reports as the Administrator determines are necessary to provide a comprehensive picture of the monthly and, as appropriate, weekly, supply and consumption of materials for which shortages exist or are threatened in the United States; the information reported may be organized by company, by States, by regions, or by such other producing and consuming sectors, or combinations thereof, as the Administrator finds significant, including appropriate discussion of the evolution of the resources and materials supply and consumption situation and such national and international trends and their effects as the Administrator may find to be significant;

"(2) an annual report which includes, but is not limited to, a description of the activities of the System during the preceding year; a summary of all special reports published during the preceding year; a summary of statistical information collected during the preceding year; critical resources and materials consumption and supply trends and forecasts for subsequent one-, five-, ten-, fifteen-, and twenty-year periods under various assumptions; and a summary or schedule of the amounts of all major or critical resources and materials that can be brought to market at various prices and technologies and their relationship to forecasted demands; and

"(3) an annual report to the Congress, including recommendations as to such additional authority as the Administrator considers necessary to assist in carrying out the purposes of this Act.

"(b) The Administrator shall also submit to the Congress annually on January 1 a report disclosing the extent of compliance and noncompliance by industry and Federal agencies subject to this Act and the rules and regulations of the Administrator. Such compliance report shall detail the enforcement resources available to and utilized by the Administrator, the number and types of compliance investigations conducted, the number and types of incidents of noncompliance discovered, the sanctions imposed for each incident of noncompliance, and the reasons for failure to impose other available sanctions. Such report shall also contain the Administrator's requests for changes in enforcement resources or sanctions available to him.

"(c) At the request of the chairman of any committee of the Senate or the House of Representatives, the Administrator shall make such special tabulations, interpretations, or analyses of information in the System as will serve the functions of the requesting committee and the purposes of this Act. To the extent that personnel and funds

are available, by appropriation or by contract, the Administrator may also make such special tabulations, interpretations, or analyses on his own initiative, on the request of any Member of Congress, or on such requests made by others, including members of the public, as the Administrator determines will serve the purposes of this Act. Reports prepared in accordance with this subsection shall be made available to the public for inspection and copying, or may be published, unless the Administrator determines that all or portions of such reports should be withheld from the public under provisions of section 208 of this Act.

"ACQUISITION OF ENERGY INFORMATION FROM INSTITUTIONS OUTSIDE THE FEDERAL GOVERNMENT"

"SEC. 212. The Administrator shall enter into arrangements to collect from institutions outside the Federal Government such additional resources and materials information as the Administrator determines is required for comparison with, or extension of, the information base of the System in furtherance of the purposes of this Act. These institutions may include but need not be limited to—

- "(1) governments of foreign countries;
- "(2) appropriate offices or divisions of the United Nations and other international organizations;
- "(3) departments and agencies of the governments of the several States and their subdivisions;
- "(4) universities and foundations; and
- "(5) corporations and business associations that are engaged in the collection or analysis of resources and materials information.

"SHORT TITLE"

"SEC. 213. This title may be cited as the 'National Resources and Materials Information Act'.

"TITLE III—RESOURCES SURVEYS AND INSPECTIONS BY THE DEPARTMENT OF THE INTERIOR"

"SURVEY OF RESOURCES IN THE PUBLIC LANDS"

"SEC. 301. (a) The Secretary of the Interior (hereinafter referred to as the 'Secretary') shall compile, maintain, and keep current on not less than an annual basis a survey of all resources in the public lands of the United States.

"(b) The survey program shall be designed to provide information about the location, extent, value, and characteristics of such resources in order to provide a basis for (1) development and revision of Federal leasing programs; (2) wider competitive interest by persons who are potential producers of raw materials from such resources; (3) informed decisions regarding the potential quantity of materials to be derived from these resources; and (4) the purpose of this Act.

"(c) The Secretary is authorized to contract for, or to purchase the results of, seismic, geomagnetic, gravitational, geochemical, or earth satellite investigations, or drilling, or other investigations which will assist in carrying out the survey program pursuant to this title.

"(d) Within six months after the enactment of this title, the Secretary shall submit to Congress and to the Commission and the Administrator a plan for conducting the survey program required by this title. The plan shall include an identification of the areas to be surveyed during the first five years of the program and estimates of the appropriation and staffing required to implement it.

"(e) On or before the expiration of the twenty-month period following the effective date of this title, the Secretary shall submit a report to the Congress concerning the carrying out of his duties under this title, together with a summary of initial information compiled, and shall thereafter, on not less than an annual basis, submit a report to

the Congress concerning the carrying out of such duties and shall include as a part of each such report the status of the current survey, including information compiled during the previous year.

"(f) Copies of all such reports and surveys shall be furnished by the Secretary to the Administrator for inclusion in the System.

"(g) No action taken to implement this title, except the drilling of exploratory wells for oil and gas and other physical exploratory activities of comparable or greater magnitude, shall be considered a major Federal action for the purposes of section 102(2)(c) of the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347).

"(h) Nothing in this Act shall be construed to authorize the Secretary or the Administrator to conduct any physically disruptive exploratory activities on any Federal lands that are within any national park, wilderness, seashore, or wildlife refuge area, or on any lands held by the United States in trust for any Indian or Indian tribe; but exploration which can be conducted from the air, without intrusion on the surface or below the surface of such lands, may be conducted with the written consent of the principal administrators or trustees of such lands.

"VERIFICATION OF REPORTED RESOURCES IN PRIVATE OWNERSHIP

"SEC. 302. When requested by the Administrator, the Secretary may inspect company records for the purpose of verifying the accuracy of information pertaining to resources required to be reported to the Administration under this Act.

"CONTENTS OF SECRETARY'S REPORTS

"SEC. 303. Reports by the Secretary to the Congress and the Administrator under section 301, and to the Administrator under section 302, shall in all cases be organized to include, but not be limited to, ownership, control, location, extent, value, and characteristics of resources. Information on ownership and control of reserves and resources, correlated with locations, shall be designated as geological information that is proprietary company information and shall be handled by the Administrator in the System in accordance with subsection (f) of section 208 of this Act.

"TITLE IV—MISCELLANEOUS

"GENERAL ACCOUNTING OFFICE OVERSIGHT OF RESOURCES AND MATERIALS INFORMATION COLLECTION AND ANALYSIS

"SEC. 401. (a) The Comptroller General of the United States shall continuously monitor and evaluate the operations and activities of the System including its reporting requirements. Upon his own initiative or upon the request of a committee of the Congress or, to the extent personnel are available, upon the request of a Member of the Congress, the Comptroller General shall (1) review the System's resources and materials information gathering procedures to insure that the System is obtaining necessary resources and materials information from the appropriate sources to carry out the purposes of this Act, (2) review the issues that arise or might arise in the collection of any of the types of resources and materials information required to achieve the purposes of this Act, including but not limited to issues attributable to claims of business establishments, individuals, or governments that certain resources and materials information is proprietary or violative of national security, (3) conduct studies of existing statutes and regulations governing collection of resources and materials information, (4) review the policies and practices of Federal agencies in gathering, analyzing, and interpreting resources and materials information, and (5) evaluate particular projects or programs. The Comptroller General shall have access to all

information within the possession or control of the Administrator obtained from any public or private source whatever, notwithstanding the provisions of any other Act, as is necessary to carry out his responsibilities under this Act and shall report to the Congress at such times as the Comptroller General deems appropriate. The report shall include but not be limited to a review of the System's operations and effectiveness and the Comptroller General's recommendations for modifications in existing laws, regulations, procedures, and practices.

"(b) The Comptroller General or any of his authorized representatives in carrying out his responsibilities under this section shall have access to any books, documents, papers, statistics, data, information, and records of any person relating to the management and conservation of resources and materials including but not limited to costs, demand, supply, reserves, industry structure, and environmental impacts. The Comptroller General may require any person to submit in writing such resources and materials information as he may prescribe. Such submission shall be made within such reasonable period and under oath or otherwise as he may direct.

"(c) To assist in carrying out his responsibilities, the Comptroller General may with the concurrence of a duly established committee of Congress having legislative jurisdiction over the subject matter and upon the adoption of a resolution by such a committee which sets forth specifically the scope and necessity therefor, and the specific identity of those persons from whom information is sought, sign and issue subpoenas requiring the production of the books, documents, papers, statistics, data, information, and records referred to in subsection (b) of this section.

"(d) In case of disobedience by any person to a subpoena issued under subsection (c) of this section the Comptroller General may invoke the aid of any district court of the United States in requiring the production of the books, documents, papers, statistics, data, information, and records referred to in subsection (b) of this section. Any district court of the United States within the jurisdiction of which the person is found or transacts business may, in case of contumacy or refusal to obey a subpoena issued by the Comptroller General, issue an order requiring the person to produce the books, documents, papers, statistics, data, information or records. Failure to obey such an order of the court is punishable by such court as a contempt thereof.

"(e) Reports submitted by the Comptroller General to the Congress shall be available to the public at reasonable cost and upon identifiable request, except that the Comptroller General may not disclose to the public any information which could not be disclosed to the public by the System under this Act.

"SEPARABILITY

"SEC. 402. If any provision of this Act or the applicability thereof is held invalid the remainder of this Act shall not be affected thereby.

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 403. There is authorized to be appropriated \$15,000,000 for each of the fiscal years ending June 30, 1975, June 30, 1976, and June 30, 1977. One-tenth of the amount appropriated in each year shall be for the general purposes of the Commission and nine-tenths shall be for the operation of the System."

(14) On page 1, strike out lines 3 through 6 inclusive (the short title, following the enacting clause) and insert in lieu thereof the following: "That this Act, divided into titles and sections in accordance with the following table of contents, may be cited as the 'National Commission on Supplies and Shortages Act of 1974'."

"TABLE OF CONTENTS

- "Sec. 1. Short title and table of contents.
- "Sec. 2. Findings and purposes.
- "Sec. 3. Definitions.

"TITLE I—NATIONAL COMMISSION ON SUPPLIES AND SHORTAGES

- "Sec. 101. Establishment of Commission.
- "Sec. 102. Functions.
- "Sec. 103. Advisory Committees.
- "Sec. 104. Powers.
- "Sec. 105. Assistance of Government agencies.

"TITLE II—NATIONAL RESOURCES AND MATERIALS INFORMATION SYSTEM

- "Sec. 201. Establishment of System.
- "Sec. 202. Functions and powers of the Administrator and the System.
- "Sec. 203. Coordination and transfer of agency activities.
- "Sec. 204. Analytic capability and information scope.
- "Sec. 205. Advisory and interagency committees.
- "Sec. 206. Unauthorized disclosures; theft of information; penalties.
- "Sec. 207. Penalties for providing false information or refusing to furnish information.
- "Sec. 208. Acquisition and designation of information by source, type, and access categories.
- "Sec. 209. Acquisition of information by sampling.
- "Sec. 210. Inspection of records and premises; subpoenas; enforcement of subpoenas.
- "Sec. 211. Reports.
- "Sec. 212. Acquisition of information from institutions outside the Federal Government.
- "Sec. 213. Short title.

"TITLE III—RESOURCES SURVEYS AND INSPECTIONS BY THE DEPARTMENT OF THE INTERIOR

- "Sec. 301. Surveys of resources in the public lands.
- "Sec. 302. Verification of reported resources in private lands.
- "Sec. 303. Contents of Secretary's reports.

"TITLE IV—MISCELLANEOUS

- "Sec. 401. General Accounting Office oversight of resources and materials information collection and analysis.
- "Sec. 402. Separability.
- "Sec. 403. Authorization of appropriations." Amend the title so as to read: "A bill to establish a National Commission on Supplies and Shortages and a National Resources and Materials Information System, to authorize the Department of the Interior to undertake a survey of United States resources on the public lands and elsewhere, and for other purposes."

Mr. MANSFIELD. Mr. President, I ask for the yeas and nays on the motion to recommit.

The yeas and nays were ordered.

Mr. TUNNEY. Mr. President, I yield 3 minutes to the Senator from Mississippi.

SENATE RESOLUTION 338—TO AUTHORIZE THE COMMITTEE ON THE JUDICIARY TO PROVIDE AN AFFIDAVIT

Mr. EASTLAND. Mr. President, I report an original resolution from the Committee on the Judiciary, granting permission to authorize Peter Stockett, Jr., chief counsel and staff director of the Committee on the Judiciary, to provide an affidavit with respect to the case the *United States v. Howard Edwin Reinecke* (Criminal No. 74-155), pend-

ing in the U.S. District Court for the District of Columbia.

Mr. Leon Jaworski, Special Prosecutor, has written to me, as chairman of the Judiciary Committee, requesting that the Senate grant permission for this affidavit to be filed. I ask unanimous consent that the text of this letter be printed in the RECORD.

There being no objection, the letter was ordered to be printed in the RECORD, as follows:

MAY 21, 1974.

HON. JAMES O. EASTLAND,
Chairman, Committee on the Judiciary,
U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: Mr. Ruth has advised me, on the basis of his telephone conversation with you, that the Judiciary Committee has kindly agreed to assist in securing any necessary resolutions to permit Counsel to the Committee to testify in the *Reinecke* case. We will, of course, make all efforts to avoid the necessity for such testimony by seeking to obtain stipulations as to the relevant facts. At the hearing last week on defendant's motions in the *Reinecke* case, counsel for Mr. Reinecke, contrary to our initial expectation, put in issue several factual matters relating to the Committee's adoption of a one-senator quorum rule in January 1972. The trial judge deferred ruling on the defendant's motion challenging the competency of the Committee hearings and allowed the government leave to supplement the record by affidavit. Accordingly, I am requesting that the Judiciary Committee obtain the permission of the Senate for Mr. Stockett to execute an affidavit on the above matter for filing in the *Reinecke* proceeding.

Thanking you for your cooperation in this matter, I am,

Yours sincerely,

LEON JAWORSKI,
Special Prosecutor.

Mr. EASTLAND. Mr. President, by the privilege of the Senate and rule XXX thereof, no Member or Senate employee is authorized to produce Senate documents except by order of the Senate, and information secured by Senate staff employees pursuant to their official duties as employees of the Senate may not be revealed without the consent of the Senate.

This resolution would authorize Mr. Stockett to furnish an affidavit, based upon his knowledge and the transcript of an executive session of the committee on January 26, 1972, concerning the adoption by the committee of a rule providing that only one Senator need be present to take sworn testimony and the practice of the committee not to take any vote on any measure or matter unless a quorum is present at the time the vote is taken.

The resolution further provides that Mr. Stockett may provide information with respect to any other matter material and relevant for purposes of identification of any document or documents in such case, if such document has previously been made available to the general public or should have been made available to the public, but the resolution directs him to respectfully decline to provide information concerning any and all other matters that may be based on knowledge acquired by him in his official capacity, and further directs him to respectfully decline to provide information concerning any matter within

the privilege of the attorney-client relationship existing between him and the Committee on the Judiciary or any of its members.

Mr. President, I ask that the Senate give favorable consideration to the resolution.

The PRESIDING OFFICER. The resolution will be stated.

The assistant legislative clerk read the resolution, as follows:

Whereas, in the case of *United States v. Howard Edwin Reinecke* (Criminal No. 74-155), pending in the United States District Court for the District of Columbia, Peter Stockett, Junior, Chief Counsel and Staff Director of the Committee on the Judiciary, has been requested to furnish an affidavit concerning the adoption by the Committee of a rule on the quorum necessary to conduct hearings: Now, therefore, be it

Resolved, That by the privileges of the Senate of the United States no evidence under the control and in the possession of the Senate of the United States can, by the mandate of process of the ordinary courts of justice, be taken from such control or possession, but by its permission.

Sec. 2. By the privilege of the Senate and by rule XXX thereof, no Member or Senate employee is authorized to produce Senate documents but by order of the Senate, and information secured by Senate staff employees pursuant to their official duties as employees of the Senate may not be revealed without the consent of the Senate.

Sec. 3. When it appears by the order of the court or of the judge thereof, or of any legal officer charged with the administration of the orders of such court or judge, that testimony of an employee of the Senate of the United States is needful for use in any court of justice or before any judge or such legal officer for the promotion of justice and, further, such testimony may involve documents, communications, conversations, and matters related thereto under the control of or in the possession of the Senate of the United States, the Senate of the United States will take such order thereon as will promote the ends of justice consistently with the privileges and rights of the Senate.

Sec. 4. Peter Stockett, Junior, Chief Counsel and Staff Director of the Committee on the Judiciary, is authorized, in response to a request made by the Special Prosecutor for the United States in the case of the *United States v. Howard Edwin Reinecke* (Criminal No. 74-155), to furnish an affidavit, based upon his knowledge and the transcripts of an executive session of the Committee on January 26, 1972, concerning the adoption by the Committee of a rule providing that only one Senator need be present to take sworn testimony and the practice of the committee not to take any vote on any measure or matter unless a quorum is present at the time the vote is taken.

Sec. 5. The said Peter Stockett, Junior, may provide information with respect to any other matter material and relevant for the purposes of identification of any document or documents in such case, if any such document has previously been made available to the general public or should have been made available to the public, but he shall respectfully decline to provide information concerning any and all other matters that may be based on knowledge acquired by him in his official capacity either by reason of documents and papers appearing in the files of the Senate or by virtue of conversations or communications with any person or persons. The said Peter Stockett, Junior, shall also respectfully decline to provide information concerning any matter within the privilege of the attorney-client relationship existing between him and the Committee on the Judiciary or any of its members.

SEC. 6. A copy of this resolution shall be transmitted to the Special Prosecutor as an answer to his request.

The PRESIDING OFFICER. Is there objection to the present consideration of the resolution?

There being no objection, the resolution (S. Res. 338), with its preamble was considered and agreed to.

Mr. EASTLAND. Mr. President, was the resolution adopted?

The PRESIDING OFFICER. Yes.

MESSAGES FROM THE PRESIDENT

Messages in writing from the President of the United States were communicated to the Senate by Mr. Heiting, one of his secretaries.

EXECUTIVE MESSAGES REFERRED

As in executive session, the Presiding Officer (Mr. BIDEN) laid before the Senate messages from the President of the United States submitting sundry nominations which were referred to the appropriate committees.

(The nominations received today are printed at the end of the Senate proceedings.)

NATIONAL COMMISSION ON SUPPLIES AND SHORTAGES ACT OF 1974

The Senate continued with the consideration of the bill (S. 3523) to establish a Temporary National Commission on Supplies and Shortages.

Mr. TUNNEY. Mr. President, how much time have I remaining?

The PRESIDING OFFICER (Mr. BURDICK). There is a unanimous agreement to vote not later than 12 o'clock noon today.

Mr. TUNNEY. I yield whatever time I have remaining to the Senator from Oklahoma.

The PRESIDING OFFICER. The Senator is recognized for 2 minutes.

Mr. BARTLETT. Mr. President, first I would like to point out that I think that the bill before us is a very good bill that should not be delayed by having it referred to a committee.

Second, I would like to point out that the bill does provide, on page 4, subsection (3) (b), for the commission, in its report, to provide for a comprehensive data collection and storage system to aid in examination and analysis of the supplies and shortages in the economy of the United States and in relation to the rest of the world.

I think it is important that this commission study be made. It would be somewhat deliberately done, and I think that is important, because I think as we analyze the shortages of all supplies of energy and minerals, we can see that there has been, first, a tendency of Congress to place blame on industry—the oil industry, certainly, and other industries in some cases.

The PRESIDING OFFICER. The Senator's time has expired. The Senator from Wisconsin has 1 minute remaining.

Mr. NELSON. I yield that minute to the Senator from Oklahoma.

Mr. BARTLETT. I thank the Senator from Wisconsin.

There has been a tendency to take punitive action, and very little tendency to take positive action to relieve the supply shortages. But I think that in one way, by trying for more and more information, just all information, without careful attention to what is privileged and what is important. There is a tendency for Congress to protect itself, to try to show that it was not involved in any way in the shortages that exist at the present time. I am concerned with the amendment of the Senator from Wisconsin, with one of the findings on page 2, section 3, not that I do not think there is a certain amount of truth in the finding, and I agree with it in part, but it says also in part that the blame for the shortages is to —

The PRESIDING OFFICER (Mr. BRIDEN). All time has expired under the amendment.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that there be 1 additional minute to each side.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. BARTLETT. Mr. President, I thank the Senator from West Virginia.

One reading of this finding would give an indication that the shortage of information has been responsible for the shortage of supplies. I do not think that is the case. We had a lot of testimony before various committees that I have served on. An indication that this has not been the case is that William Simon, in his testimony before the Interior Committee, when he was specifically asked a question on that point, said that it was not the case.

What I am trying to say is that there should be more information made available, but I think we want to be careful how we do that so that we do not in any way injure the ability of industry to perform, and that we take positions which will create a better environment rather than an inferior environment for the production of materials and for the production of energy.

Mr. NELSON. Mr. President, I yield to the Senator from Rhode Island.

Mr. PASTORE. Mr. President, I shall be as brief as I can. I agree with the Senator from Wisconsin that we are living in a critical time. This country uses 50 percent of the natural resources of the world. The time has come when we should stop talking, we should stop debating, we should stop studying—the time has come when we should start to act.

Everyone knows that most of our resources are in short supply. The lines at the gasoline pumps are too long. The price of heating oil is much too high. We are told that that is because we have to import these things. The price of food goes up every day. There are shortages here and shortages there—there are shortages everywhere.

We do not need another group to go out and study the situation for another year. The time has come—now—to set up an agency in the U.S. Government that will achieve results for the American people so that prices will be restored, so that people can pay for the things they

need—especially in buying meat, buying food, and buying oil.

Let us make sure that we are not going to die on the vine.

I am going to vote for the motion to recommit the bill.

Mr. BARTLETT. Mr. President, this amendment No. 1406 may give the administration powers that border on invasion of privacy of individuals. The definitions of "resources enterprise" and "materials enterprise" would include virtually every individual in the United States. The Administrator and the Agency which he would head could, even more than now, tend to computerize individuals and burden them with unnecessary requirements for information.

What we could have would be another bureaucratic agency whose requirements for information could lead to additional operating costs for private enterprise and, therefore, increasing costs for the consumer.

Any legislation of this nature should provide for informing the consumers and taxpayers of America just how much they are paying to obtain possibly redundant or useless information.

If certain information is needed in order to determine prudent Government policy, then I am in favor of acquiring it so long as we do not hinder the efforts of the industry to cope with shortages. I am not in favor of collecting information for the sake of collecting information.

Mr. BROCK. Mr. President, I think S. 3523 represents an important first step toward solving our materials problems. There is no question either of the seriousness of the problem or of the concern of the Senate. Yesterday's debate clearly showed this.

However, yesterday's debate also showed that there is still much disagreement on the type of structure necessary to deal with the problem of materials and material shortages. I think it would be instructive at this point to review the specific recommendations made over the last 22 years concerning the appropriate structure to deal with the problem.

First, of course, we have the Paley Commission. It recommended that the National Security Resources Board, an advisory agency that was in the Executive Office of the President at that time, be given the mandate to deal with the materials problem.

Next, the National Commission on Materials Policy studied the problem in great detail. In chapter 11 of their final report, the Commission urged the establishment of a Cabinet-level agency to develop a comprehensive, integrated materials energy environment policy.

Neglected in yesterday's debate, but of equal importance to the issue of a materials policy, are the recommendations of the 1972 Henniker conference. Under the sponsorship of the Engineering Foundation, Dr. Frank Huddle of the Library of Congress, organized the conference to bring to a focus the issues surrounding materials. The conference recommended that "a permanent policy-making body should be established by legislative action within the Federal Government," to coordinate a national

strategy for materials. However, the conference did not make any specific organizational recommendations.

Most recently, the General Accounting Office studied the problem of commodity shortages. The report issued by the GAO pointed out the lack of coordination among existing institutions. As the Senator from Wisconsin (Mr. NELSON) pointed out, the GAO made no specific recommendations for institutional reforms either.

Mr. President, I think two things should be clear from this brief review. One, the experts all agree that reforms are necessary to deal with the problem of materials and material shortages. Two, the experts all disagree on the kind of institutional and structural reform needed to deal with the problem. I suggest that this lack of agreement by the experts in the field was reflected in yesterday's debate.

Mr. President, on one issue of institutional reform, at least one group of experts, the National Commission on Materials Policy, was in agreement. I speak of the need for committee reform. In their final report, the Commission stated that—

A concomitant restructuring in the Congress is essential for the harmonization of materials, energy, and environment policies and for the elimination of inconsistencies in law and practice.

Mr. President, I might also point out that the House Select Committee on Committees recommended that an Energy and Environment Committee be established for the House in order to look at the issues surrounding energy and environment as a whole. Perhaps we should start, then, by reforming the Congress, as many of us have so consistently urged.

Much has been made of the monitoring function necessary to avoid future shortages. The Paley Commission used the word and it has cropped up repeatedly since then. One definition of "to monitor" is "to watch, observe or check * * *." Consider what Joseph Harris, a leading authority on Congress, says in his book, "Congressional Control of Administration":

"Oversight" strictly speaking refers to review after the fact. It includes inquiries about policies that are or have been in effect . . .

I suggest that a portion of this monitoring necessary to avoid future problems with materials be carried on by the Congress in oversight hearings.

Mr. FANNIN. Mr. President, I oppose amendment No. 1406 offered by the Senator from Wisconsin. Those who have been following this issue of data gathering authority, which specifically arose during the height of the energy crisis, are surprised to see this amendment offered on this bill dealing with the National Commission on Supplies and Shortages. The Senator from Wisconsin earlier in 1974 introduced S. 3209 to establish a national resource information system and it was referred to the Government Operations Committee. To my knowledge no hearings have been held on that bill. A parallel bill which dealt specifically with energy information gathering was in-

troduced in March of 1974, which was referred to the Interior and Insular Affairs Committee. That bill is S. 2782. This amendment No. 1406 is the embodiment of both of these pieces of legislation. Because each of these bills have been introduced as separate measures and have been referred to separate committees, the normal system of considering legislation ought to be adhered to now. It would be inappropriate to act on this particular 58-page amendment, S. 3523 to establish a Commission on Supplies and Shortages calls for recommendations regarding the need for a permanent data agency now. If the Senator from Wisconsin is serious about the adoption of this measure he should be willing to have it scrutinized through the normal committee hearing process. This Senate ought not blindly adopt a measure which has far-reaching consequences without thorough and deliberate consideration. I might say that the 58 pages in this amendment contain provisions which I know deserve the utmost discussion by this body.

Let us look at some of the provisions of amendment No. 1406, specifically that section that would establish a national resource and material information system, section 202, page 11. The function of this system would be to collect, collate, compile, analyze, tabulate, standardize, and disseminate information in regard to resources and materials. The administrator of this program would be authorized to request, acquire, and collect resource and material information from any person in such forms and in such manners as he may deem appropriate. This amendment would create a huge bureaucracy whose purpose in life would be to search out all types of information from all parties in this country and even abroad which deal with resources. The administrator would have the authority to collect this information from any person and any business and one need not use very much imagination to grasp the potential abuses that could spring from such authority. Under the guise of searching for data this bureaucracy would be able to barge into any corner of this country cloaked with unbridled authority to ferret out what this administrator in his own subjective determination decides is necessary to fulfill the purposes of this act.

One might ask the question, Why does an agency need this kind of information? Second, why does this agency need this much authority? Third, what is this agency going to do with this information once it receives it? Fourth, what protections or safeguards are going to apply to the collection and dissemination of this information once it is gathered? Let me tell you that if you analyze those simple four questions you will come to the conclusion, as I have, that this piece of legislation is potentially the most dangerous and disruptive legislation which we have had on the floor of this Senate during this session. There is absolutely no legitimate purpose for a Federal agency to have this much authority; there is absolutely no legitimate purpose to be served by making public the bulk of such gathered information.

In essence, the purpose of the bill is to force public disclosure of almost all information held by the private sector. The purpose of this amendment is to strip our free enterprise system of proprietary information thus placing this Nation in an untenable position in the world marketplace. The administrator of this agency would have the authority to require from any company such proprietary information as that company may possess. Mr. President, ask yourself what legitimate purpose in the world is served by such authority? The administrator may also acquire proprietary company information from sources other than the company to which such information pertains and I specifically here refer you to page 29 of the amendment starting at line 15.

In addition to the handling of this proprietary information, let me suggest that the purpose of this amendment really is to alter and amend the accounting practices of our free enterprise system. What is sought is to force private enterprise to conform to Federal dictates for accounting. When one looks closely at the requirements applied to the private sector you will note the requirement for standardization of all information. Today, our private sector has no requirement for standardization, in fact, that is what it is all about. Private enterprise can use any form to try to ascertain how they are faring. This bill would attempt to standardize all business and accounting practices so that Uncle Sam could keep tabs on the private sector. In this regard, look on page 30 of the amendment starting on line 12, subsection (c):

In order that proprietary company information acquired by the Administrator from companies shall be of maximum value to the system for the purposes of this act, the Administrator's regulations shall designate (1) Segments of business which shall facilitate comparisons on a standardized basis among resources enterprises and materials enterprises.

Reading the rest of this paragraph and all of page 31, you will certainly find that there is an unmistakable purpose to standardize accounting practices. What legitimate purpose does the Government have to embark upon this course?

Let us suppose we adopt this measure and it becomes law, what burden would both the Federal Government and the private sector have? I have here a list of the current reporting requirements that are used by the Federal Energy Office which details the reports required of just the energy sector alone. You need but spend about a minute looking through all of this periodic current and repetitive reports which are required of this particular segment of our industry to determine that placing additional reporting redtape requirements might even bring this free enterprise system to a screeching halt. It staggers my mind to try and comprehend the size of the bureaucracy that would be necessary to implement the provisions of this amendment. We create this huge bureaucracy to pursue what I believe to be an unlawful purpose and

which I believe to be completely superfluous and which will have disastrous effects for us in the world marketplace. Why in the world should we as Americans, trying to compete in the world marketplace, strip ourselves of all protections and parade ourselves around so that all can see those secrets and processes which have made us great and which have made us competitive. Following such course of action would be pure folly and would be pure suicide. Simply weighing the benefits that would accrue, because of passage of this legislation on the one hand and weighing the burdens that would be created on the other, one would have to come to the conclusion that this amendment is not needed.

Let me summarize: This amendment really is a bill which had been submitted to two separate committees which have not completed the normal hearing processes. Certainly that process should be completed on a bill of such magnitude and importance. Second, there is no legitimate purpose for this amendment No. 1406. Third, there is no legitimate purpose for the Federal Government to engage in such a widespread collection of information. Fourth, the protections which are afforded to proprietary information are certainly insufficient to protect private enterprise. Fifth, the size of the bureaucracy necessary to fulfill the requirements of this act is incomprehensible. Sixth, there is no legitimate purpose for the Government of the United States to attempt to restructure the accounting systems used by the free enterprise sector. Seventh, the potential for abuse of the powers afforded under this amendment certainly should persuade one against voting for such powers. Finally, we will only have 3 hours on this amendment of great importance, and I dare say the majority of Senators have not had an opportunity to digest the provisions of this amendment.

The PRESIDING OFFICER (Mr. BRIDEN). The question is on agreeing to the motion of the Senator from Wisconsin (Mr. NELSON) to recommit the bill, S. 3523, with instructions.

On this question the yeas and nays have been ordered, and the clerk will call the roll.

The assistant legislative clerk called the roll.

Mr. ROBERT C. BYRD. I announce that the Senator from Indiana (Mr. BAYH) and the Senator from Alaska (Mr. GRAVEL) are necessarily absent.

I further announce that the Senator from Montana (Mr. METCALF) and the Senator from Missouri (Mr. SYMINGTON), are absent because of illness.

I also announce that the Senator from Iowa (Mr. CLARK) is absent because of illness in the family.

I also announce that the Senator from Wyoming (Mr. MCGEE) is absent on official business.

I further announce that, if present and voting, the Senator from Iowa (Mr. CLARK) would vote "yea."

Mr. GRIFFIN. I announce that the Senator from Oregon (Mr. HATFIELD), the Senator from New York (Mr. JAVITS), the Senator from Maryland (Mr. MATHIAS),

and the Senator from Illinois (Mr. PERCY) are necessarily absent.

I further announce that, if present and voting, the Senator from Illinois (Mr. PERCY) and the Senator from Oregon (Mr. HATFIELD) would each vote "nay."

The result was announced—yeas 34, nays 56, as follows:

[No. 250 Leg.]

YEAS—34

Abourezk	Hughes	Nelson
Allen	Jackson	Packwood
Bible	Johnston	Pastore
Biden	Kennedy	Proxmire
Chiles	Long	Stevens
Cook	Magnuson	Stevenson
Cranston	McGovern	Taft
Eagleton	McIntyre	Tunney
Goldwater	Metzenbaum	Welcker
Hart	Mondale	Williams
Haskell	Montoya	
Hollings	Moss	

NAYS—56

Aiken	Domenici	Muskie
Baker	Dominick	Nunn
Bartlett	Eastland	Pearson
Beall	Ervin	Pell
Bellmon	Fannin	Randolph
Bennett	Fong	Ribicoff
Bentsen	Fulbright	Roth
Brook	Griffin	Schweiker
Brooke	Gurney	Scott, Hugh
Buckley	Hansen	Scott,
Burdick	Hartke	William L.
Byrd	Hathaway	Sparkman
Harry F., Jr.	Helms	Stafford
Byrd, Robert C.	Hruska	Stennis
Cannon	Huddleston	Talmadge
Case	Humphrey	Thurmond
Church	Inouye	Tower
Cotton	Mansfield	Young
Curtis	McClellan	
Dole	McClure	

NOT VOTING—10

Bayh	Javits	Percy
Clark	Mathias	Symington
Gravel	McGee	
Hatfield	Metcalf	

So the motion to recommit was rejected.

The PRESIDING OFFICER. The bill is open to further amendment.

Mr. HUMPHREY. Mr. President, I have an amendment at the desk, Amendment No. 1442, which I call up at this time.

The PRESIDING OFFICER. The amendment will be stated.

The assistant legislative clerk proceeded to read the amendment.

The amendment is as follows:

On page 4, at the end of subsection (b), add the following:

"(c) In order to establish a means to integrate the study of supplies and shortages of resources and commodities into the total problem of balanced national growth and development, it shall additionally be the function of the Commission to make reports to the President and to the Congress with respect to the most appropriate means for establishing a policymaking process within the executive and legislative branches of the Federal Government and a system for coordinating these efforts with appropriate multi-State, regional, and State governmental jurisdictions. The principal function of such policymaking process and coordinating system is to develop specific national policies relating to the achievement of a more balanced regional distribution of economic growth and development, income distribution, environmental protection, transportation systems, employment, housing, health care services, food and fiber production, recreation and cultural opportunities, communication systems, land use, human care and development, technology assessment and transfer, and monetary and fiscal policy."

On page 4, line 21, redesignate subsection "(c)" as subsection "(d)".

Mr. HUMPHREY. Mr. President, I shall explain the amendment. First, I ask unanimous consent that James Thornton, Bob Kerr, and Mr. Daniels be permitted the privilege of the floor during the consideration of this matter.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. HUMPHREY. Mr. President, I suggest we might have a little order so we can proceed with this matter.

The PRESIDING OFFICER. The Senate is not in order. The Senate will be in order.

There is 1 hour on the amendment.

Mr. HUMPHREY. Mr. President, first of all, I wish to commend all of those who have taken the initiative in introducing the bill to create a National Commission on Supplies and Shortages. We desperately need to take a close look at the process by which we make decisions affecting our present and future utilization of commodities and resources. The Commission created by this bill will have the authority to examine the problem and the responsibility of recommending a permanent organizational framework within which to order our priorities. It is a first step in the direction we need to go.

At the same time we would be remiss not to consider the fact that even the use of commodities and other material resources cannot be considered in isolation. We need to interrelate our planning for developments in transportation environment, land use, and an equitable and improved social life with our analysis of the availability and management of resources.

Two years ago I first unveiled the details of a plan which I believe would best meet our needs, and this plan was introduced as the Balanced National Growth and Development Act of 1974 (S. 3050) this February.

The Senator from Indiana (Mr. HARTKE), the Senator from New York (Mr. JAVITS), and other Senators have introduced similar legislation regarding the process by which national policies and priorities should be determined.

Mr. ROBERT C. BYRD. Mr. President, may we have order in the Senate?

The PRESIDING OFFICER. The Senate is not in order. The Senate will be in order. Senators will please clear the aisle and take their seats or continue their conversations in the cloakroom.

The Senator may proceed.

Mr. HUMPHREY. Mr. President, I take this opportunity to review briefly the major features of the Balanced National Growth and Development Act, and to suggest why the general developments it calls for are necessary if we are not to be mired down in increasingly dangerous flaws in planning and foresight.

My bill provides for the establishment of an Office of Balanced National Growth and Development within the Office of the President to: Develop specific national policies relating to future population settlement and distribution patterns, economic growth, environmental protection, income distribution, energy and fuels, transportation, education, health care, food and fiber production, employment, housing, recreation and

cultural opportunities, communications, land use, welfare, technology assessment and transfer, and monetary and fiscal policy.

This new office also would provide the means to develop these individual national policies in such a way as to reflect the appropriate interrelationships that obviously exist between and among such policies.

S. 3050 also includes provisions regarding changes in the Congress and provides for a structure to insure program coordination with multistate and State jurisdictions on questions of national policy and priorities.

The bill before us today directs our attention to the problem of resource shortages and provides for the development of some kind of institution to deal with such shortages in the future as well as help avert them. But as important as such an effort will be, it cannot, in my judgment, provide the more comprehensive context required to develop national policies to insure proper supply and management of such measures. In addition to developing recommendations about what type of institution might be required to monitor, analyze and advise the Nation regarding resource requirements and availabilities, the Commission should be asked to develop recommendations regarding the broader needs of the Federal Government with respect to a number of long-range policy questions. We need to integrate the Commission's work on resource supplies and shortages into a broader effort of determining the means for establishing a Federal policymaking process and coordinating system to deal with all national policy issues.

In today's world, everything relates to everything else. No problem, no policy issue can be totally insulated from other problems and policy issues. What happens in agriculture affects our energy policy, our transportation policy, and our foreign policy. What happens in our energy policy affects our transportation policy, our economic policy and our foreign policy. And the litany of interrelationships between and among policy areas goes on and on.

But unfortunately, our governmental institutions and policymaking processes today are not designed or equipped to reflect those interrelationships or to provide for long-range policy analysis.

Therefore, I wish to offer an amendment to S. 3523 asking that the Commission under this bill also address such needs, needs which I believe are even more important than those addressed in the original bill.

Mr. President, I happen to believe that the purpose of the amendment I have before the Senate will fit in very well with the structure of the bill before us.

The amendment states:

"(c) In order to establish a means to integrate the study of supplies and shortages of resources and commodities into the total problem of balanced national growth and development, it shall additionally be the function of the Commission to make reports to the President and to the Congress with respect to the most appropriate means for establishing a policymaking process within the executive and legislative branches of the Federal Government and a system for co-

ordinating these efforts with appropriate multi-State, regional, and State governmental jurisdictions. The principal function of such policymaking process and coordinating system is to develop specific national policies relating to the achievement of a more balanced regional distribution of economic growth and development, income distribution, environmental protection, supply and conservation of fuels and energy transportation systems, employment, housing, health care services, food and fiber production, recreation and cultural opportunities, communication systems, land use, human care and development, technology assessment and transfer, and monetary and fiscal policy."

On page 4, line 21, redesignate subsection "(c)" as subsection "(d)".

Also, I have added the supply and conservation of fuel and energy. I have outlined a couple of things I think are related to proper management of our supplies and resources. It is my judgment that the amendment I have offered would help this bill. It would impose, yes, a little additional responsibility. It would in no way detract from the original purpose of the measure before us, and I believe it could offer us a plan of action on an important, broader front in connection with how we work with State and local governments, how Governments plan and use the resources available to them, and how we can establish priorities and goals.

I would be appreciative of getting the reaction of those who sponsored this legislation as to the proposal.

Mr. MANSFIELD. Mr. President, will the Senator yield?

Mr. HUMPHREY. I yield.

Mr. MANSFIELD. Mr. President, I would suggest, and I say this most respectfully because of my great admiration and affection for the distinguished Senator from Minnesota, that he not press this amendment, and that this bill not be weighted down. I would hope that the membership would keep in mind that when it was originally considered at a Democratic Conference this proposal was unanimously approved; the leadership was delegated to go ahead and try to work with the Republican leader and together, if we could find our way clear, to work with the joint leadership of the House, and then to join with the administration to see what could be done.

We have endeavored to do that. There have been executive-legislative meetings over a period of 6 weeks. In that period we discussed many things and many ways of meeting an issue which we all considered of vital importance to the Nation.

The reason I ask that this bill not be weighted down is to give the national commission a chance to lay out the guidelines and in that way to bring about approval by the Senate and the House of a permanent facility at the highest level of the Nation to deal with these potential problem areas in terms of our requirements for resources, materials, and commodities and to assess for us the situation that may exist 5 or 10 years hence. The legislation pending covers all the areas which the distinguished Senator mentioned and it goes beyond because it takes in such things, for example, as clean air and pure water, because even

these basic items are becoming scarce in parts of the country.

But I urge the Senator to consider the possibility of narrowing his proposal, and to narrow his thinking in relation to S. 3523, which I would hope would not be encumbered too much with respect to this temporary commission whose mandate is very precise. I repeat, this was a unanimous recommendation on the part of every Democrat in the conference earlier this year.

Mr. HUMPHREY. Mr. President, will the Senator yield?

Mr. MANSFIELD. Yes, indeed.

Mr. HUMPHREY. If the Senator will bear with me for just a few moments, I wish to say that it is the first few lines of this amendment that I am really interested in. I do not think it runs at all counter to the Senator's proposal or that it weights the bill down.

At least, I would like the Senator to consider the proposal, since the life of the commission has been extended beyond the original 6 months and it, therefore, has more time to do the job.

I would like the Senator to consider this language in the amendment:

"(c) In order to establish a means to integrate the study of supplies and shortages of resources and commodities into the total problem of balanced national growth and development, it shall additionally be the function of the Commission to make reports to the President and to the Congress with respect to the most appropriate means for establishing a policymaking process within the executive and legislative branches of the Federal Government and a system for coordinating these efforts with appropriate multi-State, regional, and State governmental jurisdictions.

Forget the rest of it. It seems to me all we are really saying there as to the study on supplies and shortages is to go ahead and make further recommendations as to how the Federal Government could better work with State and local governments in matters of long-range policy planning.

Mr. MANSFIELD. Yes. This would be a national commission.

Mr. HUMPHREY. Yes.

Mr. MANSFIELD. All-embracing. Unlike what some Senators said this morning, this is not a study commission. We have studies running out of our ears. This is supposed to be an action group.

Mr. HUMPHREY. Yes, sir.

Mr. MANSFIELD. The part the Senator mentioned is satisfactory, but I hope there would be no further amendments to make this any more difficult than it is at the present time.

I remind my Democratic colleagues again that in conference and in the policy committee it was the unanimous wish that the leadership go ahead. The leadership did. It did, to the best of its ability, what it could. And now we find it is not satisfactory. Some Senators want it re-committed. Others want to weigh it down with amendments. I hope that we might recognize that we have done the best we could. The decision, of course, is up to the Senate.

Mr. HUMPHREY. If the majority leader will bear with me a moment, I voted against recommitment.

Mr. MANSFIELD. I know; I am talking about some Senators.

Mr. HUMPHREY. I understand.

The part of the amendment which I would urge be adopted will not weigh down the Commission. It is nothing except a recommendation to the President and the Congress as to a better means of utilizing our resources. It seems to me that should fall very well within the purview of this legislation.

Mr. MANSFIELD. Mr. President, will the Senator yield on that point?

Mr. HUMPHREY. Yes.

Mr. MANSFIELD. The pending bill does call for a report to the President and Congress, so it would fit in, as far as I can see.

Mr. TUNNEY. Mr. President, is the Senator ready to vote on the amendment?

Mr. HUMPHREY. No. I would hope the manager of the bill would accept this amendment, in light of our discussion here.

Mr. TUNNEY. I may say to my distinguished colleague and friend from Minnesota that I have great respect for his ability and judgment. I have analyzed his amendment. I think, in the long term, there is no question that the proposed study will have to be made. However, I would point out to the Senator from Minnesota that what we did yesterday was to cut back the life of the Commission to one year and to cut back the funding to \$500,000. The Commission is just not going to be able to study the mechanism of establishing a permanent Commission on Supplies and Shortages and at the same time get involved in the intricate analysis that the Senator's amendment suggests would be necessary. For instance:

The principal function of such policymaking process—

Mr. HUMPHREY. I was canceling out that provision. I said we would start out with line 3 on page 2.

Mr. TUNNEY. But before line 3, page 2, the Senator is talking about—

establishing a policymaking process within the executive and legislative branches of the Federal Government and a system for coordinating these efforts with appropriate multi-State, regional, and State governmental jurisdictions.

That is a very large undertaking, and I point out to the Senator that with a \$500,000 budget, the Commission would have, at the most, 10 professional people working for 1 year. I do not see how they are going to be able to analyze the need for a permanent Commission and the structure of that permanent Commission. The proposed task will require much intergovernmental coordination. The members are going to have to receive opinions from various agencies at the Federal level. It seems to me to add that the proposed responsibility with respect to State, regional, and local governments would be an insuperable burden. The Commission could not accomplish it.

Mr. HUMPHREY. Will the Senator yield for just a moment.

Mr. TUNNEY. I yield.

Mr. HUMPHREY. First of all, my amendment is most consistent with the

recommendations of the Governors' Conference. Second, the Office of Management and Budget has made some preliminary studies. I have met with Mr. Roy Ash and visited with him about some of the studies that have been conducted. Third, the original legislation was for 6 months, and was extended as a result of a vote in the Senate. The committee came back with a 3-year provision. It was cut back to 1 year. It is my judgment with the 6-month period that was added, this limited addition to the proposal to report to the Congress and the President on what might be done in terms of improving governments' forecasting policymaking and structural organization would not be an insurmountable obstacle.

I hope we might at least give it a chance. If the Commission cannot do it within that period of time, it can tell us, but I think it can. Much work has already been done. For example, the Senator from Texas (Mr. BENTSEN) has held hearings on the general matter in the Joint Economic Committee. Substantial studies have been made by the executive branch already. Likewise, the other body has made an in-depth study of this matter.

What I think is needed is a commission to pull it all together and make some recommendations. It is not as if we were setting up a new government; we are merely asking for recommendations as to how we can better plan and coordinate actions between the Federal, State, and regional governments, which there is a great need to do.

Mr. TUNNEY. I could not agree with the Senator more. I think there is a great need for that. I think the purpose of the Senator's amendment is excellent. If we had a permanent commission, I would be 100 percent for it, and I would be 100 percent for it if we had a 3-year commission, which is what was recommended by the Senate Commerce Committee almost unanimously. When the bill passed out of committee we had a \$1 million funding for 3 years.

Under those circumstances, I think the Senator's amendment would be in order and would be something the commission should take a look at. But now that we have cut back funds to \$500,000 and we have a 1-year study commission, I do not see how they are going to be able to analyze the need for a permanent commission, and then analyze alternative possible structures of that permanent commission, and at the same time analyze the process as it relates to Federal, State, and regional governments. That puts too much on the agenda for the commission, and the commission would probably not do anything right.

I happen to be of the opinion that now that we have cut this commission back to 1 year, it is not worthwhile. I question the advisability of another short-term study commission and I am 100 percent in favor of a permanent commission to analyze shortages. As a matter of fact, I was the first Senator to introduce a bill on the subject in this Congress. I do not agree with the joint leadership that the present proposal is adequate. We in the Commerce Committee were working on legislation to develop a permanent com-

mission that would immediately attack the problem of material shortages, monitoring those material shortages, et cetera. Now that the Senate has acted, by a vote of 2 to 1, to cut it to 1 year, I do not see how we can weigh down the Commission with the kinds of responsibilities that the Senator suggests it should have.

Mr. HUMPHREY. Why does not the Senator give it a chance? The majority leader said he had no objection to this limited amount being included, and I really believe it is necessary. I believe we would be derelict in our responsibilities if we did not do it. We would be deceiving ourselves. We cannot be talking about shortages and critical needs without thinking about a better policymaking structure within our Government to work between the Federal, State and local governments. We had a hearing this morning in the Office of Technology Assessment and heard from the National Science Foundation. The problems to be worked out relate to coordination between the State, local, and Federal governments. What we tend to do around here is ignore such matters. What I am trying to do is lay it before that Commission, in a period of time, which I recognize is limited, but which responsibility I believe the Commission is capable of doing. Even the suggestion that the Commission may need more time, if you please, is something which the Commission can advise us on.

I really plead with the Senator from California not to throw this out or cast it aside, because I do not think it will hurt or injure the role of this temporary Commission. To the contrary, I think it will give it extra meaning in its endeavors and purpose.

Mr. TUNNEY. I yield to the Senator from Tennessee.

Mr. BROCK. I think the Senator from Minnesota knows I have a very similar concern. I supported him on a number of initiatives in this area.

Mr. HUMPHREY. Yes, I know that. Mr. BROCK. But I do have to agree with the Senator from California. The Commission is small, the staff is small, and the amount of time is small. I do not know of anybody in the Senate who is more concerned about Federal-State relations and the federal system than I am. I am deeply distressed about the way we have been going.

I would almost be willing to support—I would support—a new commission to study just that problem in its total context. But to lift it out of a policy study on materials and materials shortages does not, to me, deal with the whole scope of the problem. Yet, while it does not deal with the problem, it does, I am afraid, burden or could burden this Commission to the point where it would lose its effectiveness. I am very reluctant to do so. Therefore, I just have to oppose the amendment of the Senator from Minnesota. I wish there were appropriate mechanisms offered, because I would like to support it.

Mr. HUMPHREY. I would like to have a little private visit with my two esteemed friends, because I think that with a little consultation we can work out an amendment which would satisfy everybody.

I think what we ought to do—maybe during a little quorum call—is to huddle for a few moments to see if we can come to a meeting of the minds. This is an opportunity we ought not to pass by, because this is our chance to more than just touch the surface of these difficult problems.

Mr. TUNNEY. I would be happy to discuss it with the Senator from Minnesota during a quorum call.

Before we get to that point, I should say again that the Commission has some very important responsibilities but a very limited budget. You take a look at what the functions of the Commission is. It is supposed to make reports to the President and Congress with respect to the existence of the possibility of any long- or short-term shortages or market adversities affecting the supply of any natural resources, raw, agricultural commodities, materials, manufactured goods, and so forth.

It goes on in section 2 to describe "the need for and the assessment of alternative actions necessary to increase the availability of the items" referred to in the previous paragraph; and then it states "existing policies and practices of government which may tend to affect the supply of natural resources and other commodities." The "government" is left in its generic sense, which would mean not only the Federal Government but also the State and local government.

Then in section 4 it states "the means by which to coordinate information with respect to the other responsibilities" that have been previously enumerated.

The point is that this commission has so much in the way of responsibility now with such a limited budget, that I fear if we start adding additional responsibilities to the commission, what we will have at the end of the year is a commission that has simply reported on the need for a permanent commission to do what the proponents of this legislation say it is supposed to do, and that is to monitor the shortages that exist today, as well as reporting on a structural institutional means of setting up a permanent commission. I do not see how we can keep adding responsibilities to this commission without killing it by the weight of its responsibilities.

I know that the idea is an excellent one. I wish that the Senator had been with us in the debate yesterday. Knowing the silver tongue of my dear friend from Minnesota, maybe he would have been able to convince the Senate better than I was able to that we ought to have a permanent or semipermanent commission of at least 2 years, with a budget of at least \$1 million to accomplish these matters.

I know that the Senator was with us in the vote. Unfortunately, I was not able to convince the Senate that we needed this 2-year commission, and we needed at least a budget of \$1 million a year, but the Senate now has spoken and we have a 1-year commission with \$500,000, and I just do not see how it is going to be able to do what it is supposed to do already.

Mr. HUMPHREY. For the purpose of what we call informal discussion, I sug-

gest the absence of a quorum, and I should like to take it out of my time, if we have any time left.

The PRESIDING OFFICER. Under the precedents, the Senator does not have enough time for a quorum call.

Mr. HUMPHREY. I have not used 30 minutes yet.

The Senator from California is talking on his time, not mine. [Laughter.] I do not want to go into this sharing business too much.

RECESS

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that the Senate stand in recess for 5 minutes.

The PRESIDING OFFICER. Without objection, the Senate stands in recess for 5 minutes.

At 12:46 p.m., the Senate took a recess until 12:51 p.m.; whereupon the Senate reassembled when called to order by the Presiding Officer (Mr. BIDEN).

Mr. HUMPHREY. Mr. President, this is a reasonable body of reasonable men. We have reasoned together in the spirit of Isaiah, and we have come forth with these suggestions. I shall read the proposed amendment as now modified:

On page 5, at the end of section 4 add a new paragraph as follows:

"In order to establish a means to integrate the study of supplies and shortages of resources and commodities into the total problem of balanced national growth and development, it shall additionally be the function of the Commission to establish an advisory committee to develop recommendations regarding the establishment of a policy-making process and structure within the executive and legislative branches of the Federal Government, and a system for coordinating these efforts with appropriate multi-State, regional, and State governmental jurisdictions. For the purposes of carrying out this provision, there is authorized to be appropriated not to exceed \$75,000 for the fiscal year ending June 30, 1975."

The PRESIDING OFFICER. Will the Senator please send his modification to the desk?

The amendment will be so modified.

Mr. HUMPHREY's amendment, as modified, is as follows:

On page 5, at the end of section 4, add a new paragraph as follows:

"In order to establish a means to integrate the Study of Supplies and Shortages of resources and commodities into the total problem of balanced national growth and development, it shall additionally be the function of the Commission to establish an Advisory Committee to develop recommendations regarding the establishment of a policy making process and structure within the executive and legislative branches of the Federal Government and a system for coordinating these efforts with appropriate multi-State, regional and State governmental jurisdiction. For the purposes of carrying out this provision there is authorized to be appropriated not to exceed \$75,000 for the fiscal year ending June 30, 1975."

Mr. TUNNEY. Mr. President, I have had the opportunity to go over this provision with the distinguished Senator from Minnesota, and I think that the structure that he has established in his amendment totally is a good one.

It requires the Commission to set up an advisory committee to handle this additional responsibility, and because the Senator has added some additional fund-

ing money for this effort would not come out of the funding for the Commission. The advisory committee is engaged to handle its responsibility without in any way derogating the ability of the National Commission to undertake its responsibilities.

I think it is a good proposal as it is now worded. I think that the advisory committee can perform a valuable service.

So, with the funding provision and the advisory committee mechanism, I am prepared to accept the amendment.

Mr. HUMPHREY. May I also say how grateful I am to the Senator from Tennessee (Mr. Brock) for his cooperation in this matter, as well as the Senator from California. Both Senators have been in the forefront of this whole struggle for better coordination of our Federal, State, and local activities.

Would it not also be desirable that, in the legislative history here, we indicate that the advisory committee would make this report to the National Commission, which would in turn make its report to Congress?

Mr. BROCK. I think, if the Senator will yield, that was the intention.

Mr. HUMPHREY. Yes.

Mr. TUNNEY. It was certainly my intention. I think the very nature of the National Commission and the language of section 4 of the bill, which says that the Commission is authorized to establish such advisory committees as may be necessary or appropriate to carry out any specific analytical or investigative undertakings on behalf of the Commission, and that any such committee shall be subject to the relevant provisions of the Federal Advisory Committee Act, make it very clear that this advisory committee would report to the National Commission. So I think the legislative history is very clear that that is what our intention is—the Senator from Tennessee, the Senator from Minnesota, and the Senator from California, the floor manager of the bill.

Mr. BROCK. Mr. President, will the Senator from California yield briefly?

Mr. TUNNEY. Yes.

Mr. BROCK. I wish to express my personal gratitude to the Senator from Minnesota for his willingness to accommodate to the interests of all concerned in working out something in which I think we are all very much interested. I appreciate his leadership and his very gracious remarks.

Mr. HUMPHREY. Mr. President, I yield back the remainder of my time.

The PRESIDING OFFICER. Does the Senator from California yield back his time?

Mr. TUNNEY. I yield back the remainder of my time.

The PRESIDING OFFICER (Mr. BIDEN). All remaining time having been yielded back, the question is on agreeing to the amendment of the Senator from Minnesota (Mr. HUMPHREY), as modified.

The amendment was agreed to.

AMENDMENT NO. 1409

Mr. TAFT. Mr. President, I call up my amendment No. 1409 and ask for its immediate consideration.

The PRESIDING OFFICER. The amendment will be stated.

The assistant legislative clerk proceeded to read the amendment.

Mr. TAFT's amendment (No. 1409) is as follows:

On page 3, line 20, strike the word "shortages" and insert in lieu thereof the following: "shortages; employment, price, or business practices;"

On page 4, line 2, after "ages" insert the following: ", practices;"

On page 4, after line 2, insert the following: "(2) the adverse impact or possible adverse impact of such shortages, practices, or adversities upon consumers, in terms of price and lack of availability of desired goods;"

On page 4, line 3, strike "(2)" and insert in lieu thereof "(3)"

On page 4, line 6, strike "or"

On page 4, line 6, after "adversity" insert the following: "or practice"

On page 4, line 7, after "items" insert the following: ", or otherwise to mitigate the adverse impact or possible adverse impact of shortages, practices, or adversities upon consumers referred to in paragraph (2) of this subsection"

On page 4, line 8, strike "(3)" and insert in lieu thereof "(4)"

On page 4, line 11, strike "(4)" and insert in lieu thereof "(5)"

On page 4, lines 12 and 13, strike "and (3)" and insert in lieu thereof "(3), and (4)"

Mr. TAFT. Amendment 1409 would make the directive of the temporary National Commission on Supplies and Shortages both more realistic and more responsive to perhaps the principal problem which generated this bill, even though the word is not mentioned once in the text—inflation.

The first change faces up to the fact that our domestic supply problems may not totally be described as the result of "shortages or market adversities," although the latter term is fuzzy enough to leave some doubts.

The amendment states specifically that the commission shall report upon wage, price, and business practices which also may contribute to supply problems. It is no secret, for example, that the sales and goods distribution policies investment decisions and collective bargaining structures in particular industries may have just as much to do with adequate supplies of various items in a given area as actual "shortages." When one reflects that supply problems, and "shortages" for that matter, are often questions of price rather than actual inability to obtain needed items, the necessity of including wage, price, and business practices within the purview of the commission becomes even more clear. While this is always a touchy area for politicians to act upon, it is one which must be included and emphasized if the commission is to seek answers to supply and inflation related problems in a realistic and comprehensive manner.

The second basic change makes clear that the commission is not just to explore the extent of supply-related problems but also to assess their adverse effect, or possible adverse effect, upon consumer in terms of price and lack of availability of desired goods. The commission also would be charged with assessing alternative actions necessary to mitigate these effects.

This change would emphasize that the commission should be oriented toward the "people problems" associated with short supplies, as well as the actual logistical problems of increasing the amount of goods available. The extent to which shortages are a problem depends largely upon the impact of these shortages on Americans' jobs and pocketbooks. Although the question of jobs is treated in the bill through mention of possible impairment of productive capacity, the possible effects of supply problems on consumers are not treated specifically. Most Americans will feel the impact of shortages in the pocketbook, as they have this year. My amendment will help to assure that the commission assesses the magnitude of and deals with this problem.

That the commission confront the inflation issue is all the more imperative because actions which would often increase supplies effectively—price increases—are inflationary in themselves. It is imperative that these kinds of trade-offs be considered carefully and as a priority of the commission.

The amendment also adds to the bill by emphasizing that there are answers to short supply problems other than increasing availability of the goods in question, such as conservation efforts, research, and stockpiling. Like the other changes, this provision of the amendment recognizes the complexity of the commission's job and should help to foster a more realistic approach to it.

Mr. President, I shall welcome any comments from the managers of the bill on this matter. The language changes are very minor.

I call attention to the fact that the word "wage" has been changed to "employment" line 2 of the amendment as it presently is at the desk.

I reserve the remainder of my time, and yield the floor.

Mr. TUNNEY. Mr. President, I should like to say to the Senator from Ohio that I think the purpose for which the amendment is offered is a good one. The language of the bill implicitly suggests that an adverse impact on consumers should certainly be taken into consideration by the Commission. However, it is not spelled out in detail.

The PRESIDING OFFICER (Mr. BIDEN). Under the previous order, the hour of 1 p.m. having arrived, the Senate will now resume consideration of H.R. 14434.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that the Senator from California may have 2 minutes to complete his statement.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. TUNNEY. Mr. President, the Senator from Ohio has enumerated specifically some matters which are important. There is no question that the Commission should take into consideration the adverse impact on consumers. It was the intention of the Commerce Committee that that be accomplished. However, the Senator has most appropriately and constructively offered language which would make this intention very clear. It is consistent with the purposes of the bill. I am prepared to accept the amendment.

Mr. TAFT. I thank the Senator for his comments.

Mr. President, I yield back the remainder of my time.

Mr. TUNNEY. Mr. President, I yield back the remainder of my time and I want to thank the Senator from Ohio for his constructive offering. I think it will improve the legislation.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Ohio (Mr. TAFT).

The amendment was agreed to.

MESSAGE FROM THE HOUSE

A message from the House of Representatives by Mr. Hackney, one of its reading clerks, announced that the House had passed without amendment the joint resolution (S.J. Res. 206) authorizing the Secretary of the Army to receive for instruction at the U.S. Military Academy one citizen of the Kingdom of Laos.

The message also announced that the House had agreed to the report of the committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H.R. 13998) to authorize appropriations to the National Aeronautics and Space Administration for research and development, construction of facilities, and research and program management, and for other purposes.

The message further announced that the House had disagreed to the amendment of the Senate to the bill (H.R. 14592) to authorize appropriations during the fiscal year 1975 for procurement of aircraft, missiles, naval vessels, tracked combat vehicles, torpedoes, and other weapons, and research, development, test and evaluation for the Armed Forces, and to prescribe the authorized personnel strength for each active duty component and of the Selected Reserve of each Reserve component of the Armed Forces and of civilian personnel of the Department of Defense, and to authorize the military training student loads, and for other purposes; agreed to the conference requested by the Senate on the disagreeing votes of the two Houses thereon; and that Mr. HEBERT, Mr. PRICE of Illinois, Mr. FISHER, Mr. BENNETT, Mr. STRATTON, Mr. BRAY, Mr. ARENDS, Mr. BOB WILSON, and Mr. GUBSER were appointed managers of the conference on the part of the House.

SPECIAL ENERGY RESEARCH AND DEVELOPMENT APPROPRIATION ACT, 1975

The PRESIDING OFFICER (Mr. BIDEN). Under the previous order, the hour of 1 p.m. having arrived, the Senate will now resume the consideration of the unfinished business, H.R. 14434, which the clerk will state.

The legislative clerk read as follows: H.R. 14434, making appropriations for energy research and development activities of certain departments, independent executive agencies, bureau offices, and commissions for the fiscal year ending June 30, 1975, and for other purposes.

The Senate resumed the consideration of the bill.

The PRESIDING OFFICER. The pending question is on whether the contested language shall remain in the bill. There is 20 minutes on the germaneness question, to be equally divided and controlled by the Senator from Hawaii (Mr. FONG) and the Senator from Maine (Mr. MUSKIE), with the vote thereon to occur after the time for debate has expired.

Who yields time?

Mr. ROBERT C. BYRD. Mr. President, I yield myself 1 minute on behalf of the Senator from Arkansas (Mr. McCLELLAN).

I ask unanimous consent that the pending measure remain before the Senate until disposed of or until the close of business today, whichever is the earlier, and that the unfinished business be temporarily laid aside until such time.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. MUSKIE. Mr. President, what is the pending question?

The PRESIDING OFFICER (Mr. JOHNSTON). The pending question is on whether the contested language is germane to the bill.

Mr. MUSKIE. I thank the Chair. I yield myself 5 minutes.

The PRESIDING OFFICER. The Senator from Maine is recognized for 5 minutes.

Mr. MUSKIE. Mr. President, I shall be brief in my comments. The question was discussed rather thoroughly on Monday. But the issue before us is simply whether we want to allow the regulatory base of the EPA to be undermined.

The issue is whether the Senate weakens enforcement of the Clean Air Act and the Federal Water Pollution Control Act, because what we have before us is legislation on this appropriation bill, the result of which would be to give the OMB and the Federal Energy Administrator the authority to transfer research programs out of EPA into other agencies of their choosing.

This issue came before the Government Operations Committee earlier this year in just that form.

The Government Operations Committee considered the issue comprehensively, resolved it in legislation which is coming to the floor of the Senate this week or next week, and which appropriately divides the research effort between EPA and the new Energy Research and Development Administration so that EPA will retain its regulatory research functions and ERDA will develop appropriate developmental research functions.

This language in the appropriations bill was raised in connection with the same issue and did not have the comprehensive attention that was given it in the Government Operations Committee. So I hope that the Senate will reject it.

The issue has been complicated by the technical question of germaneness, which is left to the Senate without any Senators listening to the technical argument, because so few are in the chamber, so there is no way for me to make this point to the Senate as a whole.

I say to you, Mr. President, that this issue is too important to be decided on such a technicality with only three or

four Senators present in the Chamber. In light of the fact that the legislative committee which has jurisdiction over the issue has considered it and resolved and voted to report and to make the report available on the Senate floor within the next 2 weeks, it makes no sense whatsoever to resolve the issue on the basis of the cursory examination given to it by the appropriation subcommittee.

On the technical question of germaneness on this portion of the bill, that is, the appropriation for research to EPA, there is no legislation which has come over to us from the House. If there were, we could not touch it by a point of order. That is the nature of the rule. There is legislative language which has come to us from the House on other portions of the bill. The distinguished Senator from Hawaii argues, therefore, that it is appropriate and germane to the bill to attach legislative language to this portion.

To adopt any such loose definition of germaneness as that is to make us helpless. Where we are now only disarmed, we would be helpless to deal with legislation on an appropriation bill that would come to us from the House.

So on the question of germaneness, it is pointless to discuss it with only three or four Senators in the Chamber. The Senator from Hawaii's case does not stand up. But I want to focus the attention of the Senate on the principal issue. It is an important issue. It is a critical issue. It has to do with the viability of EPA's research program designed to enhance its ability to regulate the activities of polluters in this country. That was the judgment of the Government Operations Committee. That was the judgment of the Subcommittee on Environment Pollution. That was the judgment of everyone except the Appropriations Subcommittee on Environment, which gave this only cursory attention.

Mr. President, if those two judgments are balanced, the decision of the Senate should go with the Senator from Maine.

Mr. President, I have tried to state the issue as briefly and succinctly as I can, and I withhold the remainder of my time.

Mr. FONG. Mr. President, this is a special energy research and development appropriation bill. The amendment permits EPA to transfer "so much of the funds as it deems appropriate to other Federal agencies for energy research and development activities." Clearly the amendment is germane to the entire thrust of H.R. 14434. That amendment is exactly parallel with two other provisions in the bill; namely, page 8, lines 7 through 11, and on page 10 lines 20 through 23.

Mr. MUSKIE. Mr. President, will the Senator from Hawaii yield for a question, on my time?

Mr. FONG. I yield.

Mr. MUSKIE. Does the Senator feel that there is no way for us to reach that language by a point of order?

Mr. FONG. You can strike it if you wish.

Mr. MUSKIE. But it cannot be reached by a point of order, as your language can.

Mr. FONG. You can strike it if you wish.

Mr. MUSKIE. If you had inserted that House language on the Senate floor in an area in which my legislative jurisdiction committee had jurisdiction, I would be raising that point of order.

Mr. FONG. Mr. President, clearly the amendment is germane to the entire thrust of H.R. 14434, which deals with energy research and development appropriations.

Now, to answer the distinguished Senator from Maine on the principle of the amendment, the prime reason for the present bill is to provide funds to coordinate and speed up the various research and development programs in the energy field.

Mr. MUSKIE. Mr. President, will the Senator from Hawaii yield for another question?

Mr. FONG. I have only 10 minutes—

Mr. MUSKIE (continuing). That will be on my time—on my time.

Mr. FONG. All right, I yield.

Mr. MUSKIE. Is that not the purpose of the ERDA bill which has been reported by the Government Operations Committee and which has been before the Government Operations Committee for weeks and which will be sent to the floor of the Senate? Is that not the bill which sets the policy? Is that not the bill which creates the agency? You do not do that in appropriations but you do that in legislation. That is what we are doing. I am urging the Senate to set the policy in that bill.

Mr. FONG. The ERDA bill has not yet been passed. The question of policy has already been set, which I will come to.

The bill is an urgent bill. We must move ahead as fast as we can in developing an overall energy policy and energy program. Research is a crucial element in our national energy program. The Environmental Protection Agency requested the subject language in the pending appropriation bill.

Although the agency was allowed a considerable increase in funding in 1975 as compared with its budget in 1974, the budget estimate contained no provision for increased personnel. We have no assurance that there will be any increase in personnel. Even if additional personnel are forthcoming, in order to obtain the greatest benefit from the funds appropriated, the agency should have some flexibility and be given the option to utilize the expertise and services of other agencies and to allow those agencies to contract with private contractors.

EPA also needs to cooperate and coordinate its activities with other Federal agencies.

In connection with the principle of transferring funds from EPA to other agencies, that is already in the law. EPA presently has authority to transfer funds to other Federal departments and agencies. I refer Senators to title 31 of the U.S. Code, section 686. That is the authority for EPA to transfer the funds to any agency.

This authority is for in-house research by the Federal departments and agencies receiving transfers of R. & D. funds from EPA.

In other words, EPA could transfer this money to any agency, and that

agency would have to use it for in-house research purposes.

What EPA wants now is authority for this money received by the transferee agency to be contracted out by the transferee agency to private contractors. That is the only reason why we have these words in the bill.

The only authority EPA now lacks is authority to transfer funds to other departments and agencies for those departments and agencies to use in contracting out R. & D. projects to outside, non-Federal organizations. It is this pass-through authority EPA seeks by its May 15 letter to the chairman of the Senate Appropriations Subcommittee, the Senator from Wyoming (Mr. McGEE). EPA has requested this language.

The transfer authority is permissive, not mandatory. If EPA has any doubts that the agency to which it transfers funds would use the funds for research not in accord with the goals of the Clean Air Act, EPA would not need to transfer such funds.

EPA will retain as much control over the use of the research and development funds it transfers under the authority recommended in H.R. 14434 as it now has under the existing authority to transfer.

One point has been developed during the course of this debate which I would like to clarify. That is the charge that the inclusion of this language is an attempt to gut the Clean Air Act and the clean air programs. I want to assure my colleagues, as forcefully as I am able, that this is not the case.

The Appropriations Subcommittee, on which I am privileged to serve as ranking minority member, and the full Appropriations Committee have both strongly and consistently supported the Clean Air Act as well as most other environmental programs.

We have consistently added funds in excess of the administration budget estimates for these programs.

In our hearings this year on a bill for fiscal 1975, the Senator from Maine presented a detailed and forceful statement in support of additional funding on various environmental programs, including clean air.

While I am not in a position to advise what action the subcommittee will take on these suggested amendments, I know that they will be carefully considered when we meet to mark up the bills within the next couple of weeks.

I repeat what I have said earlier, that this language was included in this bill at the specific request of the Environmental Protection Agency. The agency requested it and it has written a letter, which I have not yet received. That letter is forthcoming. They said they will send it to my office. That letter will say that they want these words in the bill.

Mr. President, I have every confidence that the EPA Administrator, Mr. Russell Train, a man whose credentials in the field of environmental protection are impeccable, will, if given this language in the bill, do his very utmost to see that every nickel spent for research, whether by his agency, by other Federal agencies, or by private contractors receiving

EPA transferred funds from those departments or agencies, will be for research projects that are designed to help our Nation meet the objectives of the Clean Air Act and the Federal Water Pollution Control Act.

We must face the fact that EPA simply cannot do all the necessary research in the field of environmental controls as in-house research. It must, of necessity, deal with other Federal agencies who have expertise which EPA does not have.

I am confident that Mr. Train will exert his utmost effort to make sure that any EPA funds used in research by other agencies or used by those agencies to award contracts to organizations in the private sector, will be in accord with EPA's environmental goals.

Mr. President, I should like to read the letter from Mr. Train, which I have just received:

DEAR SENATOR FONG: In response to conversations between your staff and EPA staff concerning the Energy R&D Appropriations Bill H.R. 14434 currently under debate in the Senate, I wish to emphasize that I strongly believe that EPA needs legislative authority which would permit other agencies to contract from funds transferred by EPA to carry out needed research activities.

As you know, the Economy Act of 1932, as amended (31 USC 686), specifically prohibits contracting with private industries or institutions by an agency which is the recipient of transferred funds. The Economy Act recognizes that in some cases contracting under these circumstances would be legitimate, but specific legislation would be required to allow such contracting. EPA's request to the Committee of May 15, 1974, is consistent with that procedure.

A decision has not been made as to specific amounts that would be included in pass-through to other agencies. The language that is requested is needed and is essential to assure balanced energy R&D efforts.

Although we are still discussing specific projects with other Federal agencies, I am enclosing a list of projects which would be logical candidates for transfer, if the requested authority were enacted. If the Congress acts favorably on our request, we will keep you and the Committee informed of our use of this authority.

Again, let me reiterate my strong belief that failure to provide EPA clear authority to allow transferred funds to be used for contract purposes would seriously hamper our overall energy R&D efforts, particularly as this research is necessary to support our Clean Air Act efforts.

Sincerely,

RUSSELL E. TRAIN.

Mr. President, the distinguished Senator from Maine has made a mountain out of a molehill. EPA now has this authority to transfer funds to any agency it desires in the Federal Government. The only thing that EPA's transferred funds cannot be used for by the transferee agency is for contracts with private contractors. This is the only issue involved.

The only new thing that is in this bill is the authority to the transferee agency to contract with private contractors. The transferee now has the right to receive the money; EPA now has the right and the authority to transfer the money. It can transfer funds to any Federal authority to which the EPA administrator feels he would like to transfer the money.

The only thing is, if he transfers it without the authority proposed in the pending bill, that transferee authority cannot make a contract with a private contractor.

If the EPA administrator has the right to transfer funds to another Federal authority, why should not that Federal authority be allowed to contract with a private contractor? This is the gist of what we are discussing. So I say the distinguished Senator from Maine is making a mountain out of a molehill in fighting this part of the appropriation bill.

Mr. ROBERT C. BYRD. Mr. President, I ask for the yeas and nays on the question.

The yeas and nays were ordered.

Mr. MUSKIE. Mr. President, how much time have I remaining?

The PRESIDING OFFICER. The Senator has 4 minutes remaining.

Mr. MUSKIE. Mr. President, let me make these points. First, there has been a concerted effort by OMB to transfer all research funds out of EPA to ERDA. That is not a mountain out of a molehill. That issue was discussed in the Committee on Government Operations and it was resolved to protect EPA's legitimate interests and ERDA's legitimate interests.

The request for this authority, strangely, was never submitted to the Committee on Government Operations while we were considering this broad issue. It was offered only after the effort lost in the Committee on Government Operations. Only then was this end run tried to do in the Appropriations Subcommittee what OMB did not succeed in doing in OMB. Why, I ask?

Next, I have been in touch with EPA to find out what plans they have for using this authority. They could not give me a single project.

Next point. The language in this bill is much broader than the justification that the Senator offers from EPA. This language is broad enough to accomplish what OMB tried to do in the Committee on Government Operations and did not succeed. This language is broad enough to transfer all research money out of EPA to whatever agency OMB picks.

For 10 years I have had to deal with EPA and those who seek to undermine EPA and its predecessors. We stay in touch with the Agency and we like to think we know what is going on and the forces that are moving.

With all respect to the Appropriations Subcommittee, they have had responsibility in this field for 3 years, and only with respect to appropriations. They have no legislative background in this field and they know I have been making efforts in the last few years to work with them with respect to legislative policy. Yet they bring this end run to the floor of the Senate in order to cut off a decision that we carefully, thoughtfully, and comprehensively made in the Committee on Government Operations over the last few weeks. This is not a mountain out of a molehill. It is a very big mountain, as big as those in the islands of Hawaii. The Senator from Hawaii sees those mountains, but he fails

to see this one, not because his motives are bad but because he does not see the forces moving here that have been very visible from my perspective.

The issue is, Do we take this step to undermine the research programs of EPA which are essential to the protection of the Clean Air Act? That is as simple as I can state it.

Mr. FONG. Mr. President, have I time remaining?

The PRESIDING OFFICER. All time has expired.

The Chair, under Senate rule XVI, now submits to the Senate the question raised by the Senator from Hawaii (Mr. Fong), namely, Is the amendment germane or relevant to the subject matter of the House-passed bill?

Mr. McCLELLAN. Mr. President, a parliamentary inquiry.

The PRESIDING OFFICER. The Senator will state it.

Mr. McCLELLAN. Mr. President, as I understand the issue as it will be submitted to the Senate, an affirmative vote would be a vote to uphold the germaneness of the language in the bill.

The PRESIDING OFFICER. That is correct.

Mr. McCLELLAN. A "no" vote would be to reject it as not germane.

The PRESIDING OFFICER. That is correct.

On this question the yeas and nays have been ordered, and the clerk will call the role.

The assistant legislative clerk called the role.

Mr. ROBERT C. BYRD. I announce that the Senator from Indiana (Mr. BAYH), and the Senator from Alaska (Mr. GRAVEL) are necessarily absent.

I further announce that the Senator from Montana (Mr. METCALF) and the Senator from Missouri (Mr. SYMINGTON) are absent because of illness.

I also announce that the Senator from Iowa (Mr. CLARK) is absent because of illness in the family.

I also announce that the Senator from Wyoming (Mr. MCGEE) is absent on official business.

I further announce that, if present and voting, the Senator from Iowa (Mr. CLARK) would vote "nay."

Mr. GRIFFIN. I announce that the Senator from Oregon (Mr. HATFIELD), the Senator from New York (Mr. JAVITS), the Senator from Maryland (Mr. MATHIAS), and the Senator from Illinois (Mr. PERCY) are necessarily absent.

I further announce that, if present and voting, the Senator from Oregon (Mr. HATFIELD) would vote "aye."

The yeas and nays resulted—yeas 40, nays 50, as follows:

[No. 251 Leg.]

YEAS—40

Bartlett	Eastland	McClure
Beall	Fannin	Pastore
Bellmon	Fong	Pearson
Bennett	Fulbright	Roth
Bible	Goldwater	Scott,
Brock	Griffin	William L.
Buckley	Gurney	Stennis
Byrd,	Hansen	Stevens
Harry F., Jr.	Helms	Taft
Byrd, Robert C.	Hollings	Talmadge
Cook	Hruska	Thurmond
Curtis	Long	Tower
Dole	Magnuson	Weicker
Dominick	McClellan	Young

NAYS—50

Abourezk	Hart	Moss
Alken	Hartke	Muskie
Allen	Haskell	Nelson
Baker	Hathaway	Nunn
Bentsen	Huddleston	Packwood
Biden	Hughes	Pell
Brooke	Humphrey	Proxmire
Burdick	Inouye	Randolph
Cannon	Jackson	Ribicoff
Case	Johnston	Schweiker
Chiles	Kennedy	Scott, Hugh
Church	Mansfield	Sparkman
Cotton	McGovern	Stafford
Cranston	McIntyre	Stevenson
Domenici	Metzenbaum	Tunney
Eagleton	Mondale	Williams
Ervin	Montoya	

NOT VOTING—10

Bayh	Javits	Percy
Clark	Mathias	Symington
Gravel	McGee	
Hatfield	Metcalf	

The PRESIDING OFFICER. On this vote there are 40 yeas, 50 nays. The Senate having voted that the amendment is nongermane, the Chair now rules that the amendment is legislation; therefore, the point of order raised by the Senator from Maine is sustained, and the amendment is out of order.

The bill is open to further amendment.

Mr. HASKELL. Mr. President, I send an amendment to the desk.

The PRESIDING OFFICER. The clerk will report it.

The legislative clerk proceeded to read the amendment.

Mr. HASKELL. Mr. President, I ask unanimous consent that further reading of the amendment be dispensed with.

The PRESIDING OFFICER. Without objection, it is so ordered; and, without objection, the amendment will be printed in the RECORD.

The amendment is as follows:

On page 8, line 1, delete "\$1,023,690,000" and insert in lieu thereof "\$1,022,250,000"; on line 14 delete "and" and insert in lieu thereof "Provided further, That none of the funds herein appropriated shall be used to further research and development efforts for technology which is solely applicable to nuclear stimulation, except those funds required to complete the technical and economic assessment of Project Rio Blanco, detonated May 17, 1973."

Mr. HASKELL. Mr. President, I ask for the yeas and nays.

The yeas and nays were ordered.

Mr. HASKELL. Mr. President, the purpose of the amendment is extremely clear. It is similar to an amendment which I proposed on Monday. However, since Monday, discussions with my distinguished colleagues on the Appropriations Committee have resulted in narrowing our differences of opinion to a very simple issue. I seek to delete from the energy appropriation bill an amount of money which would be devoted solely to research on the nuclear stimulation of natural resources.

I do not seek to eliminate money for basic research, which could go either for conventional research or for nuclear research. I do not seek to eliminate moneys for evaluating a nuclear stimulation shot in the State of Colorado that occurred last year.

My purpose is merely to eliminate those moneys applicable to basic research solely on nuclear stimulation.

Mr. PASTORE. Mr. President, may we have order in the Chamber? This is a very important subject.

The PRESIDING OFFICER. Let there be order. The Senator from Colorado is entitled to be heard.

Mr. HASKELL. The question, Mr. President, is why oppose nuclear stimulation?

Before I address myself to that subject, I wish to congratulate the committee for putting the extra moneys in the bill for the research of development of the technology for conventional stimulation of natural gas and oil shale.

In western Colorado, in Utah and, I presume, in Wyoming, there are some tight sand formations that contain a considerable quantity of natural gas. There are two ways of breaking up those sands so that the gas may flow through and come to the Earth's surface. One is by conventional hydrofracturing. Pursuit of this technology, incidentally, is something that was recommended last year, and I am pleased to see that the Appropriations Committee has included money for further research. Furthermore, the Atomic Energy Commission recently entered into a joint venture project with a private corporation to try out conventional hydrofracturing in western Colorado.

The other method by which these sands can be fractured is by use of nuclear devices. To be successful in stimulating or recovering 300 trillion cubic feet of gas from this field in western Colorado and the adjacent States, the Federal Power Commission estimates that 29,680 nuclear explosions will have to take place.

I invite attention to the amount of radiation that is generated by one nuclear stimulation.

I have here—and I shall send it to the desk afterward—a letter from the Chairman of the Atomic Energy Commission addressed to me, dated March 2, 1973, in which Chairman Ray, or rather Dr. Fleming and Dr. Johnson on behalf of Chairman Ray, state the amount of radioactive substances that would result from what is known as the Rio Blanco project, a project seeking to stimulate gas in western Colorado.

I read just one sentence from this letter:

One year after the detonation the total in the immediate chimney region will be about 10⁶ curies.

Mr. BIBLE. Mr. President, will the Senator yield at that point?

Mr. HASKELL. Certainly.

Mr. BIBLE. I hope the Senator will put the entire letter in the RECORD.

Mr. HASKELL. I will.

Mr. BIBLE. All right. Perhaps I am anticipating what the Senator is going to say.

Mr. HASKELL. Mr. President, I may say to my friend from Nevada that I am holding onto this merely so that I can read one sentence. I will send it to the desk and ask that it be printed following my remarks.

The PRESIDING OFFICER. Without objection, it is so ordered.

(See exhibit 1.)

Mr. HASKELL. What is 10⁶ curies? I did not know. I called up a friend of mine who does know this type of thing. I read the letter and read that particular sentence to him. He said something more forcefully than "wow," but "wow" will suffice here.

I said, "Well, now, please describe to me what this is." He said that if you put this amount of radioactive material on the steps of the Capitol, you would get rid of Washington. Admittedly, some people might think that is desirable, but you would get rid of Washington and some of the surrounding area.

Mr. President, the Atomic Energy Commission takes the position that there is no danger. The Atomic Energy Commission takes the position that this radioactive material buried in the ground will not go any place. It is buried down below the Colorado River, it is down below many of the underground streams. They take the position it cannot escape.

They further take the position, or they took the position, that the tritium, which is a radioactive substance that mixes with the gas, would not come to the Earth's surface unless they purposely flared it.

Two things occur to me in this regard, Mr. President: No. 1—and this is not my thought, but again, it was given to me by my friend—he said, "I guess the Atomic Energy Commission has not heard of the migration of minerals." As most of us know, mineral deposits were formed by a migration over a long period of time until sufficient deposits collected under the Earth.

Therefore, it is entirely possible that these minerals could migrate.

Prior to the Rio Blanco detonation the AEC also said that the tritium could not come to the Earth's surface. Well, as a matter of fact, Mr. President, it did happen. It happened a few months ago.

The leak of tritium was small and, therefore, did not endanger the people in that part of my State. But my point in bringing this up is that prior to the leak they said it could not happen. But it did happen.

So I say, Mr. President, if exploding one nuclear device results in 10⁶ curies of radioactive material being buried beneath the Earth's surface 1 year after the explosion the question before us is: Do we really want to explode 29,000 more?

My point is, Mr. President, that as a matter of national policy the risks involved are by no means worth the candle. It is this very simple issue to which my amendment addresses itself.

With that, I will reserve the remainder of my time.

Exhibit 1 is as follows:

EXHIBIT 1

U.S. SENATE,
Washington, D.C. February 14, 1973.

HON. DIXIE LEE RAY,
Chairman, U.S. Atomic Energy Commission,
Washington, D.C.

DEAR DR. RAY: I would appreciate it if you would have a member of your staff let me know as soon as possible two items concerning the proposed Rio Blanco shot in Colorado—

(1) The quantity of each radioactive element resulting from the shot; and
(2) The Commission's recommendations as to disposal or containment.

I realize the answer to my second question might take a little time but assume that the answer to my first question is immediately available and therefore would appreciate an answer to this as promptly as possible.

Thank you in advance for your courtesy.

Sincerely,

FLOYD K. HASKELL,
U.S. Senator.

MARCH 2, 1973.

HON. FLOYD K. HASKELL,
U.S. Senate.

DEAR SENATOR HASKELL: The following information is provided in reference to your letter to Chairman Ray of February 14, 1973. Enclosure 1 provides a description of what happens when a nuclear explosive is detonated underground and is included as background information.

The radioactive material resulting from a nuclear explosion is produced by three different processes. There is a certain amount of unfissioned fissionable material. In the case of the DIAMOND device which is planned to be used on the Rio Blanco project (three 30-kiloton devices), the amount and composition of this material is classified to protect nuclear explosive design information.

The second type of radioactive material is the fission products which are the new elements of lower atomic weight produced when a heavy fissionable nuclide is split or fissioned. The amounts of these materials per kiloton of fission yield are constant and the amounts for Rio Blanco are given in Table I, Enclosure 2.

The third source of radioactivity is neutron activation. During the fission process, some neutrons interact with the explosive parts and with the surrounding rock to produce radioisotopes. The amounts and types of neutron activation will vary depending on the elemental makeup of the rock at the detonation point. The primary neutron activation products for Rio Blanco are listed below:

Primary neutron activation products for Rio Blanco:

^{42}K	^{50}Fe
^{24}Na	^{46}Sc
^{56}Mn	^{44}Ca
^{56}Mn	^{203}Hg
^{50}Fe	

The amounts are classified, again to protect nuclear explosive design information.

With the exception of the gaseous radioactive materials which I will describe in more detail, it is not expected that any of the radioactivity produced by the Project Rio Blanco detonations will be transported outside of the immediate cavity area. Most of this remaining radioactivity is nonvolatile and will be permanently incorporated either in three zones or resolidified molten rock (puddle glass) or on rock surfaces in the chimney region. It is estimated that the total amount of nonvolatile radioactivity one hour following the detonation is 4×10^{10} curies. One year after the detonation the total in the immediate chimney region will be about 10^6 curies. The amount of radioactivity continues to decrease with time.

The only radionuclides which reach the surface are those gaseous products which are removed from the chimney with the natural gas. The total amounts produced and the quantities estimated to be released during flaring are given in Table 3-3 of the Rio Blanco Environmental Statement. The total amounts produced are given below in curies and grams. All these numbers except Kr-85 are maximum values since the actual values are classified to protect nuclear explosive design information.

INITIAL RADIOCHEMICAL COMPOSITION OF RIO BLANCO CHIMNEY GAS

[90 days after detonation]			
Nuclides	Half life	Total production (Ci)	Total production (g)
Tritium (H-3)	12.3 years	3,000	0.3
C-14	5,370 years	22.5	5.05
Ar-37	35.1 days	15,000	.15
Ar-39	270 years	20	.59
Kr-85	10.76 years	2,000	5.1

In addition, there may be trace amounts of Bg-203 (46.6 day half life). The concentration in the gas would be extremely low (estimated at less than 0.001 pci/cc) and there would be no health effects from this source.

With respect to your second question, the Commission's position as to disposal and containment are outlined in Sections 3, 4 and 5 of the Rio Blanco Environmental Statement (copy enclosed).

I hope this information will be of use to you, I regret that we cannot be more quantitative in an unclassified letter; however, we would be happy to provide you with a classified briefing on this subject if you desire.

Sincerely,

(S) EDWARD H. FLEMING,
GERALD W. JOHNSON,
Director, Division of Applied Technology.

TABLE I.—FISSION PRODUCT ACTIVITY IN CURIES AT VARIOUS TIMES AFTER DETONATION OF 3 30-KT NUCLEAR EXPLOSIVES

Nuclide	Activity		
	D plus 30 days	D plus 90 days	D plus 180 days
^{85}Kr	2.05×10^3	2.03×10^3	2.00×10^3
^{90}Sr	1.6×10^3	6.8×10^2	2.0×10^2
^{90}Y	1.4×10^3	1.4×10^3	1.4×10^3
^{90}Y	1.4×10^3	1.4×10^3	1.4×10^3
^{91}Y	1.8×10^3	9.2×10^2	3.2×10^2
^{92}Zr	2.0×10^3	1.1×10^3	4.0×10^2
^{94}Nb	1.1×10^3	1.3×10^3	7.2×10^2
^{94}Mo	3.6×10^3		
^{94}Tc	3.6×10^3		
^{102}Ru	1.2×10^3	4.3×10^2	9.2×10^2
^{103}Rh	1.2×10^3	4.3×10^2	9.2×10^2
^{106}Ru	4.5×10^3	4.0×10^3	3.4×10^3
^{106}Rh	4.5×10^3	4.0×10^3	3.4×10^3
^{110}Ag	1.7×10^3	6.7×10^2	
^{110}Cd	1.2×10^3	4.5×10^2	1.1×10^3
^{114}Cd	5.8×10^3		
^{114}In	6.1×10^3		
^{124}Sn	1.3×10^3	9.2×10^2	5.6×10^2
^{124}Sb	2.7×10^3	1.3×10^3	4.7×10^2
^{124}Sn	4.9×10^3	5.8×10^2	
^{125}Sb	5.4×10^3	5.6×10^2	5.4×10^2
^{125}Te	2.9×10^3	7.4×10^2	9.9×10^2
^{125}Sb	2.0×10^3	7.2×10^2	
^{127}Sb	1.6×10^3		
^{127}Te	1.6×10^3	1.1×10^3	6.3×10^2
^{127}Te	3.4×10^3	1.1×10^3	6.3×10^2
^{132}Te	3.2×10^3	9.4×10^2	1.5×10^3
^{132}Te	2.0×10^3	5.9×10^2	9.5×10^2
^{131}I	9.7×10^3	5.6×10^3	2.3
^{131}Xe	1.6×10^3	1.1×10^3	
^{132}Xe	2.0×10^3		
^{133}Xe	5.8×10^3	2.2×10^3	
^{137}Cs	1.7×10^3	6.8×10^2	5.6×10^2
^{137}Cs	1.7×10^3	1.7×10^3	1.6×10^3
^{137}Ba	1.6×10^3	1.6×10^3	1.5×10^3
^{140}Ba	2.5×10^3	1.0×10^3	7.7×10^2
^{140}La	3.1×10^3	1.2×10^3	8.8×10^2
^{141}Ce	2.7×10^3	7.6×10^2	1.2×10^3
^{141}Pr	2.5×10^3	1.2×10^3	1.3×10^3
^{144}Ce	4.7×10^3	4.1×10^3	3.2×10^3
^{144}Pr	4.7×10^3	4.1×10^3	3.2×10^3
^{147}Nd	9.2×10^3	2.2×10^3	7.9×10^2
^{147}Pm	5.6×10^3	6.5×10^2	6.1×10^2
^{147}Pm	1.6×10^3		
^{147}Sm	4.7×10^3	4.7×10^2	4.7×10^2
^{147}Sm	7.6×10^3		
^{150}Eu	3.2×10^3	2.9×10^2	2.7×10^2
^{150}Eu	1.2×10^3	7.4×10^2	
Total	2.3×10^7	7.0×10^6	2.9×10^6

¹ Nuclides in transient or secular equilibrium with the isotope listed immediately above.

TABLE II.—PRIMARY NEUTRON ACTIVATION PRODUCTS FOR RIO BLANCO

^{42}K ^{24}Na ^{56}Mn	^{50}Fe ^{46}Sc ^{44}Ca ^{203}Hg
---	---

Mr. McCLELLAN. Mr. President, a parliamentary inquiry.

The PRESIDING OFFICER. The Senator will state it.

Mr. McCLELLAN. What is the time situation?

The PRESIDING OFFICER. There is half an hour on each side.

Mr. McCLELLAN. How much time has been consumed so far?

The PRESIDING OFFICER. The Senator from Colorado has used 9 minutes.

Mr. McCLELLAN. I yield to the distinguished Senator from Nevada whatever time he may require.

Mr. BIBLE. I thank the chairman of the committee and also the chairman of the subcommittee that handled and heard this matter. That was the Senator from Mississippi (Mr. STENNIS), but he asked if I would handle it, since I have some familiarity with the plowshare program.

Mr. President, I appreciate the concerns and worries of my friend from Colorado. As Members of the Senate know, we discussed this proposed amendment at some length on Monday. I had hoped we might be able to reach an accord in the interest of time in trying to work out the problem, but unfortunately we were unable to accomplish that.

As I said on the floor of the Senate on Monday, those of us who come from Nevada are very, very familiar with this problem to which the Senator from Colorado addresses himself, and I am sure I am correct to say that in the whole world there has never been as much underground devastation by nuclear explosions as there has been on the Nevada test site, and before the ban there were explosions above the ground.

I think it is significant to note, in commenting on the statistics that the Senator from Colorado used relative to the Rio Blanco shot—and I wish he would correct me if I make a mistake—that the radioactive material was all contained underground, that there was not any escape, as nearly as I know except for possibly a minor, infinitesimal leakage into the atmosphere. Is that a correct statement?

Mr. HASKELL. If I may refer to the RECORD for a second, on my time, there was a very, very small leak of tritium, as I stated previously, and not enough leaked, as far as I know, to harm anybody.

Mr. BIBLE. I understand the Senator's concern on it. He has been very frank, very honest, very straightforward about it. He just does not want any more tests involving nuclear devices and nuclear explosives.

In order to try to accommodate ourselves to the worries of our friends from Colorado, in the Rio Blanco detonations, and those of our friends in Wyoming who have oil shale and who have the same

concern, we discussed this matter at length within the committee. During the meeting we asked our fellow member of the committee, the Senator from Wyoming (Mr. McGEE) to come over to the markup if he could accommodate his own schedule, and he did.

As a result of this coming over and discussion on the program, we wrote, not into the report but into the bill, an absolute prohibition of any field testing of nuclear explosives in the recovery of oil and gas in two appropriations contained in the bill, in the AEC section of the bill and in the Bureau of Mines section of the bill.

It appeared and occurred to me then, as it does now, that this is ample protection, and that these funds provided in this bill will be used to carry out research and work in the laboratory for the most part.

As we studied the suggestions made by the Senator from Colorado to separate and strike out the strictly nuclear work from the conventional research, when we last discussed this on Monday, it was apparent the two were so thoroughly intermixed and intertwined that I did not see any way that they could properly be separated.

Additionally, I do not see, personally, any objection at all to finding out whether we can best fracture rock in the oil shale areas or to stimulate natural gas development by nuclear methods or whether we should use the conventional TNT or dynamite, or whether we should go to some other method.

That, really, is what this is all about. But, in any event, whatever decision they come up with, there will be absolutely no field testing for the upcoming year. It is prohibited in the bill—not in the report in the bill—and I am sure the AEC would abide by that prohibition.

Those of us who, as I say, have lived under the shadow of the mushroom when it was exploded above the ground, and have devastated the underground unmercifully by underground tests—and they are going on; we have lived with this—hear the same type of concerns expressed time and time again. As my colleague from Nevada (Mr. CANNON) can vouch, we have been called out of bed at various hours of the night by various people to try to stop some of these shots. We discuss it with AEC, and there is always some fear; there is always a little fear that it is going to shake down many of the buildings.

These were shots of high megatons, but the buildings survived, Las Vegas survived, and Clark County survived and continued to prosper, and the people now have very little fear.

Earlier, they did have a fear of the underground shocks.

I do not challenge nor do I question anyone's sincerity about the tremendous, awesome power of an explosion of an atomic device. We all know the Hiroshima and Nagasaki story, and that is enough to strike fear in anybody.

But here we are attempting, in a limited and a refined way, to have detonation of nuclear devices for peaceful uses. As we have gone more and more into the uses of nuclear power, we are trying to

turn it to peacetime rather than wartime uses.

I think these uses should be explored. I reiterate that there will be no tests; they are prohibited under this bill. I can assure my friend from Colorado there will be no field tests whatever, even underground, of nuclear devices in the plowshare program during the fiscal year 1975, under the bill to which this amendment addresses itself.

Mr. PASTORE. Mr. President, will the Senator yield?

Mr. BIBLE. I yield to the Senator from Rhode Island (Mr. PASTORE), who is the greatest authority alive on the uses of atomic energy. I do not know what he is going to say; maybe I should not yield to him.

Mr. PASTORE. Mr. President, I certainly thank the Senator. It is nice to smell the roses while you are alive.

Mr. BIBLE. I agree.

Mr. PASTORE. I congratulate the Senator from Nevada for his very meticulous surveillance of this whole matter. He, like myself, is a member of the Joint Committee on Atomic Energy.

There is no question at all that we are dealing with an awesome power, with all the questions that raises in the minds of those of us who have been connected with it for a long, long time. I have been connected with it ever since I came to the Senate.

We have reached the point now of deciding whether or not we are going to use this tremendous power exclusively to kill.

Mr. President, may we have order, please?

The PRESIDING OFFICER (Mr. JOHNSTON). The Senate will be in order.

Mr. PASTORE. Whether we are going to use this awesome power to kill, or whether we are going to make it useful to mankind.

I do not think that anyone can slough this off as being a frivolous subject. It is not. I think that the Senator from Colorado has every right to have apprehensions.

We have had certain incidents—thank God, they have not been serious—but the record that we have in atomic energy is better than any other safety record we have in any other facets of industry in this country. We have proved that over the years. That is a recorded fact.

I would not want to see this whole thing shut off. I am afraid that that is what the Senator from Colorado is doing, in a sense. He is shutting off this whole attempt to see if we cannot use atomic power, not 29,000 shots at one time, but maybe next year or the year after, or some time after this particular bill expires; because, as I understand it, with the modification that has been made, we are not going to have an underground shot as a result of this appropriation. Am I correct?

Mr. BIBLE. That is correct. Let me read from the language in the bill:

Provided further, That no part of the sum herein appropriated shall be used for the field testing of nuclear explosives in the recovery of oil and gas.

Those are the dollars we are talking about. That is what the bill says.

Mr. PASTORE. The day might well come when we have actually run out of natural gas or oil that we can obtain by conventional means. I say that if there is any natural gas or any oil shale to be gathered by natural, conventional means, we should do it. Atomic energy should only be used in those cases where we cannot do it in any other way. I would not like to see it shut off at this point, because this is an opportunity that we have but once in a lifetime. If we begin to repose ourselves into the frame of mind where we will cut this thing off completely at this juncture, it would be a serious mistake.

I hope that the Senator from Colorado will understand that we are on his side. We understand his apprehensions. We do not want to do anything to hurt anyone. But I hope we will not go to the extreme of shutting it off completely because it may be the only answer, one day, when we might have to get oil shale or to get natural gas which is locked way, way down, deep in the Earth.

Mr. BIBLE. Mr. President, I appreciate the contribution of the Senator from Rhode Island. May I make an additional observation, from what I have understood today in talking to people who have the knowledge and the expertise in this field, that it is very likely it will be more economically feasible to do this fracturing in oil shale areas by conventional means, explosives, dynamite, or by water fracturing. These, too, might turn out to be the indicated ways to deal with releasing the vast reservoirs of natural gas that lie under the ground.

Mr. GOLDWATER. Mr. President, I have an interest in this amendment because we are already preparing for an atomic blast underground on the site of a copper mine in central Arizona. It is the feeling of those who are attempting this blast that, if successful, we can obtain pure copper as a result and eliminate the current process.

The question I should like to ask—and I am glad that the Senator from Rhode Island is in the Chamber—are these blasts going to be the fusion type or the fission type; does the Senator know?

Mr. PASTORE. The fact is that thermonuclear power is clean power. That would be fusion power as against fission power, which is dirty power. The atomic bomb is fission and the hydrogen bomb is fusion. The trouble is that we have not reached the point where it is 100 percent pure. Once we get it, it will be a combination of the two. There is no question that there is radiation contamination but the point is that it has to be done in such a way that it will not come out into the atmosphere.

Mr. GOLDWATER. One other question, which was directed to me, How many underground explosions have there been in Nevada at the test site?

Mr. BIBLE. I cannot supply that information immediately, but I will be happy to get it for the Senator.

Mr. PASTORE. I cannot give the Senator the figure, but it is many—very many.

Let me give the Senator the example of Amchitka, where the Senator will remember the fear that was expressed on

the floor of the Senate at that time, that we would inundate all of Hawaii, that there would be earthquakes and floods.

What happened? Jimmy Schlesinger, who at that time was Chairman of the Atomic Energy Commission, took his whole family there, and he went there to witness the shot. It was a successful shot. As a result of that successful shot, that is how we got the warhead for the antiballistic missile, and that is also how we got the SALT I agreement—all because of the Amchitka shot. And no one was hurt.

Mr. GOLDWATER. The reason I have asked the question about numbers is that I cannot recall one instance of any damaging material being released. I think it was detected at Littlefield in Arizona, but it never bothered anyone.

Is there any record of maiming, or of any deaths resulting from underground tests?

Mr. BIBLE. I can respond to that, to the best of my memory and knowledge, by saying that there may have been some burning, some loss of hair, some loss of livestock, because of the so-called genetic effect. That may have happened at the time we had the explosions above the ground, but after they went underground to explode, to the best of my memory and my knowledge there have been no reactions or any damage other than a slight tremor. An explosion shook one building, and its owner was very happy because she got a new building out of it—it was a very old and dilapidated building anyway. But once the shots went underground, there was never any indication of damage.

Mr. GOLDWATER. Mr. President, in summary, I want to thank my friends from Nevada and Rhode Island for allowing me to ask these questions, because, as I have indicated, Arizona is about ready to go on a massive test, and I think it is time—I certainly agree with the Senator from Rhode Island—that we put the power we have to work. It is time we quit being afraid of it to the point that we say never will we have nuclear power in this country.

I happen to believe that the next step forward in energy will come when we completely control the fusion of the atom. I am hopeful that day will not be too far off, but if we continue to prohibit experimentation, then I am afraid that day will be very far off.

Mr. BIBLE. Mr. President, I appreciate the contribution of the Senator from Arizona regarding the upcoming test at the copper mine in Arizona. I am sure it will not damage mankind. None of us would stand here to support any kind of instrumentality that might wipe out a single human life.

Mr. McCLELLAN. Mr. President, will the Senator from Nevada yield?

Mr. BIBLE. I yield.

Mr. McCLELLAN. Do I correctly understand that the pending amendment would reduce the amount on page 8, line 1, by \$1,440,000?

Mr. BIBLE. The Senator is correct.

Mr. McCLELLAN. Do I correctly understand that if that \$1,440,000 is retained in the bill, no part of it and no part of the \$1,023,690,000 will be used

for any kind of underground nuclear explosion for the purpose of recovering oil and gas.

Mr. BIBLE. That is exactly right.

Mr. McCLELLAN. Or any kind of nuclear explosions either underground or above?

Mr. BIBLE. That is right—or nuclear devices.

Mr. McCLELLAN. Or nuclear devices.

Mr. BIBLE. That is correct.

Mr. McCLELLAN. Then, what is at issue here with respect to the \$1,440,000? What is the real issue? If it is not going to be spent underground, what is it going to be spent for, and what are the anticipated good results from the expenditure?

Mr. BIBLE. I am happy to respond to that question, but it is more properly addressed to the Senator from Colorado (Mr. HASKELL) to speak to it. Actually, most of it will be used in laboratory work and testing, in study, or in other devices, some nuclear devices, admittedly, and other conventional methods for underground testing which the Senator from Colorado admits should be done.

Mr. McCLELLAN. Except for the actual underground testing or explosions in the field or underground, what can be the objection to the laboratory testing and the experimentation to learn more about how to use this great power for peaceful purposes?

Mr. BIBLE. Frankly, I cannot say, but it is not my amendment.

Mr. McCLELLAN. Is there any reason for it?

Mr. BIBLE. In my judgment, no. But in fairness to the Senator from Colorado, he might have a different viewpoint.

Mr. McCLELLAN. Will the Senator from Colorado, on my time, respond to the question: If no part of this money is to be used for field testing, underground or otherwise, but is clearly to be used and is limited to experimentation and laboratory work, what can be the objection to the appropriation if it is only going to be used for that purpose, in an area where we may gain additional valuable knowledge with respect to the use of this tremendous power?

Mr. HASKELL. I will be glad to respond to the Senator from Arkansas by saying, first, that the Senator from Arizona (Mr. GOLDWATER) will have a fusion test, and I would agree this will not affect the area in any way.

The issue is clear, I say to the Senator, that it is a matter of national policy. It is my viewpoint that even if we could develop a technically perfect way of breaking up the rock underground; still, because of the tremendous amount of radioactive material deposited underground, it would be a national mistake to do so.

This should be on my time, because I am doing more than answering the Senator's question.

An FPC task force report I have previously cited indicates that to get this gas out it is necessary to have more than 29,000 nuclear explosions. I have the information as to the amount of curies, 10^5 curies, remaining underground 1 year after detonation of the Rio Blanco shot. One hopes nothing goes wrong. In the words of an adviser to

Franklin Roosevelt, I understand he said, "When the boss makes a mistake it is a beaut." So if we make a mistake here, it is going to be a beaut.

Mr. McCLELLAN. Will the Senator yield further?

Mr. HASKELL. I yield.

Mr. McCLELLAN. If it is correct, if it is true, that none of this money can be used for the purposes about which he now expresses apprehension, is not his objection to the appropriation for other purposes premature—for the purpose of experimentation and developing further knowledge about it—premised on the fact that it would be exploded? Is not his objection premature, because we have not reached the point where we are proposing to appropriate money for that purpose?

Mr. HASKELL. I submit to the distinguished Senator that it is not premature in this regard: As I say, even if a technically perfect way could be devised for freeing gases from underground using nuclear explosives, it would be my judgment that we should not pursue this technically perfect way, because it has endemic risks that the Nation does not want to take.

I understand that the Senator's bill prohibits underground explosions for this fiscal year. I understand that. I think the distinguished Senators from Arkansas, Nevada, and Rhode Island have articulated our differences very well.

It is the feeling of those who do not agree with me that we should have this technology developed and in the sack so to speak, in case we need it. It is my feeling that it is so dangerous that I do not even want it in the sack.

So far as I am concerned, Mr. President, I have said all I can on this particular issue.

Mr. BIBLE. Mr. President, in today's energy shortage it is axiomatic that this Nation aggressively conduct research to develop all its energy potential. This certainly includes the possible uses of nuclear explosives, known as the Plowshare program, conducted by the AEC. As a nation, we are now painfully aware that our conventional energy supplies are not unlimited and that we need to buttress our self-sufficiency against the day when extreme shortages or the actions of foreign powers may seriously affect our economy and way of life. It is clear we no longer enjoy the luxury of unreasonable selectivity and playing off one line of research against another. We need to work on all of them.

The Plowshare R. & D. program, as applied to oil and gas recovery and utilization, was one of the first to recognize our need to develop unconventional means of obtaining heretofore unrecoverable energy sources. Underground engineering technology has been developed by AEC, its laboratories and interested industry to the point where it is very useful today in non-nuclear energy recovery methods as well. Industry has shown its interest in the Plowshare technology by contributing heavily to its development through joint projects with the Government.

Despite what the critics imply, progress has been good, although the tech-

nology is by no means proved. Probably because nuclear explosions are involved, the program has been limited over the years; however, the Gasbuggy and Rulison Projects, designed as technical experiments, have shown conclusively that nuclear explosives can stimulate tightly held natural gas. The Rio Blanco experiment, detonated in May 1973, was the first project designed to investigate the potential economics of nuclear gas stimulation by utilizing three explosives in the same wellbore to fracture across all the gas-bearing zones underground.

To date, initial tests of the Rio Blanco well have resulted in 100 million standard cubic feet of gas being produced from the top chimney created by the explosion. It does not appear, however, that connection between the three chimneys has occurred as expected. A joint drilling program with the Continental Oil Co. is now being designed to learn what actually took place underground in this complicated experiment. It is the nature of R. & D. to seek answers for either proving or disproving our technical theories. This additional Government-industry work on Rio Blanco should provide the needed additional data necessary to understand the problem.

The potential of the Plowshare program is not limited to natural gas stimulation; it also shows great promise in oil shale technology, copper leaching, and underground storage or disposal utilization. In oil shale alone, nuclear explosives may be the only technique which can ultimately recover the oil from the thicker shale deposits. The viability and potential of such technology can be seen by noting the Russian program which is much more extensive and energetic in both underground engineering and excavation utilization. The U.S.S.R. has conducted projects in water reservoir construction, oil and gas stimulation, underground storage, control of runaway gas well fires and others, and are actively considering other applications. It may be noted here that under article V of the Nonproliferation Treaty the U.S.S.R. and this country agreed to provide Plowshare technology to nonnuclear nations as a deterrent to their developing a nuclear-weapons capability.

Finally, the safety factors should be noted—they are a plus. Radiation has not been a problem—seismic and ground motion effects are understood and controllable. Years of testing at the Nevada test site and elsewhere have provided a wealth of experience in this area. In any case, there is no reason to believe Government or industry would utilize an unsafe technology.

In summary—energy research of this nature should not be cut off before definitive answers are found so that intelligent decisions can be made about the validity and possible utilization of the technology.

I am prepared to yield back the remainder of my time after I have yielded to the Senator from Wyoming (Mr. HANSEN), who said he had a question on the subject.

Then I am prepared to yield to the distinguished Senator from Maine for the

purpose of calling up a conference report.

I should like to clear up this part of the question because I do not think we have any other requests for time.

I yield to the Senator from Wyoming. Mr. HANSEN. Mr. President, I thank the distinguished Senator from Nevada for his courtesy.

My point in rising is to ask if I am right in understanding that no money is included in this appropriation that will be spent on underground experimentation programs.

In the State of Wyoming, we have what has been described as Project Wagon Wheel, a project set up to test the efficacy of nuclear stimulation of natural gases trapped in the tight rock formations.

This project has been of great concern to many of my constituents, and it has been my understanding that in the appropriations bill now under discussion there will be no money to continue with that underground project.

I ask the Senator from Nevada if I am right.

Mr. BIBLE. The Senator from Wyoming states the matter correctly. There are no dollars in the bill before us, on which we will be voting momentarily, for the so-called Project Wagon Wheel.

Mr. HANSEN. I thank the Senator.

Mr. DOMINICK. Mr. President, I would like to speak in opposition to Senator HASKELL's amendment regarding nuclear research on stimulation of natural resources.

As the distinguished junior Senator from Colorado has pointed out, the natural gas resources in the Rocky Mountain States are tremendous and important to our energy development picture. Up to 300 trillion cubic feet of natural gas is trapped in extremely tight formations in the Rocky Mountain area. This gas could be recovered with either of two techniques—nuclear stimulation or massive hydraulic fracturing.

I am not in favor of the exclusive use of nuclear stimulation to recover this natural gas. I am in favor of using the best method of assessing and evaluating the Rio Blanco project to its completion.

The \$4.4 million being debated at this time is to be used for more than evaluating the Rio Blanco project. There are funds for analysis of the in situ method of oil shale development, funds for the analysis of the in situ method for copper leaching and funds for explosive research, development, and testing.

The most important thing to remember is that none of these funds are to be used for further detonations of any nuclear devices. In fact, the AEC has at this time no plans for any detonations. Now or in the future.

Major reductions have been made in the Plowshare program over the past few years. Certain individuals have suggested that the program be phased out completely. A number of factors strongly argue for the continuation of this program. The amendment would terminate the development of technology of conducting underground nuclear explosions for peaceful purposes. The United States

incurred an obligation under article V of the Nonproliferation Treaty to provide assurances to the nonnuclear parties that they will share in the benefit of peaceful application of nuclear explosive devices. Therefore, because of this obligation alone, we should continue with the development of both techniques and devices at this minimal level.

The AEC, in cooperating with industry, is engaging in experiments and planning which might make possible the in-situ recovery of oil from oil shale by explosives, chemical as well as nuclear. Either might turn out to be the most economical method of obtaining tremendous amounts of oil and with the least effect on the environment.

A Federal Power Commission report concerning the need for natural gas, which was released Sunday June 9, 1974, stressed the importance of such techniques as Plowshare to obtain such fuels.

In order to continue investigations which could lead to an economical method of unlocking our energy resources, to obtain data on other engineering applications and our treaty obligations, this amendment must be defeated.

Continuation of the AEC Plowshare program has been endorsed by the administration and by both the Authorization and Appropriations Committees.

Senator HASKELL spoke of 5,680 wells to be stimulated with nuclear explosives. None of these wells, nor any further experiments, are included in the AEC funding. Rather, the funding is to develop the necessary background information to determine if the technique is feasible. I certainly would not ask anyone on the Senate floor to proceed with full application of the technique if any sizable risk is involved, but these questions must be answered to evaluate the possible risk in comparison to the vast natural gas which might be recovered.

This country will for some time to come be faced with energy shortages and now is not the time to turn our backs on possible alternatives to develop additional domestic resources. Our objective is to reach that point where we are self-sufficient. To adopt this amendment would be a step backward rather than a step toward that goal.

Mr. President, I urge my colleagues to vote against this amendment.

Mr. BIBLE. Mr. President, I am prepared to yield back the remainder of my time.

Mr. HASKELL. Mr. President, I am prepared to yield back the remainder of my time.

Mr. BIBLE. Before I yield back the remainder of my time, Mr. President, on a different matter entirely, I yield to the distinguished Senator from Maine for the purpose of calling up a conference report.

Mr. MUSKIE. I thank the distinguished Senator.

The PRESIDING OFFICER. (Mr. DOMENICI). Is there objection?

Mr. ROBERT C. BYRD. Mr. President, reserving the right to object—and I will not object—how much time is the Senator limited to?

Mr. MUSKIE. It should not take more than 2 or 3 minutes.

Mr. ROBERT C. BYRD. I have no objection—not in excess of 5 minutes.

The PRESIDING OFFICER. The Senator from Maine is recognized.

Mr. MUSKIE. Mr. President, the conference report on H.R. 14368, the Energy Supply and Coordination Act, is pending before the Senate. This legislation has been before the Senate in differing forms since last fall. It began as a part of the effort of Congress to respond to the energy crisis by enacting short term energy conservation and environmental modification proposals.

Mr. President, the conference report on H.R. 14368 is a complex but limited measure. It is not, like the House bill, a crisis measure. It is not as general in its terms as the Senate bill. The conference report on this legislation is both a compromise and an improvement. It improves on both the House and Senate bill in that it makes more specific the requirements of each. It is a compromise between the House and the Senate bill because it accepts, in the short term—the period between now and June 30, 1975—much of the approach embodied in the House legislation and it adheres, in the long term—the period between now and January 1, 1979—to the limitations of the Senate amendment.

I think it is important to identify, for the purpose of adequate legislative history, the very significant differences between the House and the Senate approach to the issue of coal conversion.

As I indicated earlier, the House legislation was crisis-related. It was virtually identical to the previously adopted conference report on this issue—a conference report which was written during the period of severe energy shortage and oil embargo.

The Senate bill, on the other hand, recognized that the public's perception of the crisis had changed—that the energy crisis subsided with the termination of the Arab embargo—and that legislation of this kind must necessarily be within the framework of existing environmental constraints, rather than outside of those constraints.

The House bill was mandatory in the near term and voluntary in the long term. But in both short and long term, the House bill abandoned the existing statutory base for clean air regulations—public health-related primary ambient air quality standards.

The Senate bill in the near term permitted compromise of statutory clean air programs only on the basis of a demonstrated unavailability of fuel. In the long term, the Senate bill mandated coal conversions but insisted on maintaining minimum health-related air quality.

Under the House bill, the existing basis for clean air controls was suspended in favor of a new test to respond to crisis. The House bill would have permitted coal conversions to be required or to continue whenever no significant risk to health could be demonstrated.

The Senate bill proposed that energy self-sufficiency should be a function of our ability to maintain our clean air goals while reducing our reliance on foreign fuels. The Senate bill completely barred coal conversions in areas where any pri-

mary ambient air quality standard was being exceeded and specifically barred any conversions which would cause the primary standard to be exceeded.

Mr. President, while the bills appeared similar, the intent of each body was sufficiently different that the conferees were confronted with an almost impossible task of putting together a conference report which was acceptable in purpose and in scope to the membership of both bodies. I think we have done this.

In terms of the Senate position, there is adequate protection against any long term coal conversion causing an unacceptable environmental impact. On the other hand, the House has achieved the short term goal of their proposal. And the House has achieved two significant modifications of the Clean Air Act relating to transportation controls—provisions which were in earlier conference reports—provisions which my colleagues in the conference would have preferred to defer to a later time after a more complete review—but provisions on which the House insisted.

The Senate also prevailed in two important respects unrelated to coal conversions. We have House agreement to extend the authorizations of the Clean Air Act for 1 year which will provide time to review carefully the implications of the Clean Air Act. And we have obtained House acceptance of a Senate provision which clarified the relationship between the National Environmental Policy Act and the Clean Air Act.

Without exception, the Clean Air Act actions will not be subject to the National Environmental Policy Act. This provision should reduce the potential for litigation and delay associated with the development and implementation of clean air regulations. It should improve the certainty and finality which the Congress sought in 1970 when it wrote the Clean Air Act. And, most importantly, it should end the effort of those who would use NEPA as a mechanism to compromise the statutory mandate for clean air.

My colleagues should note that the provisions of both the House and the Senate bill regarding auto emissions standards for 1976 vehicles were identical and remain so.

Mr. President, I would like to expand the history of this legislation in terms of coal conversions and the Clean Air Act amendments. I have discussed in general the differences between the two bills. I have outlined the agreement. I have discussed Clean Air Act authorizations, the application of NEPA to the Clean Air Act, the auto emissions questions, and I have referred to the issue of transportation controls. I do not intend to discuss these matters in detail; the conference report and the statement of managers provide an adequate description of each.

The bill provides for a legislative basis to deal with three energy-related problems:

First, the conference report provides a statutory basis for the granting of variances for the period between enactment and June 30, 1975, whenever the Administrator of the Environmental Protection Agency determines that clean air compliance is not possible solely because of

the unavailability of fuels necessary to meet the act's requirements. This is a very limited provision. It is intended to respond to embargo type situations. If compliance with the Clean Air Act is dependent on fuels of certain pollution characteristics, and if fuels of those pollution characteristics—or improved pollution characteristics—are not available, then and only then the Administrator can suspend for the period of the unavailability of such fuels between now and June 30, 1975, the applicability of Federal, State or local clean air requirements. This is unilateral authority. It is intended to provide a quick response mechanism in the event another crisis occurs. It is not a method to grant variances where fuel is available but the price is high, nor is it a method to grant variances where fuel burning stationary sources have dragged their feet on installing necessary pollution control equipment.

This provision specifically and precisely permits the Administrator of EPA to suspend for not more than the period between now and June 30, 1975, the application of any stationary source fuel or emission limitation solely on the basis of the unavailability of fuels necessary to comply with that stationary source fuel or emission limitation.

Second, there is authority for the Administrator of the Environmental Protection Agency to suspend temporarily certain stationary source fuel or emission limitations if, as a result of an order by the Federal Energy Administration Administrator which prohibits a power plant or other fuel burning stationary source from burning oil or natural gas, that source converts to coal. This means that the Administrator of EPA can grant a suspension from certain clean air requirements in limited instances where facilities are now burning oil and coal, have the necessary capability and plant equipment to burn coal, and either began conversion to coal between September 15 and March 15 or converted to coal as a result of an order subsequent to enactment of this act. Unlike the situation which occurs when there is an unavailability of fuel, however, the Administrator of the Environmental Protection Agency cannot grant a variance from the clean air requirements unless he determines that to do so would not cause or contribute to emissions of air pollutants which would result in levels of such pollutants in excess of national primary ambient air quality standards.

Moreover, in order to assure that any such conversion does not itself cause primary standards to be exceeded, the Administrator must establish emission limitations, determine the pollution characteristics of coal to be used, or require other enforceable emission control measures as a condition of the suspension.

Third, and perhaps the most significant provision of the coal conversion aspect of this bill is the provision which requires the Administrator of the Federal Energy Administration to issue orders prohibiting the use of petroleum products or natural gas to facilities which have on date of enactment of this act the capability and necessary plant

equipment to burn coal for the period beyond June 30, 1975. This provision is mandatory with respect to powerplants and permissive with respect to other major fuel burning stationary sources. As with the temporary suspension authority, the FEA Administrator must make his determination on a unit-by-unit basis. And, a powerplant which has several units subject to such prohibitions would have to obtain a separate suspension or extension from the EPA Administrator for each unit.

This provision to the extent achievable within the basic constraints of the Clean Air Act, is intended to reduce the burden and the reliance on foreign oil by increasing utilization of domestic coal. This provision requires that powerplants and other sources which are prohibited from using natural gas and petroleum products and which actually convert to coal comply with the existing implementation emission limitations or other requirements of implementation plans by no later than January 1, 1979. In the interim, these sources must assure compliance with primary ambient air quality standards and in areas where standards are exceeded, with applicable emission limitations.

This is the provision with which the conferees had the most difficulty because it was in the context of this provision that the conferees were treading on the most uncertain ground.

Not only were the conferees confronted with the basic policy question of mandating the use of a certain fuel in the long term but the conferees were also confronted with the need to cause the use of that fuel in a manner consistent with environmental objectives.

The House allowed an extension of the deadline for compliance with all applicable air pollution control requirements to not later than January 1, 1979, if a revised compliance schedule were approved and if no significant health risk would occur in the period of the extended compliance schedule.

The Senate bill required a similar extension of deadline to not later than January 1, 1979, only if a revised compliance plan were approved and primary ambient air quality were not exceeded during the extended compliance period. In addition, under the Senate bill, conversions were barred in air quality regions in which primary ambient air quality standards are now being exceeded.

The conference agreement permits an extension of compliance schedule to not later than January 1, 1979, only if, first, emission limits or other enforceable measures to maintain primary standards will be complied with; second, in any region in which primary standards are now being exceeded, requirements of the implementation plan applicable to any pollutant for which the national primary ambient air quality standard is now being exceeded are complied with; and third, the Administrator has approved a compliance plan.

An approved compliance plan must include adequate assurance that the plant or installation will obtain approval of a

revised schedule for and means of compliance with all applicable preconversion implementation plan requirements no later than January 1, 1979. If the source fails to obtain an approved schedule, the compliance extension ceases, and the source is in violation of the Clean Air Act and subject to enforcement action.

The Administrator is required to promulgate regulations within 90 days requiring any source to which a compliance date extension applies to submit and obtain approval of its revised measures for and schedule of compliance.

Such regulations should set forth deadlines for submittal and approval of the revised compliance schedule in order to assure earliest possible achievement of the emission limitations in the applicable implementation plans. Failure to set deadlines in these regulations could result in unnecessary delay in achieving clear air goals. Also, early submittal and approval of revised compliance schedules is necessary to assure achievement of applicable emission limitations no later than January 1, 1979.

As noted above, long term mandatory conversion can only occur where national primary ambient air quality standards will not be exceeded. While the conference report narrows the scope of the Senate prohibition on such conversions in air quality regions where the primary standard is presently being exceeded, it maintains the thrust of the Senate position by prohibiting any conversion from taking place in any region where the primary standard for a particular pollutant is being exceeded if the effect of the conversion would be to cause emissions of that particular pollutant to exceed the limits specified in the applicable implementation plans.

Mr. President, this means that if a region has not achieved the primary standard for oxides of sulfur and a conversion would cause sulfur oxide emissions to exceed limitations applicable to the plant in question, a conversion would be barred until the implementation plan limitations could be achieved. This is the so-called regional limitation.

Further, Mr. President, even if there is no "regional limitation" on the conversion, if the result were to cause emissions which would cause or contribute to concentrations of pollutants in excess of the primary standard—the "primary standard condition"—the conversion would be delayed until the plant was capable of achieving emission limitations or other enforceable measures which would assure compliance with the primary standard condition.

It is important to note that this policy does not prohibit conversions—it only prohibits those conversions limited by the "primary standard condition" or the "regional limitation" until the powerplant or other major installation has installed the necessary pollution control capacity—or obtained clean coal—which permits the unit in question to meet applicable emission limitations.

In other words our purpose is to give the Federal Energy Administration Administrator authority to put plants with the capability and necessary plant

equipment on notice that they will be required to convert to coal by a date certain with legal requirement that the plant or installation acquire the necessary pollution control capability to assure compliance with the Clean Air Act at the time conversion occurs. Failure of the plant to acquire the control equipment or clean coal would not be a defense against the FEA prohibition. If the capability to comply were not acquired, the plant or installation would be in violation of Clean Air Act emission limitations and subject to statutory and criminal penalties.

The inclusion of the noncriteria pollutant requirement in no way relieves the administrator from his nondiscretionary duty to develop and publish criteria for such pollutants in order to trigger national standards as required under the Clean Air Act. This provision is included in recognition that some pollutants may need to be regulated before that process can be completed. It recognizes that the air quality standards process entails a time lag. We deemed it unwise to wait for the completion of that entire process before providing some protection from these pollutants.

Mr. President, this bill is special legislation to deal with a special situation. It is not intended to set precedents. The bill is temporary in time and limited in application.

The auto emissions question is resolved for 2 years. The statutory standards will take effect in 1978 which should provide more than ample time to achieve them.

The transportation control limitations are only temporary. Congress must determine whether parking surcharges, parking management regulations and other transportation control measures are necessary and appropriate aspects of urban pollution control strategies.

The variance authority both as a result of unavailability of fuels and short-term coal conversions is temporary. This authorization is for 1 year. While the NEPA-EPA clarification is not time limited, this issue was intended to be resolved in 1969 and therefore is neither new or precedent-setting.

There are significant limitations on the authority of FEA to prohibit the burning of petroleum products or natural gas.

Only those units of powerplants and other major fuel burning stationary sources with the "capability and necessary plant equipment" on the date of enactment of this act may be subject to an FEA order and only those which actually convert to coal—as opposed to facilities which meet the capability and equipment test but presently burn coal—can receive either a short-term suspension or long-term extension under the Clean Air Act.

The test of "capability and necessary plant equipment" is important. As the conference report indicates, each plant or installation would have to have had the capability to burn coal at one time. Also the addition of components necessary to renew that capability would have to be simple and inexpensive.

The conferees were aware of the proposed administration amendment to require that necessary plant equipment only be reasonably available. This amendment was rejected by both House and Senate because it suggested a broader application of the FEA authority to effect conversion than intended by either body.

One example of the kind of modification necessary to facilitate conversion is discussed in a copy of a letter from Charles E. Monty, vice president of Central Maine Power Co. to Mr. Clark Grover, Director, Coal Switching Task Force, Federal Energy Office. I ask unanimous consent to include the text of Mr. Monty's letter at this point in the RECORD.

This plant and others like it would simply not meet the test of necessary plant equipment and capability required by the act, even though such equipment might be reasonably available as proposed by FEA and rejected by the Congress.

Finally, the necessary plant equipment has to be available to the unit for which conversion is required on date of enactment, not at some later date.

An important clarification in the conference report relates to enforcement of interim procedures to assure compliance. Senate conferees insisted that the Environmental Protection Agency's determination that emissions from coal converters would not cause primary standards to be exceeded must be articulated in emission limitations or other precise, enforceable measures for regulating what comes out of the stack. The conference report on this bill underscores the fact that it is not ambient standards which are enforced but emission limitations or other stack related emission control measures. Ambient standards are only a guide to the levels of emission controls which must be achieved by specific sources. In 1970, we recognized that a control strategy based on a determination of ambient air pollutant levels in relation to each individual source would be unenforceable. Existing clean air implementation relies specifically on the application of enforceable controls against specific sources. We have continued that procedure in this law.

To the extent intermittent control strategies are permitted as an interim measure applicable to coal conversion, they too must be enforceable. The bill specifically and precisely sets forth that such strategies must be enforceable. They must be enforceable by the Administrator of EPA, not the States—not the local governments—not polluters—but by the Administrator of EPA who will have the responsibility for imposing such strategies if they are to be allowed at all.

It may be a non sequitur to suggest that intermittent control strategies are enforceable by EPA. An analysis of EPA's monitoring capability suggests that monitoring is severely limited. Budgetary constraints have meant that necessary monitoring equipment and personnel have not been available and in fact the situation has gotten worse in certain regions where EPA has entirely

abandoned the monitoring effort to the States. An EPA memo states:

As a result of decentralization of the national air monitoring networks, required information to define levels of non-criteria pollutants is not available to the scientific community. Specifically, data on sulfates, nitrates, ammonia, aerosols, fine particulates and other non-criteria pollutants is not being obtained on a scientifically defensible basis nor in a timely fashion.

The existing sites of the former National Air Sampling Network (NASN) are not suitable to serve as a foundation of an experimental network. They are generally incorporated into the States' Implementation Plans and are operated as such. Lacking direct control of these stations, because of decentralization to the Regions, EPA has to rely on voluntary cooperation. The net result is an ill-defined program; changing sampling schemes, not being able to demand additional quality control and non-uniform operation of the network. EPA simply cannot expect State and local agencies to conduct such a program over and above their present monitoring requirements.

While this information was requested in relation to so-called noncriteria pollutants, I am advised that it is generally applicable to pollutants for which standards have been set.

Even if the State monitoring efforts were adequate, we cannot rely on the States to enforce the requirements which result from this legislation. Most States would prefer to make the decisions on coal conversions themselves. They would prefer to determine the extent to which their clean air requirements are modified without Federal interference. They would prefer to enforce emission limitations of their own implementation plans to meet the standards which they have determined they want to meet and not just the primary standards as required by this act.

And certainly the polluters themselves cannot be depended upon either now or in the future as a source of information as to the adequacy of the intermittent control strategy. An April 1973, EPA paper states:

An intermittent control system is a very tenuous mechanism to protect air quality. At TVA, a utility with a reputation for concern for maintaining "acceptable" air quality, the decision to take control action is made by persons whose performance is judged by their capability to produce power at a minimum cost. Their concern for the environment rarely, if ever, is a significant factor in evaluating their "efficiency." The operation at Paradise may at times severely circumscribe the implementation of controls. The outlook for a truly effective use of an intermittent control system by smelters and private utilities is not encouraging.

EPA will have the responsibility and therefore must have the capacity to enforce these strategies. And the information developed on compliance with intermittent controls must be readily available so that citizens can act under the citizen suit procedure. This would not be possible if EPA relied on the private monitoring efforts of the polluters.

Yet another reason for caution in considering alternative or intermittent control strategies is identified in a statement presented by Mr. Christopher P. Quigley, head, mechanical and structural design division, engineering and construc-

tion department, at the American Power Conference.

He said:

Finally, before committing such large investments—to scrubbers—we must assess the probability that utilities may be allowed to institute alternative and more economical methods for achieving SO₂ control such as the use of a fuel switching program based on meteorological conditions.

Endorsement of inadequate or unenforceable interim control measures as continuous control strategies could negate ongoing developmental activities. Our efforts to force technology would be further eroded.

Mr. President, as I have amply indicated, I have serious doubts about the viability of intermittent control strategies, whether or not EPA has the capacity to monitor the ambient impact of emissions from coal conversions. These doubts are summarized in the hearings of the Subcommittee on Environmental Pollution. I ask unanimous consent that annotated excerpts from the subcommittee hearings and files be included in the RECORD at the close of my statement.

It is these doubts that lead me to underscore the fact that no one should view limited application of enforceable strategies related to this legislation as a precedent for future legislation or as a reinterpretation of the requirements of the existing law which bar the application of intermittent control strategies as a substitute for emission limitations.

Mr. President, this legislation points out both the significance of the Clean Air Act as well as the frailties of our efforts to protect and improve our environment. The primary reason that we are talking about coal conversion today is because the users of fuel in this country chose the cheap and convenient way to meet clean air requirements. Rather than develop the technology which would make each fuel burning stationary source capable of using domestic fuels, the power industry and others switched to low sulfur foreign fuel.

Most utilities and others have steadfastly refused to participate in any major effort to develop the technology of stack gas control. To the extent that anyone has come forward to demonstrate stack gas control technology, these same utilities have led the effort to discredit that technology and the credibility of those who would propose it.

I do not know whether effective stack gas control technology for major powerplants is available or not. But I do know that unless powerplants and other major fuel burning stationary sources are required by law to achieve a high degree of emission reduction from their stacks without regard to the fuel to be used, we will never know whether or not technology is or can be made available.

Our dilemma simply put is as it always has been—those who pollute also control the technology of pollution control. For more than 10 years I have participated in the development of legislation to impose an environmental ethic on these polluters. To encourage them to develop the technology of pollution control, I have opposed efforts to determine, by legislative fiat, the choice of technology.

Both the Clean Air Act and the Fed-

eral Water Pollution Control Act articulate pollution control requirements as performance standards rather than technological standards. EPA, too, is expected to articulate regulations in terms of performance rather than technology. Those laws demand only that the pollution controls be enforceable on a continuous basis against precisely defined criteria, so that both regulators and the public will know that the performance test is being met.

Thus far, our reliance on performance standards has been only partially adequate. The automobile companies refused to change their technology and so we have catalysts. The utilities refused to develop new technology and so, when foreign oil disappears, we have an energy crisis.

We have come only a small part of the way in developing an environmental ethic. We have not even begun to press our technological capability. We have only stirred the innovative instincts of those in the private sector who profit from pollution control equipment. We have moved only a little toward the best and the cheapest ways to transfer pollution to a recovered resource rather than a discharged waste.

This legislation is but one example of the failure of industry to move aggressively. But the fact that it does not abandon the clean air goals that we set in 1970 and earlier years is an expression of the national commitment of the goals of the Clean Air Act.

Mr. President, there is a typographical error in the conference report. Section 119(c) (1) refers to "expanding substantial sums to permit such source to burn coal;". The word "expanding" should have been "expending".

I move the adoption of the conference report.

Mr. President, I want to commend all the members of the conference committee for the constructive and cooperative roles they played in developing this legislation. I particularly want to say how much I appreciate the efforts of the chairman of the Senate Public Works Committee, the gentleman from West Virginia (Mr. JENNINGS RANDOLPH). He was always there to help bring us to a common ground, to help find the solution to issues that would allow a breakthrough and resolution of problems. His unfailing efforts made this legislation possible. His decades of efforts to make this country aware of the energy problems this Nation faces gave him an unusual ability to merge the need for energy with the need for clean air.

I also want to point out the assistance given by the ranking Republican of the Senate Public Works Committee, the gentleman from Tennessee (Mr. HOWARD BAKER). He has never lost sight of the environmental goals this Nation should pursue, and his efforts in balancing those goals with the energy needs of the country were crucial in achieving the agreements laid out in this legislation. The Nation should know of his constructive role.

This legislation could never have been completed without the masterful guidance of the gentleman from West Virginia (Mr. HARLEY STAGGERS), chairman

of the House Commerce Committee. When others might have abandoned the cause he continued to press this legislation along, meeting the arguments of all sides, and adjusting and improving the bill in light of those arguments. In fact, this was the approach of all of the House conferees, as well as those of the Senate. The mutual cooperation of all concerned deserves commendation, and brought about the agreement now before the Senate.

Mr. President, I do not think there is any need to discuss this matter at length. It has been before the Senate in differing forms since last fall, previously as a part of a broader so-called emergency energy bill. It has been agreed to by the Senate basically in legislative form. The conferees have reached agreement, as they did twice previously.

I ask unanimous consent to have material in connection with this matter printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

ENVIRONMENTAL PROTECTION AGENCY,
Washington, D.C., March 2, 1973.

Subject, Intermittent Control Systems (ICS).

To, Bernard J. Steigerwald, Director, Office of Air Quality Planning and Standards.

The 53 page Staff Report on Intermittent Control Systems (ICS) submitted to our Division by OAQPS is a lengthy and complex description of a relatively simple process. Major sources of sulfur dioxide emissions are attempting to exploit this process in order to avoid the cost of responsible environmental management based on reduction of emissions through conventional methods of permanent emission control. We are particularly perplexed as to the reasons that the OAQPS report was submitted to our office on February 27, 1973, with a request for comments on or before March 2. Although the concept of ICS is simple, enforcement of ICS is not. Nevertheless, in the limited time available for review, we have determined that ICS is unacceptable from an enforcement standpoint.

We cannot comment on the report without drawing attention to several basic errors detected in our review. The report states "The effectiveness of ICS is intuitively obvious for short term standards" and "ICS is a superior approach to achieving annual standards as well." Experience tells a different story. ICS was attempted in Washington and Montana with sufficient lack of success to encourage the Puget Sound Agency in Washington, and the State of Montana to adopt direct emission standards, what the OAQPS report calls permanent emission controls (PEC). The failures were attributed chiefly to (1) insufficient curtailment of operations due to inability to forecast adverse meteorological conditions, and (2) information to prove a violation was completely dependent on self-monitoring by the source without an effective means of policing the monitoring stations. Similar experiences have been recorded in New Jersey, Kentucky, and Pennsylvania. Congress recognized the inherent problems of enforcing ambient air quality standards and deleted from the 1970 Clean Air Act any requirements that enforcement of emission regulations be conditioned on violations of ambient standards. That the OAQPS report would claim ICS is superior to PEC for achieving annual standards is indeed surprising. ICS simply is not designed or needed to achieve long term air quality standards.

We feel the OAQPS report misinterpreted the philosophy of the Clean Air Act and its

legislative history with respect to the importance of cost of controls to meet standards. Since national standards must be attained, the cost of a necessary control system is irrelevant to the acceptability of the control technique or regulatory approach utilized to attain the standard, although cost is of course important to the polluter.

New source performance standards (NSPS) provisions within Section 111 of the Clean Air Act did reference cost by defining a standard of performance as "a standard for emissions of air pollutant which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction) the Administrator determines has been adequately demonstrated." (Emphasis added.) An ICS system such as the one operated by TVA at its Paradise Power Plant obviously is not what Congress had in mind as "the best system of emission reduction", since the Paradise Plant achieved only a 0.13% reduction in annual SO₂ emissions in 1972. In addition, since the factors described on page 36 vary from plant to plant, there would be no way to set a national standard uniformly applicable to all new sources in the class, which is the intent of Section 111.

The OAQPS report describes two requirements as necessary and essential prior to approval of any ICS for sulfur dioxide emissions. These are that (1) reasonably available control (of the PEC-type) be applied to limit emissions of other pollutants, and (2) good faith efforts (presumably PEC) must be made to augment ICS leading to a reduction in annual emissions. The report says monitors similar to those employed in an SO₂ ICS are not available for particulate matter. This appears to be only a technicality, since continuous tape samplers are available for particulate matter and continuous monitors for other pollutants also are available. If ICS is legally and technically acceptable for SO₂, it should be equally acceptable for particulate matter and all other pollutants. Thus, this prerequisite of applicability of ICS exclusively to SO₂ cannot be met. The other prerequisite, that of requiring PEC along with ICS, is impractical from a legal standpoint. If ICS is an acceptable method for achieving emission reductions to meet national standards, it would appear that no other type of control legally could be required within the authority of the Clean Air Act. Hence both necessary prerequisites are legally impractical.

The OAQPS report advocates an ICS based on enforcement of ambient standards with fines used as "incentives" to operate the system conscientiously. The large sources for which ICS is recommended can well afford to pay many fines rather than install alternative permanent emission controls. The nature of ICS encourages violations of ambient standards and hardly qualifies as maintenance of the standard. Consider the case of a source which has obtained EPA approval of its operations curtailment procedures and has apparently made good faith efforts not to exceed ambient air quality standards. Assume this source exceeds a standard anyway, and reports this violation to EPA. We do not anticipate the fine a judge would impose for such infraction would be large enough to offer an incentive for control, particularly since the curtailment procedures followed were approved by EPA. (One can afford to pay a lot of \$25,000 fines rather than install control systems costing millions.)

The OAQPS report suggests various combinations of PEC and ICS. One alternative (number 8) is to "Require RACT for attaining primary standards but allow ICS for attaining secondary standards." Any type of control acceptable for attaining secondary standards would be acceptable for attaining primary standards. Therefore, option 8 probably is illegal; in any event, it seriously weak-

ens any arguments EPA may have for requiring permanent controls.

It was noted that all air quality monitors about the Paradise Power Plant were in a sector which the plume passed over only 10% of the time. Perhaps it is inappropriate to claim an ICS is effective when 90% of the time the plume impacts in an area where no monitors are placed. By careful placement of monitors, it should be possible to demonstrate that practically any ICS scheme "works".

Enforcement of ICS, as the report admits, be complex. Fines levied pursuant to violations of ambient air quality standards cannot be used to prevent these standards from being exceeded in the future, as the Act requires. This is an established Agency policy initially presented by DSSE, OEGC, in a 1972 position paper (copy attached). The only alternative is an ICS operated on a daily variance basis, with provisions for revoking the variance should changing meteorological conditions warrant such revocation. This would require the control agency, whether State or Federal, to provide meteorologists on a 24-hour/day basis. Any source using ICS must be required to reduce emissions at the direction of an authorized Agency meteorologist, whether or not the source's meteorologist orders a reduction. There is a distinct legal problem involved in granting daily variances, but it is felt this problem can be resolved.

Additional conditions must be met for ICS to be enforceable. A plume can be extremely narrow (less than 15") and can cause maximum ground level concentrations at distances exceeding 5 miles. Simply to guarantee that the plume would pass over a monitor would require a "circle" of 24 monitors (assuming a plume angle of 15). To cover a downwind range of 5 miles at 1/2 mile intervals would require 240 monitors. With this enormous number, illegal 1-hour concentrations from "looping" plumes could avoid detection, but such a system probably would serve to validate meteorological predictions. In combination with a suitable air quality display model, the number of monitors could be reduced to perhaps 50, with a substantial percentage of these operated by the Agency to ensure "accuracy" of the remainder. For terrain where models cannot be developed, the full complement of monitors will be required. Any enforceable ICS must provide for extensive recordkeeping, for both ambient and emission data.

An enforceable ICS could include no overriding factors which would serve to prevent emissions reduction when environmental considerations indicated the necessity of such reduction. For example, TVA stated that electrical load requirements could make curtailment impossible, even though environmental considerations required the curtailment. ASARCO said protection of equipment might necessitate continuing operation to some extent when atmospheric conditions required total shutdown. Production demands could not influence operation of the system as ASARCO implied was the case. At ASARCO the plant manager could, and did, override the meteorologist's determination to curtail operation.

We feel that the economic advantages of ICS will make the system, even with its enforcement requirements, acceptable to large sources. It may be necessary for sources wishing to exploit the advantages of ICS to reimburse a control agency for the additional cost of administering such a system.

It should be noted that our comments relate to a permanent ICS, rather than an interim ICS. If ICS is adopted as an interim measure to be employed until permanent emission controls (acid plants, etc.) can be installed, the Act allows greater discretion by the Administrator with respect to enforceability. Since an interim measure can be whatever "the Administrator determines to

be reasonable"; an interim ICS could be designed which would closely approximate the system OAQPS recommends. Additionally, such an interim system would have little impact on State or Federal environmental programs, and would not constitute a fundamental change in Agency policy. We do not wish to appear to advocate such a system, but we do feel the option of an interim ICS differs markedly from permanent ICS in enforceability requirements and may be a workable solution to the problem of control. Essential elements for such an interim system include:

1. Sources must assume liability for any violation of NAAQS. Where there is more than one source, each must be held accountable for any violation. Apportioning of blame is relevant only in a Court's consideration of the amount of a fine, not in the determination of a violation. Sources should be precluded from showing the violation was the fault of others; i.e., there should be some form of absolute liability;

2. Failure to follow the approved operations manual must constitute a violation;

3. Sources must agree that any violation after the first is a continuation of the first and thus no new notice of violation is required and criminal penalties are immediately applicable;

4. Extensive recordkeeping requirements must provide for retention of data reflecting both air quality measurements and stack emissions.

These requirements reflect measures this Division considers reasonable to make an interim ICS something more than a license to pollute. They are not adequate to ensure the degree of enforceability necessary for a permanent ICS.

If you wish to further discuss the enforceability of ICS, please feel free to contact me.

WILLIAM H. MEGONNELL,

Director, Division of Stationary Source Enforcement.
Attachment.

ENFORCEABILITY OF INTERMITTENT CONTROL SYSTEMS (ICS)

APRIL 21, 1972.

MR. DON R. GOODWIN: Attached is a paper giving our position on enforceability of an ICS as you requested. After careful analysis it is our conclusion that ICS is unenforceable and its efficiency unknown to achieve and maintain the national standards. Mr. Baum in the Office of General Counsel has reviewed this position paper and gives his concurrence.

I believe our position is nearly the same as OAP with the exception of putting a date-certain on the interim use of ICS. In our opinion, a date-certain for installation of permanent controls is essential and no plan should be approved or promulgated that does not contain such.

WILLIAM H. MEGONNELL,

Director, Division of Stationary Source Enforcement.

DIVISION OF STATIONARY SOURCE ENFORCEMENT OFFICE OF ENFORCEMENT AND GENERAL COUNSEL

Position paper on the acceptability of intermittent control systems for achieving and maintaining the national ambient air quality standards.

ISSUE

The Office of Air Programs, EPA, has requested the advice of the Office of Enforcement and General Counsel regarding the acceptability of an intermittent control system for meeting the national standards. An intermittent control system (ICS) is defined as any procedure to temporarily curtail emissions through reduced source operations as may be needed to prevent air quality standards from being exceeded.

There are basically two types of intermit-

tent control systems, one based on enforcement of a violation of an ambient air quality standard monitored by ground-level instruments, and one based on enforcement of predetermined emission rates calculated by meteorological forecasting and monitored by in-stack instruments. In both cases since production is curtailed only on a temporary basis it is not likely that total annual emissions will be noticeably reduced, but only that emissions will be reduced during adverse meteorological conditions and increased during favorable meteorological conditions.

BACKGROUND

Section 110(a) (2) (B) of the Clean Air Act, as amended, provides that the Administrator shall approve an implementation plan if "it includes emission limitations, schedules, and timetables for compliance with such limitations, and such other measures as may be necessary to insure attainment and maintenance of such primary or secondary standard, including but not limited to, land use and transportation controls..." Section 110 of the Act does not provide a definition of the meaning of this requirement for an implementation plan. However, the Senate report (91-1196) of the Committee on Public Works on pages 11 and 12 provides some insight on this matter as evidenced by the following comments:

"The establishment alone of ambient air quality standards has little effect on air quality. Standards are only the reference point for the analysis of factors contributing to air pollution and the imposition of control strategy and tactics. This program is an implementation plan... The Committee bill would establish certain tools as potential parts of an implementation plan and would require that emission requirements be established by each State for sources of air pollution agents or combinations of such agents in such region and that these emission requirements be monitored and enforceable. In addition to direct emission control, other potential parts of an implementation plan include land use and surface transportation controls..." (emphasis added)

The Administrator has elaborated on this requirement, as interpreted by EPA at the recent oversight hearings. He stated:

"The problem is that whenever we adopt a control strategy, the purpose of the strategy is to reduce emissions in that particular air quality region so as to meet the ambient air quality standard and what we mean by emission limitations is really emission reduction so that anything which reduces, including the transportation controls that Senator Randolph was concentrating on, anything that reduces the total emissions in that air quality control region so as to meet the air quality standards, as I read the Act, I have to approve as a control strategy that in fact complies with the Act."

In commenting on a question whether EPA would approve a plan with a "closed loop theory" (another term for an intermittent control system), the Administrator stated: "...only if we can become convinced that such a closed loop theory, or any strategy that is adopted, will in fact achieve the ambient air quality standard and can be enforced."

The acceptability of an intermittent control system was evaluated in terms of the requirements of the Act, the quoted statements above.

Question No. 1

Is an intermittent control system that provides for enforcement after violation of an ambient air quality standard approvable by EPA?

Answer No. 1

No; the purpose of an implementation plan is to prevent a violation of an ambient air quality standard, by the enforcement of specific measures applicable to sources. A

plan which on its face provides for enforcement only after a standard has been exceeded does not provide for the achievement and maintenance of the national standards.

Question No. 2

Is an intermittent control system that provides for enforcement on the basis of predetermined emission rates based on meteorological forecasting techniques and monitored by in-stack instruments, approvable by EPA?

Answer No. 2

Although this type of intermittent control might be legally acceptable, it is unenforceable because it is too complex and unmanageable and places an unreasonable burden on EPA and the States. Moreover, its efficacy is uncertain. This type of control strategy is unacceptable as a permanent means of achieving and maintaining the national standards. It is recommended that ICS be restricted for use in certain limited situations discussed below.

DISCUSSION

The discussion is numbered to correspond to the questions and gives the basis of OFGC's opinion.

1. Experience with enforcement of an ambient air quality standard on an intermittent basis has been unsatisfactory. The system has validity only for a point source that is sufficiently remote to be unaffected by emissions from other sources. An extensive ambient monitoring network is required—one that is beyond effective policing by a control agency but rather depends more on the "honor system". We are aware of certain experiences with such systems at large point sources in the States of Washington and Montana. Numerous violations occurred during the period when curtailment systems supposedly were in effect. Penalties were assessed but to no avail. Principal reasons for failure of ICS have been that (1) sources did not curtail operations as often and to the degree needed usually through inability to forecast meteorological conditions requiring curtailment; (2) direct cause-effect relationship for violation of an air quality standard has been difficult to prove, and (3) information to prove a violation was completely dependent on self-monitoring by the source without an effective means of policing the monitoring stations. After this experience with enforcement of ambient air quality standards, the Puget Sound Agency in Washington and the State of Montana adopted direct emission standards.

This experience is not limited to these States. The States of New Jersey, Kentucky and Pennsylvania also experimented with dispersion methods for enforcement of air quality standards for many years and eventually all came to renounce such methods. In 1970 the Congress recognized the problem of enforcing an ambient air quality standard and deleted the requirement that enforcement be conditioned on violations of such standards. We do not consider this type of intermittent control system to be enforceable.

2. An intermittent control system can be refined to provide for enforcement of emission limits. Such a system would have to be developed separately for each affected source. Although, probably due to its complexity, to date, no such system has been fully developed. It would appear that it is not possible to develop an ICS system that includes emission limitations before July 31, 1975. Therefore, if EPA were to accept this concept, the development of the control strategy would have to take place beyond the statutory deadline.

Although this is a sufficient basis for rejection of an ICS as a permanent control strategy, there are more important technical and enforcement problems leading to the same conclusion. This type of intermittent control system is much like an emergency

episode plan which is required by all States as part of the implementation plan. However, ICS is not backed up by the enforcement power that EPA or the States have during an emergency; that is the power to shut down sources prior to even giving the source an opportunity for a hearing. This power is essential since *shut down* of source operations is the *control strategy* in an ICS system and this decision cannot be dependent on the source operator who is primarily concerned with meeting production demands. Lack of this power by EPA or the States would make an intermittent control system difficult to effectively enforce.

TVA pioneered the effort to develop ICS and has documented its experience in several publications. TVA has many reservations about the technical feasibility of the system and considers it to be an interim method to be used only until permanent emission control techniques can be installed. The following comment was made by TVA in a statement presented at a hearing of the New Mexico Environmental Improvement Board on October 19, 1971:

"At the outset we should like to emphasize the 'interim' aspects of this type program, as in most cases, it should serve only as an *interim method* for maintaining air quality until such time when a satisfactory SO₂ removal process can be installed. Also, it should be emphasized that this type of control program may not be feasible for all plants as its application depends on plant design and operation, regional and local meteorology, local terrain effects, power system size and flexibility, and regional air quality goals." (emphasis added by TVA)

TVA comments in the same paper that they have been working with interim operational controls since 1955 at their Kingston steam plant. TVA goes on to describe a highly sophisticated operational control program at their Paradise steam plant. Several years were spent for detailed studies in developing a system for Paradise since each operational control scheme must be tailor-made.

For the Paradise Steam Plant the nine criteria listed below were developed by TVA for the limited mixing layer model which was found to be critical for this large power plant.

- (1) Potential temperature gradient between stack top, 180 m. and 900 m.
- (2) Potential temperature gradient between stack top, 180 m. and 1500 m.
- (3) Difference between daily minimum and maximum surface temperature.
- (4) Maximum daily surface temperature.
- (5) Maximum mixing height.
- (6) Maximum mixing height and plume centerline height.
- (7) Time for mixing height to develop from plume centerline to critical mixing height.
- (8) Mean wind speed stack top and 900 m.
- (9) Cloud cover.

TVA further states that for some plants more than one model may be necessary and that certain physiographic features, e.g., valley ridge configuration may cause frequent occurrences of high surface concentrations involving one or more plume dispersion models, thus making operational control not feasible.

Emission limitations are determined daily for the Paradise plant. A TVA meteorologist takes daily early morning meteorological measurements, including temperature profile (by instrumented fixed-wing aircraft) and wind profile (by standard pilot) from surface to 7000 feet. These data along with input from a 15 station ambient monitoring network plus mobile sensing units are processed by a computer for limiting control. The special computer program provides the limiting SO₂ emission rate in terms of megawatt load generation. Even so the system failed on 18 percent of the days to forecast the need for control actions.

It is apparent that an ICS is highly complex and its success (limited as it is) depends on the good faith of the source operator. Neither EPA or the States would have sufficient resources to review this system or to police it if put into effect where the emission limit can vary on a daily basis. Therefore, our position is that ICS must be restricted to an interim measure in certain limited situations which EPA will define.

ICS should be used as an interim measure only when reasonably available technology cannot achieve the primary standard by July 31, 1975. "Interim" is defined as until 1977 for achievement of the primary standards inasmuch as this is the latest date allowed by the Act for achievement of the standards by a permanent enforceable control strategy. Further as regards achievement of secondary standards, "interim" is defined as such "reasonable time", established by OAP, when practicable technology could be developed. The situations where ICS is acceptable as an *interim* measure should be limited to the following:

- (a) Sources for which reasonably available control technology is inadequate.
- (b) Point sources that are sufficiently remote to avoid interference to the ICS system from other point sources or background.
- (c) Pollutants for which in-stack monitors are available for continuous measurement.
- (d) Short-term standards only, i.e., 3-hour secondary standard and 24-hour primary standard.

We are particularly concerned that any ICS system that is approved or promulgated contain a date-certain when permanent controls will be instituted.

FEDERAL ENERGY OFFICE,

Washington, D.C., May 20, 1974.

Hon. JENNINGS RANDOLPH,
Chairman, Committee on Public Works, U.S.
Senate, Washington, D.C.

DEAR MR. CHAIRMAN: The Energy Supply and Environmental Coordination Act of 1974, H.R. 14368, which is now under consideration by the conferees, contains provisions allowing the Administrator, Federal Energy Administration, to order major fuel burning installations, including electric power plants, to cease burning natural gas or petroleum products as their primary energy source. It also has complementary provisions which amend the Clean Air Act to provide that a plant converting to coal under such an order cannot be prohibited by reason of the application of any air pollution requirement from using coal until January 1, 1979, provided the emissions from the source do not cause certain standards that are specified in the bills to be exceeded.

The provisions of H.R. 14368 will provide a flexible, useful approach to short-term coal conversions; sections 119 (a) and (b) contain provisions applicable through the end of the 1970's. These short-term conversions, however, are only an emergency measure. Only long-term conversions to coal will permit us to achieve our goals of energy self-sufficiency. As you know, the Administration has submitted to the Congress, by letter dated March 22, a package of amendments, of which the coal conversion provisions are only a part, that are designed to encourage these long-term coal conversions. We urge the Congress to turn their attention to these additional amendments as soon as they complete work on H.R. 14368.

We are also concerned with several specific aspects of the coal conversion provisions of H.R. 14368. We would like to take this opportunity to bring these concerns to your attention and suggest possible alternative language.

Coal conversion provision. Our first concern is with the language of the Senate-passed Bill which provides that a suspension under Section 119(b)(1) is conditioned on the source being "located in an air quality

control region in which applicable National primary ambient air quality standards are not being exceeded." This language would unnecessarily impair our ability to convert plants to coal.

A number of air quality control regions cover large geographic areas. The air quality control regions may have a metropolitan area combined with a large rural area. Levels exceeding primary ambient air quality standards are generally found in the densely populated areas. However, a number of power plants that are candidates for conversion are located in suburban or rural portions of regions with a major metropolitan center. Thus, it is likely that a number of non-urban power plants may be excellent candidates for conversion (based on a plant-by-plant analysis of predicted ground-level pollutant concentrations), yet be blocked from conversion because primary ambient air quality standards are being exceeded many miles away. In many such cases, the converted source would not contribute to any violation of the primary ambient air quality standards being exceeded in the urban area.

Accordingly, we believe that the test for conversions should be solely on a plant-by-plant basis. The priority classification of an air quality control region should not be a constraint. The latest data available to EPA show that during 1973 primary ambient air quality standards for sulfur dioxide, were exceeded in 13 to 15 air quality control regions. The primary ambient air quality standard for total suspended particulates was exceeded in 102 air quality control regions during that same period. There are 247 air quality control regions in the country.

A preliminary analysis of the situation shows that 8 of 10 plants analyzed by EPA and FEO as candidates for long-term conversion would not cause to be exceeded or exceed the primary ambient air quality standards, but would not be candidates for conversion under the Senate provision because of the air quality control region in which they are located. This analysis is based on the most recent published data on the ranking of AQCR's. A situation that vividly illustrates the point includes the Morgantown and Chalk Point plants in Maryland which emit pollutants into the same air shed yet are situated in different air quality control regions. Under the formula of the Senate bill, one could be converted, while the other one could not, despite the fact that both plants could meet primary standards.

Further, the addition of the air quality control region test would insert further uncertainties and factors for dispute into the process of identifying plants that are candidates for conversion. Regional priority classifications are based on imprecise procedures. We understand that air quality monitoring data or diffusion modeling calculations may serve as the basis for a priority classification determination. Often the classification for an air quality control region is based on monitoring results from only a few, or even only one, monitor operated by Federal, state or local agencies. EPA quality control studies of monitoring programs have revealed deficiencies in both accuracy and consistency, and a significant margin of error from instrument malfunctions as well as inadequate procedures.

Finally, the data used to rank air quality control regions are generally up to a year or more out of date at the time of the reclassification. Such data and the resulting regional rankings are nearly functionally irrelevant when emissions from a converted source will not in fact occur for some time. Some plants ordered to convert may not actually begin to burn coal for two to four years, which is the time needed to open new mines.

Accordingly, the above reasons clearly indicate to us that the proper approach is to

make determinations on a plant-by-plant basis. Such a procedure should rely on state-of-the-art diffusion models and assessments of existing, relevant air monitoring data.

The House-passed bill has no language limiting the provisions of section 119(b) to regions where primary air quality standards are not being exceeded. We recommend conforming the Senate bill to the House-passed bill by deleting from section 2 of the Senate-passed bill the following words, appearing in the first sentence of section 119(b) (1) of the Clean Air Act:

"and which is located in an air quality control region in which applicable national primary ambient air quality standards are not being exceeded."

If the conferees wish to make it absolutely clear that a stationary source may not cause or contribute to concentrations of air pollutants in excess of national primary ambient air quality standards, the first sentence of section 119(b) (1) can be further amended by adding at the end of that sentence: "subject to the provisions of subparagraph (b) (2) (A)."

A conforming amendment is needed in subsection 8(a) of the Senate-passed bill, which deals with FEA-ordered coal conversions. The second sentence of that subsection should be amended to delete the following phrase: "the installation is located in a region described in the first sentence of section 119(b) (1)."

Plant equipment for burning coal. Section 8(a) of the Senate-passed bill and section 10(a) of the House-passed bill provide that conversions can be ordered only for plants which on the date of enactment have "the capability and necessary plant equipment to burn coal". We understand that it is the intent of the Congress to permit conversions to be ordered where necessary plant equipment is reasonably available and that it is not necessary for a plant to have all the equipment already in place. To avoid any uncertainty, however, we urge the conferees to state this intent in the conference report as was done in the House Report on page 28.

Energy information reporting. The House bill contains, in Section 11, provisions authorizing the Federal Energy Administrator to collect energy information he determines is necessary to assist in the formulation of energy policy or to carry out the purposes of the Act or the Emergency Petroleum Allocation Act.

The Senate Bill contains no such provision.

As you know, the recently enacted FEA legislation now provides the Administrator with broad authority, including subpoena powers, to gather energy information. In view of the enactment of the FEA bill, we strongly support the approach taken by the Senate of deleting Section 11. This will avoid duplication, confusion and conflict with the information gathering sections of the FEA Act.

In particular, subsection 11(e) of the House version is particularly objectionable because it would provide the authority to the Administrator to obtain information directly from other agencies regardless of existing statutes prohibiting such transfer or of the pledge of confidentiality under which it was obtained. Law enforcement and independent regulatory agencies would be required, for example, to make information available which was obtained pursuant to active law enforcement investigations. Other bureaus and agencies who gather statistics on a voluntary basis but with a pledge of confidentiality to the respondent would also be required to make available individual respondent reports, thereby frustrating their ability to collect such data in the future.

There are two aspects of Section 11 which we understand are being considered for inclusion in the conference bill because they

have no exact counterparts in the FEA legislation.

Subsection (d) (2) would require quarterly reports setting out a variety of types of energy information. We are very concerned that preparation of such reports would require misdirection of FEA's limited resources. Insofar as is practicable, FEA will publish data in report form, but we would prefer not to be required to prepare such a wide variety of reports, particularly on a quarterly basis.

We are also concerned that this provision might be construed to require publication of data that might be considered proprietary by the persons supplying the data to FEA; for example, inventory data broken down by refiners, and refinery yields by product. Such a provision would be inconsistent with the provisions of section 11(f) of the House bill, which provides confidential treatment for trade secrets and confidential commercial and proprietary data, and the similar provisions of the Emergency Petroleum Allocation Act.

The second provision under consideration, we understand, is one which would provide that the presently applicable restrictions of 18 U.S.C. 1905 against divulging trade secrets and other confidential trade information would not apply to information supplied to congressional committees at their request. We are somewhat concerned that such a provision would impair FEA's capacity to acquire proprietary data necessary for useful statistical information. Our data collection effort depends for its success on having the widest possible sampling. We therefore recommend against inclusion of such a provision. We will, of course, continue to provide Congressional committees with the widest possible range of information, as we have in the past.

Enforcement and penalty provisions. The enforcement provisions of section 8 of the Senate-passed bill appear to contain some technical shortcomings which should be clarified to accomplish the intent of the Congress.

We recommend amending section 8(d) (4) to make it clear that the Administrator, FEA, and not just his delegates, can request the Attorney General to seek injunctive relief. We suggest the following language in lieu of the present section 8(d) (4): "The Administrator, Federal Energy Administration, or his delegate, may request the Attorney General to bring an action in the appropriate district court of the United States to enjoin acts or practices constituting a violation of this section or any rule, regulation or order issued pursuant to this section, and upon a proper showing, a temporary restraining order or a preliminary or permanent injunction shall be granted without bond. Any such court may also issue mandatory injunctions commanding any person to comply with this section or any such rule, regulation or order issued pursuant to this section."

We also recommend an amendment to subsection 8(e) to make it clear that actions may be taken against offenders after June 30, 1975, for acts or omissions occurring before that date. As now drafted, the section could be construed to require formal administrative proceedings actually to have begun on June 30; this requirement could encourage violations of the Act in the weeks immediately prior to June 30.

We recommend adopting the following language on this subject:

"(e) The authority to promulgate and amend regulations and to issue any order under this section expires at midnight on June 30, 1975 but such expiration shall not affect any action or pending proceedings, civil or criminal, not finally determined on such date, nor any action or proceeding based upon any act committed prior to midnight June 30, 1975."

Reference to additional legislation in conference report. Let me reiterate my concern that the pending amendments to the Clean Air Act, while helpful if modified substantially, still do not represent long-term solutions to our coal use problems. They provide only limited, short-term assistance and do not correct several major, and I believe, unwarranted provisions or interpretations of the Clean Air Act.

We understand that the conferees are considering a statement in their report that H.R. 14368 deals with only a limited number of topics of extreme urgency and that the committees will be addressing themselves in the near future to other possible amendments, including amendments designed to deal with energy shortages and with insuring the best use of scarce low-sulfur fuels. We strongly support including such a commitment in the conference report.

There are several items included in both House and Senate versions of H.R. 14368 which are not a subject of the conference but which we believe should be discussed now and again during hearings held on additional amendments to the Clean Air Act.

Specifically, we are concerned with the provisions of section 119(b)(2)(B) that require that plants scheduled to convert must be committed to a compliance schedule that provides a date by which the source must enter into contracts for low sulfur coal or scrubbers. This provision is coupled with section 119(b)(2)(C) that requires plants granted suspensions to come into compliance with emission regulations in a state implementation plan that are in effect on the date of enactment of these amendments.

The requirement concerning contracts for low sulfur fuel or scrubbers would effectively preclude the use of intermittent control systems as an alternative method for achieving compliance. If the Administration's proposal to permit use of intermittent control systems, contained in our March 22 amendments to the Clean Air Act, is adopted, this section of H.R. 14368 would have to be amended to conform with it.

The related requirement concerning compliance with state implementation plan emission limitations in effect as of the date of enactment of H.R. 14368, similarly is inconsistent with the Administration's proposal to encourage revision of state implementation plans to avoid "overkill"—the situation in which state implementation plans require the burning of clean fuels in areas where air quality does not necessitate such fuels. If state implementation plans are in fact revised by the states in the interim to avoid overkill, plants should be required to come into compliance at the conclusion of their conversion orders with these revised state plans, not the plans in effect when H.R. 14368 is enacted.

We also strongly believe that the June 30, 1975 deadline for ordering conversions is unduly restrictive. The time-consuming procedure of air quality analysis and compliance plan revisions will be a deterrent to the number of orders FEO can effectively issue by the June 30, 1975 deadline. This deadline should be deleted.

We are interested in the conversion of power plants to coal from natural gas or petroleum products for the purpose of reducing U.S. dependence on foreign fuels. This strategy is designed to assist in achieving the Nation's long-run self-sufficiency goals. Only long-term conversions should be encouraged where secure long-term coal contracts can be established.

We believe there is a serious need to evaluate emission limitations that are designed to achieve ambient air quality cleaner than that required by the health-related standards. EPA's Clean Fuels Policy is essentially addressing this problem. However, this vol-

untary program has been less than completely successful. As long as overly stringent regulations remain on the books, utilities will not be able to enter long-term coal contracts because of the uncertainty of future emission limitation revisions.

Accordingly, the Federal Energy Office believes that further discussion is needed of several reasonable alternatives:

(1) Require the states to reconsider the emission regulations when a candidate for conversion is ordered to develop a compliance plan, or

(2) Extend the compliance deadline beyond 1979—to a time when resources are reasonably available to attain the welfare-related ambient standard.

Such further modifications to the Clean Air Act will prove necessary we believe to provide the incentive to the mine owner and operator to invest in new coal ventures. Ten to twenty years are needed to assure an economical mine—not just a few years.

I hope these comments have been useful and I look forward to continued cooperation with your Committee.

Sincerely,

JOHN C. SAWHILL,
Administrator.

OCTOBER 12, 1973.

Subject: Proposed Use of Supplementary Control Systems and Implementation of Secondary Standards.

Mr. ROBERT NELIGAN,
Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, N.C.

DEAR MR. NELIGAN: Thank you for the opportunity to comment on the proposed changes as published in the Federal Register, Vol. 38, No. 178, Friday, September 14, 1973.

EPA's proposed limitation on the use of supplemental control strategies show careful analysis. We agree that it is essential to require the source to reimburse the control agency for the cost of added monitoring and to take responsibility for air quality violations as well as the reliability of the supplemental controls as you have proposed.

We oppose the use of supplemental control systems to achieve ambient SO₂ standards without the requirement of at least 90% sulfur removal. We believe there should be no delay beyond the date presently established by EPA in reducing the total quantity of sulfur emitted to the air. See attached staff memoranda. We also urge the immediate application of curtailment to protect public health when primary standards are exceeded.

The evidence presented in the Swedish acid rain and the CHESS studies support the need to remove at least 90% of the sulfur from the emissions. It is important to provide early relief for those individuals who live downwind of a large point source of SO₂.

If supplementary control systems should be adopted we recommend these changes:

1. Add the following under 40 CFR, Part 51: The use of supplemental controls shall be implemented at the earliest practical date to protect public health in places where primary standards for SO₂ are exceeded.

2. Ninety percent of the sulfur shall be removed from the emissions of smelter and power plants by the earliest practical date. The use of curtailment of emissions in excess of 90% shall be required if such curtailment is necessary to avoid exceeding SO₂ standards.

3. The installation of SO₂ control equipment for large point sources located in urban areas shall be given priority.

Eliminate the following under Supplementary Control Systems of 40 CFR, Part 51, column 2, page 25699:

Constant emission limitation techniques capable of achieving this degree of emission reduction are not available for every smelter. The alternatives in most cases will be either to close these facilities (or drastically curtail

production) or apply supplementary control systems. Weak gas stream scrubbing and process changes may become available for application to many nonferrous smelters in the future.

The same stack-gas technology which EPA considers "adequately demonstrated" for electric generating plants can be applied to weak gas streams (e.g. from reverberatory furnaces) in smelters. And the top priority for this should be those power plants and smelters located in urban areas.

Thank you for your careful review of these comments and the enclosed memo.

Sincerely yours,

A. R. DAMMKOEHLER,
Air Pollution Control Officer.

OCTOBER 12, 1973.

To Air Pollution Control Officer.

From Chief-Engineering and Air Pollution Engineer-Roberts.

Subject Use of Supplementary Control Systems and Implementation of Secondary Standards Proposed by E.P.A.

The long-term use of supplementary control systems for large point sources of SO₂ such as curtailment or increased stack height to meet ground level ambient air concentrations are undesirable unless accompanied by at least 90% sulfur removal for the following reasons:

1. Supplementary Control System by itself will not control the total emissions of sulfur oxides even though ambient concentrations are below those set by regulation. The CHESS and Swedish acid rain studies, document the need to limit the total quantity of SO₂ which is emitted to the air at an early date.

2. The experience of this Agency with curtailment of the Tacoma Smelter is not satisfactory as is implied in the Federal Register. The attached chart showing the number of violations and public complaints indicate that there has been a large drop in complaints but there is need for added relief. The real life implementation of SO₂ curtailment by the Tacoma Smelter has produced some 200 public complaints in 1973 up to August 31. Some of the limitations proposed by E.P.A. will limit the number of violations and complaints and should be added the condition of the variance granted ASARCO. The use of curtailment with the Federal standards which are less stringent than those of our Agency would result in a higher number of SO₂ insults to the public. We still receive large numbers of SO₂ complaints while ambient readings do not exceed the Federal standards.

3. ASARCO has reported that the use of curtailment by the Tacoma Smelter has caused a 30% loss in production. The early installation of effective controls would reduce the loss of power and copper that will occur if curtailment is used as the primary means of meeting SO₂ standards.

4. The technology to achieve 90% SO₂ control is available. The technology to control weak SO₂ streams coming from power plants is "adequately demonstrated" for purposes of Section III of the Clean Air Act. This safer technology can be applied to weak SO₂ streams coming from smelter roasters and reverberatory furnaces.

5. Curtailment programs are difficult to monitor and enforce.

A. ASARCO has recently successfully challenged this Agency's monitoring of * * * process. The State of Washington Pollution Control * * * recently ruled that a violation cannot be issued unless the SO₂ ruling is 10% above the value specified in the regulation. On this basis six violations in 1973 were voided.

B. It would be possible to operate a curtailment system with very few violations yet have a large number of SO₂ insults that affect public health and cause the large number of complaints that we still receive. There

is a strong tendency to reduce curtailment if the point source plume does not touch the air monitoring station. Requiring the source to pay the cost of additional monitoring is the only practical way to protect the public from SO₂ and sulfate insults.

C. It is impossible to model the SO₂ (and/or sulfate) insults that occur due to wind changes, the break-up of an inversion or the fugitive low level emissions. The only sure way to reduce these insults is to combine 90% control and curtailment.

6. Once supplementary controls are accepted as a means of meeting ambient air SO₂ standards there will be pressure to continue such controls indefinitely.

JOHN W. ROBERTS.

THE LIBRARY OF CONGRESS,
CONGRESSIONAL RESEARCH SERVICE,
Washington, D.C. May 6, 1974.

To Senate Subcommittee on Environmental Pollution. Attention: Mr. Karl Braithwaite.

From Maria H. Grimes, Analyst, Environmental Policy Division.

Subject: Supplemental Control Strategies.

The following comments summarize information obtained on certain aspects of the proposed supplementary control strategies which you selected for further analysis during our meeting on April 18. These included: state-of-the-art and reliability of SCS methods and technology; vulnerability of the system; costs; and enforceability.

To complement the information provided by EPA in its April, 1973 briefing paper, proposed regulations regarding use of intermittent control systems of September 14, 1973, and its hearings on the adequacy of SO_x control technology in October, 1973, as well as the comments submitted to EPA by Natural Resources Defense Council (attached), I contacted the following persons:

Mr. John W. Frey, Air Quality Branch, TVA, Muscle Shoals, Alabama;

Mr. Robert Foster, Div. of Air Pollution Control, State of Tennessee;

Mr. Frank Dannkoehler, Air Pollution Control Officer, Puget Sound Air Pollution Control Agency, Seattle, Washington;

Mr. Franchot Buhler, National League of Cities, Washington, D.C.

The following observations result from these interviews:

ADEQUATE AND RELIABLE SCS TECHNOLOGY AND METHODOLOGY IS AVAILABLE

There seemed to be general agreement that adequate and reliable technology is now available and components from several vendors are usually selected to make up an SCS system. TVA estimates that a system for one of their plants would require 16-18 months to become fully operational, including field studies, design state, and installation of equipment all of which can proceed simultaneously. The process requires minimal downtime and there is little malfunction.

Differences of opinion arise as to operational methods. EPA cites TVA's Paradise plant system as an example of the feasibility of the system. The discussion with Mr. Frey yielded the information, however, that the field instruments are not individually checked for calibration and performance, since the employee anticipated to this work has not yet become available. The instruments are monitored by remote control, the resulting data being processed by computer. One employee on an early day-time shift monitors the computer consoles and interprets the data for action as needed. (The need for onsite interpretation of meteorological data appears to vary with the individual location. Paradise requires only low-level interpretation, but the system installed for one section of the Widows Creek plant calls for considerable interpretive skills.)

At Paradise, no monitoring takes place by

a trained meteorologist outside of his working hours which end in mid-afternoon. Yet, Mr. Dannkoehler stated that all SCS systems now available require regular servicing of all instruments (calibration, reading, evaluation) in the field, and that the system, to be reliable, must be operated on a 24-hour basis. ASARCO's system and the instruments of the Puget Sound region are operated in this manner.

In a second, unsolicited conversation, Mr. Frey modified his previous statements. He did not change his original assertion that TVA SDEL program is being executed both on the basis of previous experiences and the use of new data developed in the course of operation, and that it is still in a state of flux, is not complete, and is still experimental in some of the stages. He did state, however, that TVA's goal is to have continuous meteorological surveillance in the field to interpret and make changes to improve computer accuracy. He apparently is not content to rely solely on the currently used indirect monitoring and remote readouts. Nevertheless, he reiterated that the Paradise operation demonstrates that ambient standards can be met and maintained with SCS, and that the system can be used as an "ongoing sustaining operation with reliable capability." He emphasized that the full-scale program projected for TVA would involve a 24-hour, 3-shift, 7-day workweek operation, anticipated for June or September of this year at the Widows Creek plant. Even now, field instruments apparently are being maintained by TVA personnel not directly related to the SDEL program as part of the regular service schedule for all TVA instrumentation.

COSTS FOR RELIABLE AND ENFORCEABLE OPERATION OF AN SCS PROGRAM ARE CONSIDERABLE

EPA estimates that installation costs for an SCS system will average \$300,000, and operational expenses \$100,000 a year. A tall stack about 1,000 ft. high, to complement the system would cost \$6 million, but require almost no upkeep. TVA's figures for its SDEL technique is about \$100 million for installation and some \$17 million annually for operation. Mr. Foster's estimate for a large power plant needing 10-12 monitoring sites is \$2 million. These costs are about 10% of expenses which would have to be incurred for sulfur oxide scrubbers.

The real costs of using SCS are much higher. According to Mr. Dannkoehler and EPA, ASARCO sustained a 35% loss of production last year as a result of necessary curtailments of operations. While industries in some areas may avail themselves of State or local weather services and meteorological findings to compute and predict adverse conditions, additional funds may be needed for weather balloons and other measuring instruments where such services are not furnished by State or local weather bureaus.

Very significant additional costs, according to the State spokesmen and Mr. Buhler will have to be assumed by the tax payers to provide the necessary instrumentation and personnel to monitor and enforce SCS systems for the States' resources are already taxed to the limit and cannot assume additional surveillance responsibilities. Tennessee is considering a request for a Federal grant of about \$100,000 a year for this purpose. Mr. Foster anticipates that, by following EPA criteria of eligibility, 5 or 6 sources would be allowed to use SCS and could be monitored for this amount. Puget Sound 6 or 7 persons are now detailed to monitor one ASARCO plant, using 5 of its 10 stations. About \$200,000 a year is needed for this process which includes complex verification procedures to furnish solid proof of violations. It is complicated by obsolete instrumentation. Mr. Dannkoehler's estimate for State manpower needs to monitor all anticipated sources permitted to use SCS was

around \$400,000 a year. In addition, his agency would require a minimum of \$70-80,000 to purchase new and more reliable equipment, since no Federal grants for this purpose have been received since 1968.

ENFORCEMENT OF AMBIENT STANDARDS IS DEFICIENT AND DIFFICULT—SCS SYSTEMS ARE TOO EASILY MANIPULATED TO AVOID DETECTION OF VIOLATIONS

EPA's criteria for allowing the use of SCS systems is that they be measurable and enforceable. TVA claims that the concerned States have free access to all plants and data, and that all necessary information is made available. Tennessee reserves the option for its personnel to enter a source without prior announcement, a requirement which antedates filing of the State implementation plan. The Puget Sound agency uses its own independent instrumentation to verify data submitted by ASARCO.

Confirmation of accuracy, and thus the enforcement of ambient standards are complicated, however:

Mr. Frey said that TVA is still negotiating with the States involved since the latter have not yet decided on a course of action to supervise the system and enforce the standards. Tennessee does give prior warning of a forthcoming inspection unless there is reason to believe that a source is deliberately violating the standard. In that event, a State monitoring instrument is moved into the vicinity of the plant's instrument to verify its data. Sources are required to demonstrate that they have both the expertise and the equipment to comply with regulations; however, expertise is acknowledged to be gained largely through on-the-job training, and Mr. Foster's opinion was that violations might be permitted on a sliding scale, with the system becoming effective over a period of time. Since his agency's primary stated objective is to protect public health, it is concerned with the results, not the internal mechanisms of a system. Sources are responsible for all equipment, including the necessary weather balloons.

Mr. Dannkoehler admits to considerable difficulties in proving violations. In order to disprove ASARCO's data obtained with up-to-date equipment, it must monitor the source's operations independently and, according to State regulations, furnish proof within a plus-minus 10% margin of error. The final strip chart—the final chart of calculations which is the result of preceding measurements and computations—is the required proof.

Puget Sound personnel has become experienced and expert at providing justifiable court data, but ASARCO employees also have become expert at avoiding or bypassing State monitoring stations. ASARCO also was to comply with a State-established inspection protocol which, however, it has yet to implement.

At the start, every citation of a violation was appealed, resulting in cumbersome, time-consuming procedures. The Appeals Court has since defined certain areas of controversy such as reliability of readings, dump cycle arguments (a smelter's purging period of 5-6 minutes at a time when instruments are not read) for which precedent-making judgments have been rendered. As a result, appeals have diminished, but violations have not decreased as a result of the increased number of uncontested fines paid. (see attached documents).

In the case of multiple sources in a region, Mr. Dannkoehler felt that a separate set of instruments would have to be used for each source to prove a violation, for polluters could claim that the readings did not apply to them. Mr. Foster would use a model allocating a certain percentage of emissions to each source located in fairly close proximity to another.

SUPPLEMENTARY CONTROL STRATEGIES DO NOT ASSURE PROTECTION OF PUBLIC HEALTH

Until definitive proof is available that sulfates, acid rain and other residual pollutants resulting from tall stack emissions of SO_x into the atmosphere are not harmful to public health, there appeared to be general agreement that SCS should be used solely as an interim measure in the context of the EPA proposal, i.e. for existing installations only, and as temporary, immediate relief to the public while permanent controls are perfected. (Admittedly, the interim aspect may complicate enforcement and act as a disincentive to commit capital for installation and operation of SCS.) The Puget Sound region is on record as opposing the use of SCS without the requirement of at least 90% SO_x removal. Emission controls of large sources, as soon as their effectiveness has been demonstrated, are acknowledged to be the only permanent answer for the protection of public health. However, there seems to be general agreement that not only is control technology still deficient, but that delays in deliveries of equipment already contracted for due to shortages of materials and metals will make achievement of standards within the mandated time limits unfeasible.

Other issues, such as the legality of using SCS as an abatement strategy, are not covered in this memorandum. They are dealt with in the NRDC comments, a copy of which is attached.

STATE AIR POLLUTION IMPLEMENTATION PLAN PROGRESS REPORT, JUNE 30 TO DECEMBER 31, 1973

Prepared by Office of Air Quality Planning and Standards, Office of Air and Water Programs, U.S. Environmental Protection Agency, Research, Triangle Park, N.C., and Office of Enforcement and General Counsel, U.S. Environmental Protection Agency, Washington, D.C.

AIR QUALITY AND EMISSION DATA Air Quality Overview

Suspended particulates remain a problem in spite of encouraging evidence of downward trends. One-hundred-thirty-eight AQCRs reported at least one station still above a primary standard (24-hour or annual in 1972). Thirty-four AQCRs have reported no annual 1972 particulate data. Primary 24-hour or annual sulfur dioxide standards were exceeded at one or more locations in only 19 of 162 AQCRs reporting 1972 data.

Data on oxidants and carbon monoxide are quite sparse, but if the limited results are indicative, substantial problems exist with these two pollutants. The primary oxidant standard was exceeded in 21 of 38 AQCRs reporting at least one quarter's data. The primary carbon monoxide standards were exceeded in 42 of 48 AQCRs reporting in 1972.

Adequacy of Air Quality Reporting and Processing

At the conclusion of the fourth quarter of calendar year 1973, data for the second quarter of CY 1973 reaching the Storage and Retrieval of Aerometric Data (SAROAD) system represents less than 60 percent of the total stations reporting in CY 1972. Consequently, an attempt to characterize nationwide air quality status or trends using the incomplete 1973 data presently in hand would be premature and misleading. Four quarters of 1973 data are expected to be in hand for summarization in the next SIP progress report.

Adequacy of air quality monitoring networks

The number of air sampling stations by pollutant-type reporting data as required in approved SIPs varies from 60 to 200 percent of requirements. However, when the required reporting stations are related to the SIP requirement the percentage by pollutant-type varies from 39 to 84 percent.

Emission data reporting and processing

Emission data are continually changing due to additions and corrections (e.g., updated emission factors, discovery of new sources, new estimates of emissions from a source, installation of control equipment, shutdown and start up of sources). Consequently, trends due to control activities are characterized as inconclusive. However, the 1972 data based on the National Emission Data System (NEDS) show significantly higher carbon monoxide and lower particulate emission from industrial processes when compared to the 1971 data. NEDS shows more carbon monoxide for nearly every industrial category. It could be concluded either that NEDS has not adequately accounted for carbon monoxide controls or that the methodology used in 1971 overestimated the extent of control. Another possibility, of course, is that sources of carbon monoxide were inadvertently missed in earlier inventories.

Industrial process particulate emissions compare favorably from 1971 to 1972, except for the mineral products industry, which in 1972 had much lower emissions. As in the case of carbon monoxide emissions, the accountability of control measures for this category could cause this discrepancy.

PLAN REVISION MANAGEMENT SYSTEM Overview

The Plan Revision Management System (PRMS) analysis has been expanded from the original 17 AQCRs to 67 AQCRs. In addition, the PRMS has been expanded from analysis in relationship to annual particulate matter and sulfur dioxide standards to analysis of all current national ambient air quality standards, except that for nitrogen dioxide.

The Office of Air Quality Planning and Standards provides each Regional Office with detailed copies of the individual PRMS site reviews for each monitoring site identified as having a "possible deficiency" within 60 days of the end of each semiannual reporting period. Data review actions have been initiated by the Regional Offices to determine causes of the identified deficiencies in the first 17 AQCRs within the PRMS.

Two important facts are germane in considering results of these actions. First, because the system considers the applicable State and Federal regulations, transportation control plans, and the Federal Motor Vehicle Control Program in the development of the projected air quality trend, an AQCR will not be "flagged" even though the air quality is considerably above the applicable air quality standards, so long as the observed air quality is following the downward trend predicted on the basis of enforcement of regulations and compliance schedules. Second, the PRMS analyzes only the air quality data currently contained in the SAROAD. Therefore, in a number of cases, because of the incomplete implementation of the quarterly reporting requirements for air quality data, there may be an 8- to 10-month time lag in the currentness of the data.

However, as more States begin to implement the reporting requirements, the system will be able to provide an up-to-date analysis of any specific AQCR and its progress toward attainment of the standards.

Results of analysis

The current PRMS analysis has identified approximately the same percentage of possible deficiencies (i.e., an air sampling site where trends in air quality indicate that NAAQS will not be reached as of the specified attainment date) in 10 of the original 17 AQCRs as were identified in the first analysis. Seven AQCRs did not have an increased number of monitoring sites available for review and had the same or an increased percentage of possible deficiencies.

A review of the other 50 AQCRs analyzed showed adequate progress being made toward attainment of air quality standards, with

the exception of a few localized problems. The AQCRs that did not follow this general trend were principally divided into two groups: (1) those within limited data base and (2) those with increasing ambient concentrations. The AQCRs with a limited data base had fewer than the minimum number of sites required by the SIP and/or a minimal quantity of available data from each site.

For particulate matter, 8 of the 67 AQCRs had a limited data base; for sulfur dioxide, 32 of the 67 AQCRs had a limited data base. Similarly, 14 of 25 AQCRs that were required to have carbon monoxide instruments had less than the minimum number of sites required and 18 of 36 AQCRs that were required to have oxidant instruments had less than the minimum number of sites required reporting sufficient data for analysis.

Possible deficiencies associated with particulate matter were noted in 51 of the 67 AQCRs analyzed. Some of these deficiencies appear to be local in nature since the remainder of the AQCR appears to be progressing as predicted.

Possible deficiencies were associated with carbon monoxide in 13 AQCRs and with oxidant in 8. However, 29 AQCRs have values that are currently above the national standards for carbon monoxide (although only 25 of the 67 AQCRs required CO monitors, an additional 4 AQCRs had data, thus, the 29), and 19 of the 36 AQCR required to have oxidant monitors have values above the standard. Again, it should be noted that almost 50 percent of the AQCRs that were required to have carbon monoxide and oxidant monitors had less than the minimum number of sites with sufficient data for analysis. Additionally, some AQCRs have a carbon monoxide instrument where no current SIP requirement exists and have recorded values in excess of the standard.

In general, the PRMS analysis indicates that in most AQCRs adequate progress appears to be being made for most sites; however, no relaxation of any of the current ongoing programs should take place. The possible deficiencies should be reviewed to determine their cause and possible solution for that area of the AQCR where the deficiency was noted. The status of sulfur dioxide, carbon monoxide and oxidant will require additional data to really assess the situation and determine if possible deficiencies exist.

SUPPLEMENTARY CONTROL SYSTEMS

A major issue related to implementation plans involves the question of supplementary control systems (SCS) as an acceptable control strategy. SCS involve both the temporal variation of emission rate, based on expected meteorological conditions, to avoid high ground-level concentrations during periods of poor dispersion potential, and the use of tall stacks to lower ground-level impact. Early in September 1973, EPA proposed regulations and solicited public comment on them.¹

SCS are considered less desirable than constant emission limitations and, as proposed, will be allowed only for large, remote existing sources of sulfur dioxide and only where constant emission reduction systems are not available to the source. Generally this restricts their use to nonferrous smelters (after use of acid plant control systems) and rural coal-fired power plants that will not be able to install stack gas cleaning equipment nor find low-sulfur coal. The regulations also proposed many requirements for the design and operation of SCS.

Fourth, it should also be noted that many AQCRs have less than the minimum num-

¹ Federal Register, Volume 38, No. 178, September 30, 1973.

ber of sites required in the SIP reporting sufficient data for which any analysis can be performed. This is especially true for sulfur dioxide, carbon monoxide and oxidants. Thus, for many of the 67 AQCRs, the analysis for those pollutants may not be conclusive until at least the minimum number of required sites are reporting enough data for analysis and review. Consideration should be given to the number of sites for which the analysis was performed compared to the minimum number of sites required by the SIP before any conclusions are made concerning the progress an AQCR is making. Many AQCRs that at this time appear to be making adequate progress based on less than the minimum number of monitors required may have severe SIP deficiencies when the data from all the sites are available in sufficient quantity for review.

A comparison of the initial analysis for the 17 AQCRs to the current analysis indicates that, in general, States are submitting more aerometric data, thus providing a larger air quality data base for review.

In some cases, the increased data base allowed for the identification of some additional possible deficiencies that were not evident in the initial analysis.

The results from the current analysis of 67 AQCRs indicated four principal types of problems: (1) limited data base, (2) localized problem, (3) general problem, and (4) increasing pollutant concentrations.

The AQCRs with a limited data base resulted from having less than the minimum number of sites required by the SIP. This was not a major problem for particulate matter as only 8 of the 67 AQCRs had less than the minimum number of sites currently reporting sufficient data for analysis. However, this was not the case for sulfur dioxide; 32 of the 67 AQCRs had less than the minimum number of monitoring sites reporting sufficient data for analysis. Similarly, 14 of the 25 AQCRs that were required to have carbon monoxide instruments had less than the minimum number of sites required, and 18 of the 36 AQCRs that were required to

have oxidant instruments had less than the minimum number of sites required reporting sufficient data for analysis.

Possible deficiencies associated with total suspended particulates were noted in 51 of the 67 AQCRs analyzed. Some of these deficiencies appear to be local in nature since the remainder of the AQCR appears to be progressing as predicted. In addition, 65 of the 67 AQCRs have particulate concentrations above the national ambient air quality standard.

Only 5 of the 67 AQCRs had possible deficiencies relative to sulfur dioxide, and 9 AQCRs had values above the standards. As mentioned previously, however, almost 50 percent of the AQCRs analyzed had less than the minimum number of sites required, and any general conclusions on the status of sulfur dioxide would not be completely accurate at this time.

Possible carbon monoxide deficiencies were noted in 13 AQCRs and oxidant deficiencies in 8. However, 29 of the AQCRs have values that are currently above the national standards for carbon monoxide. Nineteen (19) of the 36 AQCRs required to have oxidant instruments were above the standard. Again, it should be noted that almost 50 percent of the AQCRs required to have carbon monoxide and oxidant monitors had less than the minimum number of sites with sufficient data for analysis. Additionally, four AQCRs that have a carbon monoxide instrument where no current SIP requirement exists have recorded values in excess of the standard.²

Two AQCRs have been noted as having possible deficiencies throughout the AQCR, and further study should be initiated to determine the real extent of the problem.

To date, 8 AQCRs have reported pollutant concentrations that have increased over the past years. This problem appears to be local in nature as only one or two sites in these AQCRs have shown increases. This problem

² Although only 25 of the 67 AQCRs required CO monitors, an additional 4 AQCRs had data; thus, the 29.

relates primarily to particulate concentrations; however, in a few areas, sulfur dioxide levels have also increased slightly.

In general, the PRMS analysis indicates that in most AQCRs adequate progress appears to be being made for most sites; however, no relaxation of any of the current ongoing programs should take place. The possible deficiencies should be reviewed to determine their cause and possible solution for that area of the AQCR where the deficiency was noted. The status of sulfur dioxide, carbon monoxide, and oxidants will require additional data to really assess the situation and determine if possible deficiencies exist. However, for those areas where a deficiency was noted, some work should begin to investigate the extent of the problem.

SECTION 6—AIR QUALITY MONITORING AND DATA REPORTING

Ambient air quality

State air pollution control agencies must satisfy two basic requirements with respect to ambient air quality monitoring: (1) establish a network of measurement stations for each designated pollutant (total suspended particulates, sulfur dioxide, carbon monoxide, and oxidants) according to prescribed guidelines, adequate in number and comprehensive in distribution, to yield a representative picture of pollutant means and extremes, and (2) submit the data from these monitoring networks to EPA quarterly as evidence of meeting air quality standards or of making proper progress toward a specified compliance date.

Table 6-1 lists, by State, the level of monitoring activity for calendar year 1972 being reported to EPA's National Aerometric Data Bank (NADB) as of September 1973. Under each pollutant, the initial columns give the numbers of individual stations initially required in the August 14, 1971, *Federal Register*¹ and the numbers of stations for which data collected in 1972 have been reported.

¹ *Federal Register*, Volume 36, No. 156, August 14, 1971.

TABLE 6-1.—STATUS OF CALENDAR YEAR 1972 MONITORING ACTIVITY AS REPORTED TO NADB BY STATES, SEPTEMBER 1973

EPA Region/State	AQCR's within State	Total suspended particulates					Sulfur dioxide					Carbon monoxide					Oxidants									
		Total required			AQCR's reporting		Total required			AQCR's reporting		Total required			AQCR's reporting		Total required			AQCR's reporting						
		Minimum required	Total reporting	Required not reporting	<1/2 minimum required	1/2 to minimum required	> Minimum required	Minimum required	Total reporting	Required not reporting	<1/2 minimum required	1/2 to minimum required	> Minimum required	Minimum required	Total reporting	Required not reporting	<1/2 minimum required	1/2 to minimum required	< Minimum required	Minimum required	Total reporting	Required not reporting	> 1/2 minimum required	1/2 to minimum required	< Minimum required	
Region I:																										
Connecticut.....	4	16	25	0	0	0	4	14	4	10	2	1	1	4	0	4	2	0	2	4	0	4	2	0	0	2
Maine.....	5	13	6	7	4	1	0	13	9	7	4	0	1	0	0	0	0	0	5	4	0	0	0	0	0	5
Massachusetts.....	6	39	52	6	1	0	5	34	48	0	0	0	6	7	2	5	2	0	4	7	0	7	2	0	0	4
New Hampshire.....	3	8	25	0	0	0	3	9	4	5	2	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
Rhode Island.....	1	7	23	0	0	0	1	7	20	0	0	0	1	0	2	0	0	0	1	0	0	0	0	0	0	1
Vermont.....	2	4	2	2	1	0	1	5	0	5	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
Region II:																										
New Jersey.....	4	19	78	0	0	0	4	20	28	2	0	1	3	8	20	2	0	1	3	7	3	4	1	1	2	4
New York.....	8	72	228	0	0	0	8	58	49	25	3	1	4	13	10	8	1	1	6	19	7	13	4	0	1	4
Puerto Rico.....	1	3	5	2	0	0	1	4	4	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1
Virgin Islands.....	1	3	4	0	0	0	1	4	2	2	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Region III:																										
Delaware.....	2	3	16	0	0	0	2	3	10	0	0	0	2	1	0	1	1	0	1	1	0	1	1	0	0	1
District of Columbia.....	1	4	2	2	0	1	0	4	4	0	0	0	1	1	2	0	0	0	1	1	1	0	0	0	0	1
Maryland.....	6	31	85	0	0	0	6	29	50	0	0	0	6	6	1	5	2	0	4	6	0	6	2	0	0	4
Pennsylvania.....	6	68	105	2	0	1	5	42	14	28	4	2	0	11	1	10	2	0	4	11	1	10	2	0	0	4
Virginia.....	7	47	116	3	0	1	6	16	44	4	1	0	6	2	3	1	0	1	6	7	3	4	2	0	0	5
West Virginia.....	10	24	36	4	3	1	6	12	14	8	6	0	4	0	1	0	0	0	10	0	0	0	0	0	0	10
Region IV:																										
Alabama.....	7	34	60	1	0	1	6	15	10	8	4	1	2	3	0	1	1	0	6	4	1	3	1	0	0	6
Florida.....	6	32	39	6	2	9	4	24	36	2	2	9	4	0	3	0	0	0	6	4	2	2	1	1	0	4
Georgia.....	9	43	29	13	1	7	1	6	14	23	3	3	3	0	1	0	0	0	9	1	0	1	1	0	0	8
Kentucky.....	9	30	88	2	1	0	8	18	78	0	0	0	9	0	4	0	0	0	9	3	2	1	1	0	0	8
Mississippi.....	4	11	1	9	3	0	1	9	2	7	3	0	1	0	0	0	0	0	4	2	0	2	1	0	0	3
North Carolina.....	8	54	178	0	0	0	8	11	135	3	0	0	8	0	0	0	0	0	8	2	1	1	1	0	0	7
South Carolina.....	10	35	72	10	0	0	10	19	36	3	0	1	9	0	0	0	0	0	10	1	0	1	1	0	0	9
Tennessee.....	6	39	95	0	0	0	6	17	34	3	2	0	4	0	1	0	0	0	6	5	2	3	1	1	0	4

TABLE 6-1.—STATUS OF CALENDAR YEAR 1972 MONITORING ACTIVITY AS REPORTED TO NADB BY STATES, SEPTEMBER 1973

EPA Region/State	AQCR's within State	Total suspended particulates					Sulfur dioxide					Carbon monoxide					Oxidants				
		Total required			AQCR's reporting		Total required			AQCR's reporting		Total required			AQCR's reporting		Total required			AQCR's reporting	
		Minimum required	Total reporting	Required not reporting	< 1/2 minimum required	1/2 to minimum required	Minimum required	Total reporting	Required not reporting	< 1/2 minimum required	1/2 to minimum required	Minimum required	Total reporting	Required not reporting	< 1/2 minimum required	1/2 to minimum required	Minimum required	Total reporting	Required not reporting	< 1/2 minimum required	1/2 to minimum required
Region V:																					
Illinois	11	54	54	26	8	2	1	52	38	26	7	0	4	10	0	10	2	0	9	10	9
Indiana	10	42	117	1	0	2	8	37	61	17	4	0	6	4	0	4	8	4	1	3	2
Michigan	6	29	108	0	0	0	6	27	42	1	0	1	5	0	0	0	6	0	0	0	0
Minnesota	7	25	57	2	1	1	5	23	18	6	3	2	2	4	2	2	6	0	1	0	0
Ohio	14	78	123	27	9	1	4	60	72	28	8	1	5	0	4	0	14	16	7	8	3
Wisconsin	8	24	7	17	6	1	1	9	3	6	4	0	4	0	0	0	8	4	0	4	0
Region VI:																					
Arkansas	7	10	28	0	0	0	7	4	2	3	3	0	4	0	0	0	7	0	0	0	0
Louisiana	3	5	11	0	0	0	3	15	17	0	0	0	3	0	0	0	3	5	4	1	0
New Mexico	8	16	26	2	2	0	6	9	5	5	4	1	3	1	1	0	7	3	1	2	1
Oklahoma	8	24	90	0	0	0	8	6	25	0	0	0	8	0	2	0	4	2	2	0	2
Texas	12	52	160	0	0	0	12	49	13	37	9	0	3	1	0	1	11	19	0	19	7
Region VII:																					
Iowa	12	32	26	9	3	1	8	13	2	11	10	0	2	0	0	0	2	2	0	2	1
Kansas	7	35	57	2	0	1	6	31	0	0	0	7	1	3	0	0	7	3	2	1	0
Missouri	5	30	46	6	1	0	4	15	4	11	3	0	2	6	1	5	2	6	1	5	2
Nebraska	4	11	36	0	0	0	4	5	2	4	3	0	1	0	1	0	4	0	1	0	0
Region VIII:																					
Colorado	8	28	68	0	0	0	8	8	3	7	7	0	1	3	1	2	1	7	3	2	1
Montana	5	13	2	11	4	0	1	14	1	13	5	0	0	0	0	0	5	0	0	0	0
North Dakota	2	5	16	0	0	0	2	2	0	2	2	0	0	0	0	0	2	0	0	0	0
South Dakota	4	6	2	4	3	0	1	3	1	2	2	0	2	0	0	0	4	0	0	0	0
Utah	3	11	8	2	2	1	0	9	1	8	3	0	0	2	4	0	3	2	0	2	1
Wyoming	3	7	3	4	2	0	1	3	1	2	2	0	1	0	0	0	3	0	0	0	0
Region IX:																					
American Samoa	1	1	0	1	1	0	0	1	0	1	1	0	0	0	0	0	1	0	0	0	0
Arizona	4	17	32	0	0	0	4	16	15	4	0	1	3	3	1	2	1	0	3	2	1
California	11	64	18	47	10	0	1	17	15	6	6	0	5	29	42	2	10	29	60	1	1
Guam	1	1	3	0	0	0	1	4	2	2	0	1	0	0	0	0	1	0	0	0	0
Hawaii	1	3	14	0	0	0	1	1	12	0	0	0	1	0	1	0	1	0	1	0	0
Nevada	3	13	41	0	0	0	3	8	3	5	2	1	0	2	0	2	2	1	2	1	0
Region X:																					
Alaska	2	11	17	1	1	0	3	7	7	0	4	0	0	1	1	0	4	0	0	0	0
Idaho	4	15	25	2	0	1	3	7	0	7	0	4	0	0	0	0	4	0	0	0	0
Oregon	5	20	48	0	0	0	5	8	2	6	4	1	0	3	2	0	4	3	2	1	0
Washington	6	31	54	0	0	0	6	14	12	2	2	0	4	7	8	0	6	5	4	1	0
Total		1,377	2,667	233	69	33	220	861	1,049	363	136	33	153	133	125	69	23	5	275	208	122

The remaining columns in Table 6-1 categorize the number of Air Quality Control Regions (AQCRs) within each State that are (1) reporting less than half the required monitoring, (2) reporting from half up to the required monitoring, and (3) reporting more than the minimum required monitoring. (Requirements for interstate AQCRs are apportioned to the constituent States according to population.)

Note that some States in Table 6-1 are reporting as many stations as required, and some are reporting more; but these stations are not always distributed among the AQCRs in accord with minimum requirements for each AQCR. Consequently, even in these States, one or more AQCRs may not yet satisfy minimum monitoring requirements. Further, Table 6-1 identifies how many of the minimum required stations are actually being reported in each State. No attempt has yet been made to assess the aspect of how representative these monitoring locations are.

Tables 6-2 to 6-5 summarize the status of air quality in the nation's 247 AQCRs as portrayed by the data reported to NADB for calendar year 1972. For each pollutant, the number of AQCRs in each priority classification is shown, plus the number of AQCRs reporting (1) at least one station-quarter's data and (2) at least one valid station-year of data for particulates and sulfur dioxide, for which annual standards pertain. The final

column in each of these tables reports the number of AQCRs wherein one or more reporting stations exceeded a primary standard. The results in these four tables differ from those presented in the previous SIP progress report² as a consequence of additional 1972 data and corrections received in the interim. The previously reported counts are shown in parentheses in the tables.

In brief, suspended particulates remain a problem in spite of encouraging evidence of downward trends. One-hundred-thirty-eight AQCRs have reported at least one station still above a primary standard (24-hour and/or annual) in 1972. Thirty-four AQCRs had reported no 1972 particulate data at that point. Primary 24-hour and/or annual sulfur dioxide standards were exceeded in only 19 of 162 AQCRs reporting in 1972.

Data for oxidants and carbon monoxide are quite sparse, but if these limited results are indicative, substantial problems exist with respect to these two pollutants. The primary oxidant standard was exceeded in 21 of 38 AQCRs reporting at least one quarter's data. The primary carbon monoxide standards were exceeded in 42 of 48 AQCRs reporting in 1972. More detailed information on

AQCR status and individual station results is given in Publication No. EPA-450/1-73-004.³

The presence of individual values or annual means over a standard clearly identifies problem AQCRs. The absence of such values or means in the data reported from other AQCRs does not necessarily warrant the conclusion that the standards are being met in those AQCRs until their monitoring networks have been thoroughly appraised for adequacy in number and placement of monitoring sites. Many regions do not have comprehensive networks operating; others are only just beginning to report scattered results from the initial stages of network implementation. Until assessments can be made of network adequacy (not necessarily to be equated with the initially specified minimum requirements listed in Table 6-1) a technical distinction exists in describing an AQCR reporting no values above standards. For the present, it can only be stated that such an AQCR "experiences no violation." The goal based on data from an adequate network, will be to designate such an AQCR as "in compliance" with national ambient air quality standards.

² State Air Pollution Implementation Plan Progress Report, January 1 to June 30, 1973. U.S. Environmental Protection Agency, Research Triangle Park, N.C. EPA-450/2-73-005. September 1973.

³ Monitoring and Air Quality Trends Report, 1972. U.S. Environmental Protection Agency, Research Triangle Park, N.C. Publication No. EPA-450/1-73-004.

TABLE 6-2.—SUSPENDED PARTICULATE MATTER, STATUS OF AIR QUALITY, 1972

[Based on data reported by States as of Oct. 6, 1973. Values reported in EPA 450/2-73-005 are given in parentheses]

Priority classification	Number of AQCR's	AQCR's reporting—		AQCR's exceeding any primary standard
		At least 1 station-quarter	At least 1 station-year	
I or Ia.....	120	118 (116)	110 (106)	102 (99)
II.....	70	63 (61)	53 (47)	22 (26)
III.....	57	37 (36)	28 (26)	14 (14)
Total.....	247	218 (213)	191 (179)	138 (139)

TABLE 6-3.—SULFUR DIOXIDE, STATUS OF AIR QUALITY, 1972

[Based on data reported by States as of Oct. 6, 1973. Values reported in EPA 450/2-73-005 are given in parentheses]

Priority classification	Number of AQCR's	AQCR's reporting—		AQCR's exceeding any primary standard
		At least 1 station-quarter	At least 1 station-year	
I or Ia.....	60	52 (51)	41 (40)	13 (17)
II.....	41	31 (30)	27 (25)	14 (8)
III.....	146	79 (73)	55 (50)	2 (2)
Total.....	247	162 (154)	123 (115)	19 (27)

¹ These original totals were in error.

TABLE 6-4.—OXIDANTS, STATUS OF AIR QUALITY, 1972¹

Priority classification	Number of AQCR's	AQCR's reporting at least 1 station-quarter		AQCR's exceeding primary standard
		AQCR's reporting at least 1 station-quarter	AQCR's reporting at least 1 station-year	
I.....	55 (54)	31 (25)	25 (18)	
III.....	192 (193)	7 (3)	3 (3)	
Total.....	247 (247)	38 (28)	28 (21)	

¹ Based on data reported by States as of Oct. 6, 1973. Values reported in EPA 450/2-73-005 are given in parentheses.

² Providence AQCR has been reclassified priority I for oxidants.

TABLE 6-5.—CARBON MONOXIDE, STATUS OF AIR QUALITY, 1972¹

Priority classification	Number of AQCR's	AQCR's reporting at least 1 station-quarter		AQCR's exceeding primary standard
		AQCR's reporting at least 1 station-quarter	AQCR's reporting at least 1 station-year	
I.....	30 (39)	22 (13)	21 (13)	
III.....	217 (218)	26 (21)	21 (20)	
Total.....	247 (247)	48 (34)	42 (33)	

¹ Based on data reported by States as of Oct. 6, 1973. Values reported in EPA 450/2-73-005 are given in parentheses.

In some instances, the lack of stations in an AQCR may be only an apparent deficiency. Stations may exist for which the data are not yet being expeditiously relayed or correctly identified for acceptance in the National Aerometric Data Bank. Table 6-6 provides clear evidence that the anticipated schedule of data submittal from local or State agencies through the EPA Regional Offices to NADB, Durham, North Carolina, has not yet been realized. According to this schedule, data should reach NADB 75 days after the close of a quarter; summaries of these data are then provided 120 days after the close of a quarter. However, at the conclusion of the fourth quarter (CY IV), data for the second quarter of CY 1973 (CY II) reaching NADB represents less than 60 percent of the total stations reporting in CY

1972. Consequently, an attempt to characterize nationwide air quality status or trends using the incomplete 1973 data presently in hand would be premature and misleading at this time. Sufficient 1973 data are expected to be in hand for summarization in the next SIP progress report.

The number of monitors reporting air quality data to NADB by type varies from 60 to 200 percent of nationwide requirements, although the percent of required stations reporting by type is considerably lower, from 39 to 68 percent (see Table 6-7).

TABLE 6-6.—NATIONAL SUMMARY OF STATE MONITORING AS REPORTED TO NADB AS OF JAN. 11, 1974

Pollutant	1971	1972	1973		Legal requirement
			1st quarter	2d quarter	
TSP.....	1,313	2,683	1,914	1,449	3,511
SO ₂	409	1,064	694	766	2,129
O ₃	50	113	31	52	458
CO.....	58	128	42	75	457
Total.....	1,830	3,988	2,681	2,342	6,555

¹ Includes both continuous samplers and West-Gaeke bubbler.

TABLE 6-7.—AIR QUALITY MONITORING SITES, ACTUAL VERSUS REQUIRED

Pollutant	Legal requirement	Total reporting ¹	Ratio reporting/required	Required not reporting	Required reporting	Ratio required reporting/required
TSP.....	1,377	2,667	1.94	233	1,144	0.84
SO ₂	861	1,049	1.22	363	498	.58
CO.....	133	125	.94	69	64	.48
O ₃	208	122	.59	128	80	.39

¹ Not all of total reporting sites necessarily satisfy legal requirement.

The wide variance between the percent of total reporting stations and those stations reporting from required sites suggests a need for EPA and State effort to improve the distribution of air quality monitors as well as to increase the number of some types. It is anticipated that this will change as EPA revises guidelines for minimum monitoring networks in the future.

SOURCE EMISSIONS

The 1972 emission estimates shown in Table 6-8 are based on data from the National Emissions Data System (NEDS) data bank. Until 1972, the emission estimates were obtained by applying overall emission factors and industry average control efficiencies to nationwide production or consumption totals to calculate emissions. Emissions in NEDS are calculated for each point and area source and summed to arrive at the totals shown in Table 6-8.

TABLE 6-8.—NATIONWIDE EMISSIONS, 1972 (10⁶ TONS/YR)^a

Source	CO	TSP	SO ₂	HC	NO _x
Transportation.....	76.4	0.8	0.6	16.0	8.6
Fuel combustion in stationary sources.....	1.2	7.5	24.4	.5	12.3
Industrial processes.....	17.6	8.6	6.6	6.5	.7
Solid waste.....	5.0	.9	.1	1.6	.2
Miscellaneous.....	.8	.2	0	1.8	
Total.....	101.0	18.0	31.7	26.4	21.8

^a Based on data from the National Emissions Data Bank.

The NEDS data bank lacks adequate data for estimation of emissions from all sources. The most notable deficiencies in NEDS, with respect to Table 6-8, are that (1) all New York State point sources are missing, and

(2) emission estimates are not made for forest fires, coal refuse burning, and structural fires. According to data from the New York SIP, significant additional emissions for point source fuel combustion and industrial processes could be expected. Perhaps an additional one million tons of sulfur oxides and smaller amounts of the other pollutants may be added to the fuel combustion by stationary sources totals to account for New York point sources. Industrial process emissions of particulate in New York may be 200,000 tons, but less than 100,000 tons of the other pollutants. Emissions from forest fires, coal refuse burning, and structural fires should be added to the miscellaneous category to make these totals comparable to the data for previous years. Due to lack of source data on a detailed, county basis for these types of sources NEDS does not presently account for these emissions.

The 1972 data based on NEDS show significantly higher carbon monoxide and much lower particulate emissions from industrial processes when compared to the 1971 data based on the old methodology. NEDS shows more carbon monoxide for 1972 for nearly every industrial category. It is concluded either that NEDS has not adequately accounted for carbon monoxide controls or that the old methodology overestimated the extent of control. Another possibility is that relatively large emitters were not accounted for in the old methodology. The apparent discrepancy is probably due to a combination of these factors. On the other hand, recent industrial process particulate emissions from NEDS agree quite well with old methodology estimates except for the mineral products industry and food and agricultural industry categories. Recent NEDS estimates show much lower emissions for both categories (5.2 versus 2.6 million tons for food and agricultural industries). Again, the discrepancy could be due to difficulties in correctly determining control efficiencies. A more likely explanation in this case is that NEDS does not adequately account for emissions from all sources in these categories. It is known, for example, that NEDS does not contain adequate source data to estimate emissions for all grain elevators and feed mills.

COMMENTS ON PROPOSED RULES REGARDING USE OF SUPPLEMENTARY CONTROL SYSTEMS

The proposed "supplementary control system" ("SCS") regulations, 38 Fed. Reg. 25697 (Sept. 14, 1973), should not be promulgated. In our view, they violate the Clean Air Amendments and cannot be supported on policy grounds. EPA was correct about a year ago when it stated its opposition to dispersion techniques: "dilution" is not, as the leaden professional jest once had it, "the solution to pollution."

At the outset, we must clarify what these regulations actually provide, for they are written in a way that disguises their true consequences. The proposed regulations provide for indefinite use of SCS and tall stacks as a means of attaining National Air Quality Standards in the vicinity of "isolated sources" of pollution. So long as a state agency concludes that continuous emission control devices capable of meeting the emission limitations necessary to attain Standards are not "available," and the source agrees to undertake a program of research on continuous emission controls, the source may continue using SCS. They are not limited to use as "interim measures of control," within the meaning of the statute, since they are not limited to sources within areas that have received extensions of the deadline for attaining National Standards as provided in § 110(e) of the Act, and since the

Footnotes at end of article.

proposed regulation puts no limit on the time during which they may be used.

This point should be made clear. In our views, SCS may be a legally acceptable interim measure under § 110 (e) and (f) of the Act. But despite the rhetoric of EPA's preamble to the proposed regulations, they do not confine SCS to use as an interim measure in any ordinary sense of the word. In the statute, the word "interim" is used in connection with short periods of time, such as one or two years, with specified beginning and end. A source allowed to use an "interim" measure must be on a binding compliance schedule constructed to insure that emission limitations are met at the close of the interim period.

But EPA's proposed SCS regulations contain none of these earmarks of an interim measure. Instead of requiring a definite date in the near future for moving from SCS to continuous controls, they merely require "formal review and reexamination of the permit at intervals of 5 years or less." Proposed App. P, § 3.2(g). Rather than requiring a specific compliance schedule for moving to continuous controls, or even a binding schedule for a program of research on such a control system, they timidly require a mere "description . . . of the firm's research and demonstration programs, or its participation in such programs, which will accelerate the development of constant emission reduction technology . . . [including a description of] schedules and resources to be committed, and an anticipated date when adequate emission reduction technology can be applied. . . ." Proposed App. P, § 3.2(b)(5). These "requirements" amount to little more than a generalized and totally unenforceable statement from the source that he intends to proceed in good faith. Since the statute requires compliance, the good faith of a source is irrelevant, though it is hard to imagine how the statutory requirements could be attained without it. On the other hand, EPA has already accumulated ample hard evidence, based on performance rather than promises, to justify a conclusion that good faith attempts to develop and install continuous control equipment cannot be anticipated from the utility industry.²

Second, though they are drafted to disguise the fact, the proposed regulations are actually a vehicle for legitimizing the use of tall stacks as well as SCS. In fact, they are drafted in a way which would allow a source to escape ever having to curtail production (or pollution) so long as he presented a paper program for intermittent curtailment and built a tall enough stack. Proposed 40 C.F.R. § 51.13(h) places only one limitation on the use of tall stacks to attain Air Quality Standards—that it be "accomplished as part of an approved supplementary control system." The possibility that an SCS will be merely a paper justification for building a tall stack is hardly remote. Process curtailment is expensive, and inconvenient. In the case of power plants, the need to continue operations at full capacity is likely to occur at precisely the times when curtailment would be required if SCS were relied upon without tall stacks—during periods of air stagnation during the summer when massive use of air conditioning produces peak loads on electrical systems. In other industries, it is likely that the increased production that could be provided by being able to operate at full capacity at all times would more than pay the costs of erecting a stack high enough to avoid ever having to invoke SCS process curtailment. For these reasons, the SCS proposal can in no sense be considered a proposal for "emission limitations," as required by the Act. It is, pure and simple, a proposal to supply the mantle of legitimacy to the use of dispersion as a means to attain Na-

tional Air Quality Standards, and must stand or fall, legally, on the question of whether such a method is allowed by the statute.

I. DISPERSION IS PROHIBITED BY THE ACT AS A MEANS OF ATTAINING NATIONAL STANDARDS

The issue of whether dispersion techniques are allowed by the Clean Air Amendments is now in the Courts.³ Since NRDC is one of the litigants in this case, it is unnecessary to delineate in detail the statutory basis for our belief that such methods are explicitly prohibited as control strategies by the Act. Instead, we incorporate by reference pages 23-30 in petitioners' brief, and pages 15-19 in petitioners' reply brief in that case, which are attached to these comments as Appendix A. Suffice it to say, however, that NRDC regards that case as placing in issue the principle of whether dispersion is a permissible means of control under the Act, and will regard a holding in our favor there as applying to the whole of the regulations under consideration here.

We also believe that the present SCS proposal does violence to the statutory scheme in another way. In its preamble to the proposed SCS regulations, EPA asserts that SCS is to be considered as a control technique wherever adequate continuous emission control methods are "not available" and the "alternatives . . . will be either to close these facilities (or drastically curtail production), or apply supplementary control systems." 38 Fed. Reg. at 25699. In such situations, the preamble states the Administrator's judgment that "it does not appear to be in the public interest to require shutdown or permanent curtailment of production for existing sources which could temporarily use supplementary control system. . . ." *Id.*

This statement does not provide a legally adequate basis for turning to a method of dubious efficacy and legality. The Act does not set itself against the closing of plants which endanger the public health and welfare. Indeed the drafters explicitly recognized the possibility that methods of production that were incompatible with the protection of the public must be curtailed or eliminated. "(E)xisting sources of pollution either should meet the standard of the law or be closed down. . . ." Sen. Rep. No. 91-1196 (1970), at 3.

The Act also provides a means for dealing with situations when a claim is made that meeting the requirements of the law would result in shutdown, designed to maximize the incentive of the source to find ways of complying with the emission standards contained in the State Plan. First, where emission controls are not available soon enough to insure attainment of National Primary Standards within the three years outer limit required by the Act, a State may receive up to two years extension of the deadline for meeting the Standard. If an individual source finds that he is still unable to install equipment or make other changes to bring him into compliance, he may ask his State Governor to request an additional year's postponement of the application of the emission limitations to him. Such a request must be tested in a judicialized hearing, where there is opportunity of cross-examination and full testing of the source's claim. If, among other things, the Administrator finds that the continued operation of the source is "essential to the national security or to the public health or welfare," he may grant the postponement; if not, he must order shutdown. We find nothing in the statute which precludes additional postponements, so long as they are tested fully through the statutory procedure. But the benefit of this procedure is that it places a heavy burden on the source owner to justify, on a yearly basis, continued failure to meet emission limitations. EPA's proposal, which

substitutes an informal administrative judgment, made long before the last deadline for meeting State emission standards and renewed only infrequently, removes this burden and maximizes the incentive to avoid discovering ways of meeting the emission limitations.⁴

Finally, the proposal violates the requirement of the Act that any State Plan, or revision, "provide (i) necessary assurances that the State will have adequate personnel [and] funding. . . ." § 110(a)(2)(F), 42 U.S.C. § 1857c-5(a)(2)(F). An SCS will impose large financial, administrative, and technical burdens on the State agencies. The Puget Sound Air Pollution Control Authority, one of the few State agencies with experience in overseeing such systems, estimates that it presently spends \$160,000 to \$200,000 per year to monitor the SCS now operating at ASARCO's Tacoma, Washington, smelter.⁵ EPA's own estimates, completed prior to the formulation of the proposed regulations, fall in the same range.⁶ Yet nothing in the proposed regulation requires a showing by a State agency inclined to allow the use of SCS on a facility of whether such funds are available over and above funds already made available for the remainder of the State program. If such additional funds are not available, they will obviously rob from the existing State program. In many State agency budgets, \$200,000 represents a sizable portion of the entire air pollution control effort.⁷

To remedy this defect, EPA should require, as a prerequisite to approval of any proposed SCS, a showing that the funds necessary to hire competent personnel, place and maintain monitors, telemeter continuous emission and ambient air quality data to the State agency, and pay for enforcement are available. This funding should not be the responsibility of the State agency. The cost of administering an SCS is a cost of pollution control, just as the cost of any continuous emission control system is, whether it be flue gas desulfurization or clean fuel. Rather than merely encourage the States to require licensing fees to defray to additional costs of SCS (preamble to proposed rulemaking, 38 Fed. Reg. at 25700), the Agency should make such fees a prerequisite to approval of any such system. This was urged within the agency in earlier consideration of the SCS regulation;⁸ it should be added to the proposed rule. Without requiring assurance of adequate personnel and funding, the rule-making cannot meet the legal standard of the Act.

II. DISPERSION SHOULD BE PROHIBITED BECAUSE IT REPRESENTS BAD POLICY

A. *The Use of Dispersion Rather Than Continuous Controls Endangers the Environment Because it Fails to Curtail Atmospheric Loading With Dangerous Pollutants.* The dangers of atmospheric loading of sulfur oxides, particulate matter, nitrogen oxides, and other toxic materials are increasingly well known in the scientific community and within EPA. Evidence is accumulating rapidly that the health effects of sulfur oxides are related to sulfates, interacting with particulate matter and perhaps nitrogen oxides. Sulfates are dangerous to health at concentrations an order of magnitude smaller than the present National Primary Standard for sulfur oxides. Concentrations prevailing in the skies over much of the urbanized areas of the country are often as high as twice those found to have adverse effects on health. Unlike sulfur dioxide, sulfates are distributed in dangerous concentrations over wide areas, not just at the points where plumes from specific sources touch down.

Similarly, a growing body of evidence exists that injury to the biosphere is growing rapidly as a result of acid rains. Like sulfate concentrations, acid rains are related to the total quantity of sulfur oxides emitted into the biosphere rather than the ground level

Footnotes at end of article.

concentrations now regulated under EPA's National Standard for sulfur oxides. Evidence exists that in some parts of the country, the level of acid accumulated in the biosphere has reached very close to a critical point at which natural neutralizing agents can no longer prevent major damage.⁹

As a matter of policy then, it is highly inappropriate for the Agency to be considering regulations which would allow continued atmospheric loading with sulfur oxides and other pollutants. Rather than seeking to legitimize further atmospheric loading, the Agency should be considering additional National Standards that would have the effect of reducing drastically the total quantities of these pollutants emitted into the air. The failure to do so represents a serious dereliction of statutory duty; the present proposal, given this context, may violate the statutory duty to protect public health and welfare.

B. SCS Is Not a Reliable Method for Meeting the National Air Quality Standards. Over a year ago, EPA declared that SCS was not acceptable because, among other things, it was not a reliable means of meeting the National Standards. 37 Fed. Reg. 15095 (July 27, 1972). In the present proposal, it has not presented sufficient basis for a different conclusion.

To begin with, EPA nowhere explicates a consistent or defensible definition of the concept of reliability. An acceptable definition must be grounded in the words of the statute itself, which states that the State Plan must contain measures that "insure attainment and maintenance" of the National Standards. § 110(a)(2)(B), 42 U.S.C. § 1857c-5(a)(2)(B). Plainly, the meaning of this phrase is that the Standards must be met at all times, not merely some percentage of the time. Measures that will accomplish full-time compliance are available, and have been adopted by most States. Low sulfur fuel, the most commonly adopted means for attaining the Standards, allows 100% compliance with emission limitations. Similarly, 100% compliance can be attained through flue gas desulfurization technology, by designing in redundant systems so that malfunctions can be compensated for by switching modules, by ceasing operations when malfunctions become sufficiently serious to prevent compliance with emission standards, and, in some cases, by retaining the capacity to switch to clean fuel during periods of equipment malfunctions.

In considering the SCS proposal, however, EPA appears to have operated under a different, and statutorily deficient, concept of reliability. An EPA briefing paper on SCS (ICS), referred to previously, adopts the position that SCS is acceptable if it attains the ability to prevent violations of National Standards 80 per cent of the time.¹⁰ The assumption behind this conclusion, stated in the briefing paper, is that this level of reliability is all that can be attained by continuous emission control equipment, since it must be down for scheduled maintenance a certain number of days, and will be down because of malfunction an additional number of days each year.

This assumption is in error for a number of reasons. First, it assumes that the benchmark for reliability is flue gas desulfurization equipment, though using clean fuel enables 100% compliance. Second, it assumes that plants will continue to operate regardless of the fact that their pollution control equipment is not functioning—an assumption contrary to the command of the statute, as noted previously. Third, it assumes that scheduled down time will be randomly distributed, as will days of atmospheric stagnation that would assure violation of the National Standards. In fact, air pollution agencies have the power to order

scheduled maintenance of pollution control equipment to occur at times when the likelihood of stagnation is lowest. And as a matter of fact, to take one important class of sources, utilities would ordinarily schedule maintenance during the spring and fall because their system load is lowest at that time of the year; it so happens that in most areas of the country, spring and fall are also the seasons when stagnant weather is least likely to occur.

Using this false conception of the degree of reliability required by the statute, and this erroneous set of assumptions about how reliable continuous control measures actually are, the Agency was apparently willing to accept evidence from interested parties tending to show that SCS systems now in operation can achieve similar levels of reliability. In justification of its conclusion that SCS has now been shown reliable, the Agency cites three examples: two smelters operated by ASARCO in Tacoma, Washington, and El Paso, Texas; and a power plant operated by the Tennessee Valley Authority.

None of these examples constitutes adequate basis for a conclusion with respect to reliability. EPA makes no claim that any of them have shown SCS capable of preventing all violations of National and State Air Quality Standards; instead, it bases its conclusion on data allegedly showing that violations of National and State Standards at each plant have declined to some level it chooses to call tolerable. In fact, even these conclusions are extremely suspect. First, the data from the TVA plant is entirely generated by TVA, a highly interested party. EPA makes no claim that this data was ever tested independently, and it could not, as far as our investigation has been able to discover.¹¹ Second, the data from both ASARCO plants are flawed by a basic defect. State officials from both Texas and Washington State have indicated to NRDC that the dramatic reductions in violations shown in EPA's figures are in large measure owing to the operators' ability to program the system to avoid sensors. Mr. Kellogg, meteorologist with the Puget Sound Air Pollution Control Authority, stated to us that in his judgment, curtailment of operations at the Tacoma smelter begins only when the plume moves toward sensors, rather than when conditions merit curtailment to avoid excessive concentrations at any point in the region affected by the plant.¹² Likewise, officials in the El Paso local agency reported that the violations from the ASARCO smelter there increased 100% with the addition of ten new monitors.¹³

But the crucial deficiency in the data presented by EPA is even more telling. In both cases, the smelters operate in geographical locations that allow them to operate without regard to ground level concentrations much of the time. In Tacoma, the smelter is located close to Puget Sound, where PSAPCA has no meters. And in El Paso, the smelter is able to "aim" its emissions into Mexico much of the time, where no air pollution agency maintains sensors. One State official, who requested that he not be identified, told us that "the only closed-loop system" he knew about was that "a hell of a lot of copper is smelted there when the wind blew towards Mexico."¹⁴

In short, what the Tacoma and El Paso examples appear to show is the weaknesses in an SCS, rather than its strengths. Both smelters appear to have used their systems merely to learn how to avoid preventing excessive concentrations where they could be detected, rather than how to assure protecting persons from harm. It seems fair to assume that similar learning will occur elsewhere if SCS is widely adopted.

These examples point up the general weakness in SCS that it is open to manipulation in so many ways that it cannot be counted on to protect the public. Clearly, the num-

ber of "violations" depends in the first instance on the number and placement of sensors, which is in turn dependent on the financial resources of the control agency. Placement will certainly be the subject of negotiation between source and agency, and this will surely produce anomalies. The number of violations also depends on the time intervals of the standards. Washington State regulations, for example, provide a standard for a 5 minute interval, but the Tacoma smelter now operates under a blanket variance from this, apparently because it would have produced too many violations. By contrast, the National Primary Standards' short test interval is one day, assuring a maximum number of violations of 365 in a year. (The National Secondary Sulfur Oxides Standard is for a three hour interval, but it is generally conceded that it is set at such a high concentration that its regulatory effect is nil.¹⁵)

In sum, it would appear that virtually any figures on the reliability of SCS for assuring attainment of National Standards at all points affected by a source are bound to be little more than artifacts of the Standard itself and the location and number of sensors. Even more important, it would appear that the improved compliance that allegedly comes with experience is in fact little more than increased sophistication at finding the weaknesses in the monitoring systems surrounding the plant.

C. SCS Is Not an Enforceable Method for Meeting the National Standards. Compliance with SCS is inherently difficult to enforce, because the degree of compliance depends on hundreds or thousands of low visibility actions each year by the plant operator, any one of which can produce a violation of National Standards. By contrast, an enforcement agency finds it relatively easy to enforce a low sulfur fuel requirement, or requirement to install flue gas cleaning equipment, both of which require essentially one or a few very visible actions on the part of the source owner. If a State agency takes seriously the enforcement of an SCS, it will assure jobs for an entire enforcement apparatus on a permanent basis. There will have to be enforcement attorneys to present each violation to a judicial-type administrative body, and such a body to hear each case. Where such bodies already exist, SCS would guarantee imposing immense new responsibilities on them, which most are not now prepared to handle. Where a decision of an administrative agency is contested, there will be appeals to State judicial systems, with attendant expense and strain on the judicial system. Though the proposed requirement that sources forego the defense that they are not responsible for violations within a given zone (proposed App. P, § 3.2(d)(1)) will help, EPA should not fool itself into believing that meter readings showing violations will not be contested vigorously. PSAPCA's experience with the Tacoma smelter proves this point forcefully.

There will also be a continual temptation on the part of the State agency to compromise the real reliability of the system in assuring compliance with National Standards rather than "waste" the agency's resources fighting "minor" infractions.

More likely, for the reasons cited above at 7, State agencies will simply not have the manpower and competence to police the sophisticated SCS. Most State agencies do not have the budgets to support the enforcement apparatus necessary to assure compliance. For example, NRDC's investigation of the Tacoma and El Paso smelters mentioned in the EPA proposal repeatedly unearthed mistakes and uncertainties as the number of violations recorded by the agency. The El Paso agency reported violations three times a week from the ASARCO plant yet the State agency could not confirm these

Footnotes at end of article.

figures when NRDC inquired. In November the New Mexico State agency sent NRDC computer printouts of monitor readings indicating numerous violations caused by the same plant, only to inform us this month that these figures were wholly inaccurate because the "technician had mistakenly been doubling the readings." The PSAPCA presented NRDC with three different and inconsistent inventories of violations from the Tacoma smelter for the same period, and confessed to be mystified at the basis of the figures presented by EPA in the preamble to the proposed rulemaking. Kentucky State officials told NRDC that they do not monitor the TVA Paradise plant cited in the EPA preamble at all.

The proposed regulations do not even provide an enforceable means of assuring ultimate compliance with emission limitations through continuous controls. The proposed regulations' requirement of a "formal review" at suggested intervals of 5 years (proposed App. P, § 3.2(g)), and of a "description" of the source's contemplated program of research on continuous means of control (proposed App. P, § 3.2(b)(5)) would provide no means for a State agency to force a source even to undertake a particular line of research, let alone install any specific equipment.

D. The Use of SCS Cannot be Limited to a Small Number of "Isolated Sources". In proposing to authorize the use of SCS, the Agency makes a good deal of its intent to confine the use of SCS to "a limited number of sources" "under carefully controlled conditions." Proposed App. P, Introduction. Though this intent is laudable, NRDC doubts that SCS can be so confined. Once the Agency has certified that such systems are legal, reliable, and enforceable, it has placed itself on the slippery slope, with no clear way of drawing a line between a source where SCS is acceptable and where it is not. Given the heavy financial incentive for sources to seek adoption of SCS, it can be expected that sources will seek State and Federal approval for more and more dubious applications of SCS, each relying on a previously granted SCS permit granted to a source only slightly less dubious than itself. Having abandoned the high ground of prohibiting SCS altogether, EPA will inevitably be forced through court action or the threat of it, to capitulate to such demands.

The present proposal is itself a vivid illustration of this danger. When EPA first expressed its objection of SCS on grounds of reliability and enforceability, rather than the clear principle of illegality, it virtually invited source owners to produce data designed to allay the Agency's concern. This data has not been produced, and had the predictable effect, even though, as we pointed out previously, pages 13-19, it is riddled with assumptions and defects that vitiate the conclusions drawn from it. Nonetheless, given the immense industry stake in obtaining approval for SCS, and the political divisions within EPA itself, this data has been used as an excuse for the Agency to reverse its better judgment. In the much less visible circumstances of individual applications to use SCS, it can be expected that these forces will operate with even more effect.

D. The Proposed Regulations Would Allow the Use of SCS in Heavily Populated Areas. The proposal is written to contain the use of SCS to what it calls "isolated sources" of pollution. This isolation is defined in terms of other air pollution sources, rather than people, however. Proposed App. P, § 1.0. As a result, nothing prevents the application of SCS to sources such as the Tacoma and El Paso smelters, located within plume range of highly concentrated populations. In our view it is unconscionable for the Agency to adopt a policy of continued atmospheric loading in any such area. Redefining the

meaning of "isolated" to prevent this outcome, while it would not in our view make the regulation any more acceptable under the statute, would at least provide some assurance that the public would not, in large numbers, be exposed to continued high levels of sulfates and other toxic materials.

FOOTNOTES

¹ 37 Fed. Reg. 15095 (July 27, 1972).

² In its flue gas desulfurization hearings, the EPA hearing panel concluded that the installation of such technology had been impeded by the stubborn resistance of the utility industry, some segments of which admitted spending more money to fight the requirements for installing such technology than to make it workable and acceptable on their terms. U.S. EPA, Report of Hearing Panel, National Public Hearings on Power Plant Compliance with Sulfur Oxide Air Pollution Regulations (January, 1974), at 27-28.

³ *NRDC, et al., v. EPA*, No. 72-2402 (5th Cir.). This case was argued before the Court of Appeals on May 8, 1973.

⁴ The strong financial incentive for sources to drag their feet in discovering that continuous controls are available is apparent. For example, EPA now estimates the cost of installing flue gas desulfurization equipment at \$50 to \$65 per kilowatt or about \$30-40 million at an average sized coal fired power plant. U.S. EPA, Report of Hearing Panel, National Public Hearings on Power Plant Compliance with Sulfur Oxide Air Pollution Regulations (January 1974), at 55. By contrast, SCS can be installed for about \$300,000, and operated for approximately \$100,000 a year. EPA briefing paper on SCS, April 1973, p. 14. A very tall smokestack, perhaps 1,000 feet high, might come to about \$6 million in capital costs, with virtually no upkeep.

⁵ The figure includes costs for sensors, computer time, and 6 to 8 full time employees. Telephone conversation with Frank Dannkoehler, Air Pollution Control Officer, PSAPCA, Nov. 8, 1973.

⁶ Briefing paper prepared for EPA conference on SCS (ICS), April 1973, Tab. 6, at p. 3. Attached as Appendix B.

⁷ See NRDC, Action for Clean Air (1971), at 47, for figures on State agency budgets at that time. It is also worth noting that in a recent case where EPA's approval of a State Plan was challenged on the grounds that it did not provide adequate assurances of personnel and funding, the Agency defended its approval in large part by reference to the State Governor's request for an additional \$250,000 for the budget of the State Agency. *NRDC, et al., v. EPA*, —F2d—, 5 ERC (1st Cir., 1973), post judgment submission of EPA in response to Court order.

⁸ EPA briefing paper, cited previously, at Tab 6, page 4.

⁹ The conclusions stated here are widely shared in the scientific community. We have listed, as a bibliography to these comments, some of the studies in which these conclusions are stated. They are incorporated by reference, as are additional studies to the same effect not listed.

¹⁰ EPA briefing paper, cited previously, at Tab 2, page 2.

¹¹ NRDC contacted six key EPA officials (in the Office of Stationary Source Enforcement, Office of Air Quality Planning and Standards, and EPA Region IV office) concerning this data to learn that the federal agency had no monitoring data, indeed no information whatsoever, on the TVA Paradise plant other than TVA's own reports.

¹² Telephone interview with Mr. Kellogg, PSAPCA, November 8, 1973.

¹³ Telephone interview with Rubin Christmeyer, El Paso City-County Health Unit, October 26, 1973.

¹⁴ This statement is confirmed in the "Report of Investigation at American Smelting and Refining Company, El Paso, Texas,"

Texas APCS, Feb. 2-4, 1971, referenced in the Federal Register notice to this proposed rulemaking, 38 Fed. Reg. 25700, Sept. 14, 1973. The report states, (p. 7):

"There is not curtailment everyday. When the wind is from the Northeast, regardless of the weather conditions, the plant does not curtail because the plume goes into Mexico."

¹⁵ See Vaughn, Dennis J. and Edward J. Stanek II, "Sulfur Dioxide Standards: Primary More Restrictive Than Secondary?", *Journal of the Air Pollution Control Association*, December 1973, pp. 1039-1041; and Comments on Proposed Revision of Environmental Protection Agency Regulations on Sulfur Oxides Secondary Standards, submitted by Louis Slesin, Dept. of Urban Studies and Planning, MIT, July 11, 1973.

BIBLIOGRAPHY

Ackermann, W. C., R. H. Harmejon, R. A. Sinclair. 1970. Some long-term trends in water quality of rivers and lakes. *Trans. Amer. Geophys. Union*. 51:516-522.

American Chemical Society. 1969. *Cleaning Our Environment. The Chemical Basis for Action*. American Chemical Society, Wash., D.C. 249 pp.

Barrett, E. & G. Brodin. 1955. The acidity of Scandinavian precipitation. *Tellus* 7: 251-257.

Bertine, K. K. & E. D. Goldberg. 1971. Fossil fuel combustion and the major sedimentary cycle. *Science* 173: 233-235.

Bolin, Bert (Ed.) 1972. *Supporting Studies to Air Pollution Across National Boundaries. The impact on the environment of sulfur in air and precipitation. Sweden's case study for the United Nations Conference on the Human Environment*. Royal Ministry of Foreign Affairs Royal Ministry of Agriculture, Stockholm.

Contains the following articles:
Bendel, E. 1972. Effects of atmospheric sulfur pollutants on the durability of outdoor coatings for wood.

Granat, Lennart. 1972. Deposition of sulfate and acid by precipitation in northern Europe.

Granat, Lennart. 1972. On the relationship between pH and the chemical composition in atmospheric precipitation.

Ingelstam, L. 1972. The systems structure and the evaluation of future trends in a study of sulfur as an environmental pollutant.

Johannesson, M. 1972. Reducing emissions of sulfur dioxide at minimum cost.

Jonsson, B. & R. Sundberg. 1972. Has the acidification of atmospheric pollution caused a growth reduction in Swedish forests? A comparison of growth regions with different soil properties.

Oden, S. & T. Ahl. 1972. The long-term changes in the pH of lakes and rivers in Sweden.

Oden, S., R. Andersson & Mats Bartling. 1972. The long-term changes in the chemistry of soils in Scandinavia due to acid precipitation.

Rodhe, H. 1972. A study of the sulfur budget for the atmosphere over northern Europe.

Sehlin, E. 1972. The effect of atmospheric sulfur pollutants on the durability of anti-rust paints.

Tamm, C. O. and A. Aronsson. 1972. Plant growth as affected by sulfur compounds in polluted atmosphere. A literature survey.

Tapper, L. and V. Kucera. 1972. The effect of atmospheric sulfur pollutants on historical buildings of sandstone and limestone in Sweden.

Working Party for Preparation of Sweden's Case Study. 1972. Needs for research concerning sulfur in air and precipitation and its impact on the environment.

Bormann, F. H. and G. E. Likens. Acid rain and ecosystem nutrient cycling. Unpublished manuscript. Yale School of Forestry and Environmental Studies, New Haven, Connecticut.

Buffalini, M. 1971. Oxidation of sulfur dioxide in polluted atmospheres—A review. *Environmental Science and Technology* 5/8: 685-700.

Carroll, D. 1962. Rainwater as a chemical agent of geologic processes—A review. *Geol. Surv. Water Supply paper*, 1535—G. 81 pp.

Crowther, C. & H. G. Rusman. 1911. The nature, distribution and effects upon vegetation of atmospheric impurities in and near an industrial town. *J. Agric. Sci.* 4: 25-55.

Dethier, B. E. 1966. Precipitation in New York State. *Cornell Univ. Agric. Expt. Station, Ithaca, N.Y. Bull.* 1009, 78 pp.

Engstrom, A. 1971. Air pollution Across National Boundaries. The Impact on the Environment of Sulfur in Air and Precipitation. Rept. of the Swedish Preparatory Committee for the U.N. Conference on Human Environment. Knut. Boktryckeriet P.A. Norstedt & Soner, Stockholm. 96 pp.

Finklea, John F., Carl M. Shy, et al. Health Consequences of Sulfur Oxides: Summary and Conclusions Based Upon Chess Studies of 1970-1971. (draft report) Human Studies Laboratory, National Environmental Research Center, EPA, August 15, 1973.

Fisher, D. W. 1968. Annual variations in chemical composition of atmospheric precipitation eastern North Carolina and southeastern Virginia. *U.S. Geol. Survey Water-Supply paper* 1535—M 21 pp.

Fisher, D. W., A. W. Gambell, G. E. Likens, and F. H. Bormann. 1968. Atmospheric contributions to water quality of streams in the Hubbard Brook Experimental Forest, New Hampshire. *Water Resources Research* 4: 1115-1126.

Gambell, A.W. & D.W. Fisher. 1966. Chemical composition of rainfall in eastern North Carolina to southeastern Virginia. *Geol. Survey Water-Supply paper* 1535—K. U.S. Gov't Printing Office Washington, D.C. 41 pp.

Gordon, C.G. Short-long gnifer needle syndrome. Interim Rept. unpublished manuscript. University of Montana, Missoula, Mont. 23 pp.

Gorham, E. 1958. Free acid in British soils. *Nature* 181: 106.

Hogstrom, U. Residence Time of Sulfurous Air Pollutants from a Local Source During Precipitation. *AMBIO* 1973.

Holden, A.V. 1966. A chemical study of rain and stream waters in the Scottish Highlands. *Dept. of Agriculture and Fisheries. Edinburgh, Scotland. Freshwater and Salmon Fisheries Research* 37: 3-17.

Junge, C.E. 1960. Sulfur in the atmosphere. *J. Geophys. Res.* 65: 227-237.

Junge, C.E. 1963. Air Chemistry and Radioactivity. Academic Press, New York. 382 pp.

LeLand, E.W. 1952. Nitrogen and sulfur in the precipitation at Ithaca, N.Y. *Agron. Journal* 44/4: 172-175.

Likens, G.E. 1972. The chemistry of precipitation in the central finger lakes region. *Cornell University Water Resources and Marine Sciences Center. Ithaca, N.Y. Technical Report* 50. 47 pp.

Likens, G.E., F.H. Bormann & N.M. Johnson. 1972. Acid rain. *Environment* 14/2: 33-40.

Lodge, J.R., Jr., J.B. Pate, W. Basbergill, G.S. Swanson, K.C. Hill, E. Lorange, & A.L. Lazrus. 1968. Chemistry of United States precipitation. Final rept. on the Nat'l Precip. Sampling Network National Center for Atmospheric Research. Boulder, Colorado. 66 pp.

Ludholm, B. 1970. Interaction between oceans to terrestrial ecosystems. pp. 195-201. *In Environmental Pollution. Springer-Verlag. New York.* 218 pp.

Massachusetts Institute of Technology. 1970. Man's Impact on the Global Environment. Report of the Study of Critical Environmental Problems. MIT Press, Cambridge, Mass. 319 pp.

Miller, Stephen, Asst. for Scientific Affairs, & Carol Salzberg, OPE, EPA, Identification of Ecological Research Needs Prior to SO₂ Long Term Standard Setting, May 25, 1973.

Overrein, L.N. 1972. Sulfur pollution patterns observed; leaching of calcium in forest soil determined. *Ambio* 1/4: 145-147.

Pearson, F.J., Jr., & D.W. Fisher. 1971. Chemical composition of atmospheric precipitation in the northeastern United States. *Geological Survey Water-Supply paper* 1535—P. U.S. Gov't Printing Off. Washington, D.C. 23 pp.

Rall, Dr. David P., NIH, A Review of the Health Effects of Sulfur Oxides, October 9, 1973.

Reisquum, H. 1970. Sulfur: Simulated long-range transport in the atmosphere. *Science* 170: 318-320.

Shearer, S. David, Quality Assurance and Environmental Monitoring Laboratory, EPA, Memorandum on Five Particulate Sulfates and Nitrates: Urban Levels and Evidences of Regional Deterioration, September 19, 1973.

Shy, Carl M., Acting Director, Human Studies Laboratory Div., EPA, Memorandum on Evidence for Change in Significant Harm Levels, October 30, 1972.

Terraglio, P.P. & R.M. Manganelli. 1967. The absorption of atmospheric sulfur dioxide by water solutions. *J. of the Air Pollution Control Association*. 17/6: 403-406.

U.S. ENVIRONMENTAL
PROTECTION AGENCY,
May 2, 1974.

Subject: Definition of Significant Risk.
From: J. F. Finklea, M.D., Director, NERC-RTD.

To: Bernard J. Steigerwald.

Attached is a draft of the requested document defining significant risk to health. The delay in preparation of this draft was caused by our need to do additional work on the acid-sulfate aerosol problem before writing this paper.

LEVELS OF AIR POLLUTANTS ASSOCIATED WITH
ADVERSE HEALTH EFFECTS AND WITH SIGNIFICANT RISKS TO HEALTH

(By J. F. Finklea, D. I. Hammer, and G. I. Love)

Estimates of pollutant levels associated with adverse health effects can provide a rational point of departure from which to assess the impact of ambient air quality deterioration. The soundest of such estimates are likely to be ascertained from the current U.S. Primary Air Quality Standards. The Clean Air Act requires that primary air quality standards be set to fully protect the public health and that these standards contain an adequate margin of safety. Thus the law assumes there exists a "no known effects" threshold for each pollutant and for every adverse health effect. Moreover, the Clean Air Act requires that the primary standards be set to fully protect both specifically susceptible subgroups and health members of the population. One can define significant risk in many ways, the most prudent definition would be any adverse health effect, in other words, the present standards without any safety margin. Another more troublesome but undeniably defensible definition would be the threshold concentration at which there is a demonstrable increase in mortality.

Adverse health effects include both the aggravation of preexisting diseases and increased frequency of health disorders. In addition, good preventive medicine would dictate that evidence for an increased risk of future disease is an adverse health effect. Discussion of what constitutes an adverse effect may become quite vigorous at times. Most reasonable men would agree that mortality (death) and morbidity (illness) constitute adverse effects. However, pollutant exposures are usually not the sole cause of death or the sole cause of any single disease or group of disorders. Furthermore, with few exceptions unique disorders do not follow exposure to the pollutants for which we have established primary ambient air

quality standards. There is even more room for honest disagreement when one tries to ascertain which changes in body function indicate a risk for clinical disease and which are either simply adaptive or of uncertain significance.

Especially susceptible population segments include persons with pre-existing diseases which may be aggravated by exposure to elevated levels of pollutants in the ambient air. Some quantitative information is available on the aggravating effects of air pollutants on asthma, chronic obstructive lung disease and chronic heart disease. Asthmatics constitute two to five percent of the general population; three to five percent of the adult population report persistent chronic respiratory disease symptoms; and seven percent of the general population report heart disease severe enough to limit their activity. The distribution of these conditions by age, sex, ethnic group, social status and place of residence is better defined by other reports. One could legitimately be concerned about the aggravating effects of air pollutants on a number of other susceptible population segments; persons with hemolytic neoplasms, premature infants and patients with multiple handicaps. Little quantitative information exists about the aggravating effects of pollutants on these individuals.

In addition to the aggravation of symptoms in persons who are already ill, air pollutants may also increase the risk in the general population for the development of certain disorders. Many if not all of the general population may experience irritation symptoms involving the eyes or respiratory tract during episodic air pollution exposures. Similarly, even healthy members of the general population may experience impaired mental activity or decreased physical performance after sufficiently high pollution exposures. The general population, especially families with young children, is almost universally susceptible to common acute respiratory illnesses including colds, sore throats, bronchitis and pneumonia. Air pollutants can increase either the frequency or severity of these disorders.

Personal air pollution with cigarette smoke, occupational exposures to irritating dusts and fumes and possibly familial factors increase the risk of developing chronic obstructive lung disease and respiratory cancers in large segments of our population. Ambient air pollutants also can contribute to the development of these disorders. A few animal studies indicate that air pollutants may also accelerate atherosclerosis and coronary artery disease. These conditions affect most of our adult population even though they may be clinically silent. There is legitimate concern but few reliable studies to indicate that air pollutants may cause embryotoxicity, fetotoxicity, teratogenesis and mutagenesis. It is difficult to define which segment of the unborn population might be most at risk. In fact these events are poorly recorded and the relevant existing data are not readily accessible.

Safety margins contained in the present primary air quality standards may be estimated by comparing the present standards to the best judgement estimate of the effects threshold for each pollutant. As previously mentioned, one method of defining significant risk is to accept the best judgement estimates for adverse health effects and sacrifice the safety margins summarized by pollutant in Table 1.

Sulfur dioxide, acid sulfate aerosols and total suspended particulates are considered together because the assessment of their effects is based largely upon community studies in which it is difficult if not impossible to disentangle the effects attributable to one pollutant from those attributable to another pollutant or to a mixture of the pollutants. Studies which were initially thought to have considered isolated exposures to ur-

ban particulates really involved exposures containing substantial amounts of acid aerosols or particulate sulfates. With regard to the short-term standards, aggravation of pre-existing cardiorespiratory symptoms in the elderly, aggravation of asthma and irritation of the respiratory tract seem to occur at a level lower than those permitted by the relevant primary ambient air quality standards.

The effects noted at sulfur dioxide and suspended particulate levels lower than the standard are in our opinion most likely due to elevated levels of finely divided suspended particulate acid sulfate aerosols which arise from reactions involving sulfur dioxide, particulates and other pollutants in the atmosphere. Our best judgement estimates for threshold levels of suspended sulfates in ambient air are further detailed in Table 2 along with illustrative health risks that might accompany exposures substantially above each threshold. Suspended sulfates are the best available though far from perfect proxy for acid sulfate aerosol exposures.

Three points are worth emphasizing: first, the estimates for sulfur oxides and particulates are based on community studies; second, the estimated effects thresholds for particulate sulfates are an order or magnitude lower than those for sulfur dioxide or total suspended particulates; and third, the safety margins present in the ambient air quality standards for sulfur oxides and particulates are quite modest being in all cases less than the standard itself. For the long-term standards, one must realize that average estimates do not always adequately consider the effects of annual repeated short-term peak exposures. For example the lowest best judgment estimate for an effects threshold for increased prevalence of chronic respiratory disease symptoms is based upon annual average estimates in a smelter community where repeated short-term peak exposures occurred. The lowest annual average exposures involving less marked fluctuations in short-term levels were considerably higher. The safety margins contained in the annual average standards seem only slightly more adequate than was the case with the short-term standards.

Nitrogen oxide exposures are now controlled on the basis of an ambient air quality standard for nitrogen dioxide. Investigators have expressed concern that exposures to organic nitrates, nitrous acid, nitric acid and suspended particulate nitrates have not been

adequately considered. In fact, preliminary epidemiologic data have associated the aggravation of asthma with suspended nitrate levels of about 4–6 $\mu\text{g}/\text{m}^3$ per 24 hours. There is no short term Federal standard for nitrogen dioxide. The existing long-term standard, seems adequate with a margin of safety somewhat greater than those for sulfur oxides and suspended particulates.

Adverse health effects attributable to carbon monoxide differ markedly from those associated with the other ambient air quality pollutants. Decreased oxygen transport and interferences with tissue respiratory mechanisms result in a different array of worrisome effects. Clinical studies of carbon monoxide effects predominate. A limited number of experimental animal studies and population studies involving certain of the adverse effects associated with cigarette smoking may also be relevant. The existing 8 hour and 1 hour standards permit a 130% and 82% margin of safety, respectively at sea level. At higher altitudes (≥ 1500 meters). These safety margins would both be less than 100%.

Adverse health effects associated with photochemical oxidant exposures involve a different set of considerations. Photochemical oxidants include compounds other than ozone which are quite irritating to the eyes. Ozone itself is thought to be radiomimetic thus focusing concern on accelerating aging, increased risk for malignancies, mutagenesis, embryotoxicity and teratogenesis. Information on susceptibility to acute respiratory disease, risk for mutations and impaired fetal survival is limited to animal studies. Photochemical oxidants are of interest for another reason, many of the studies were conducted some years ago before research methodologies were refined. These pioneer studies may not have adequately addressed the problem. In estimating effects thresholds, there is little uncertainty regarding irritation phenomenon and a great deal of uncertainty when considering other adverse effects. No estimates are possible for two of the more severe health effects—accelerated aging and malignancies. It is also worth emphasizing that assessment of potentially grave health effects depends on a small number of largely unconfirmed studies.

Several factors must be kept in mind when considering the calculation of safety margins presented in Table 1. First, safety margins are not as precise as the percentage estimates would at first seem to indicate because of the underlying uncertainties in measurement

methods and in estimates of effects thresholds. Second, consistency in safety margins was not a major consideration in setting primary ambient air quality standards. Third, the apparent margins of safety have decreased as more complete health studies on susceptible populations have become available. Fourth, the safety margins contained in the primary ambient air quality standards are much smaller than those maintained for the control of ionizing radiation and most environmental chemicals. In no case does the safety margin for a pollutant clearly exceed the standards for that pollutant. Even the most extreme best judgment safety margin is less than ten times the relevant standard. Finally, there is little or no safety margin associated with the sulfur dioxide-suspended particulate-fine particulate sulfate combination. In general, therefore, little or no deterioration of air quality can occur without a subsequent increase in adverse health effects.

Another definition of significant risk might be the earliest level at which increases in daily mortality are observed. This definition can be reasonably applied only to sulfur dioxide, acid sulfate aerosols measured as suspended sulfate and total suspended particulate. Such values are summarized in Table 3. It is our best judgement that there is a significant risk for increased mortality over an urban region for 24 hours if sulfur dioxide levels exceed 400 $\mu\text{g}/\text{m}^3$, if suspended sulfates exceed 25 $\mu\text{g}/\text{m}^3$ or if total suspended particulates exceed 300 $\mu\text{g}/\text{m}^3$. Exposures of this magnitude or larger to small areas where people do not spend an entire day or where susceptible infirmed or apparently healthy elderly persons do not reside might still be deemed permissible. For example, acceptable occupational exposures involving limited numbers of health prescreened adults exposed for 40 hours or less each week might be allowed to exceed significant risk levels for the general population.

Another approach to the significant risk problem would be to recognize the lowest achievable ambient pollution levels consistent with competing broad national goals, calculate the probable resulting unavoidable health damages and endeavor to reduce these health damages as soon as possible. Finally, one could attempt a formal cost-benefit analysis but it is likely that this approach would be most controversial at the present time because health damage functions are not yet precisely defined.

TABLE 1.—EFFECTS THRESHOLD, BEST CHOICE SIGNIFICANT RISK LEVELS AND SAFETY MARGINS CONTAINED IN PRIMARY AMBIENT AIR QUALITY STANDARDS

Pollutant	Lowest best judgment estimate for effects threshold and best choice for significant risk levels			U.S. primary air quality standard	Margin of safety* (percent)
	Concentration	Averaging time	Adverse health effect		
Sulfur dioxide	300 to 400 $\mu\text{g}/\text{m}^3$	24 hour	Mortality increase	365 $\mu\text{g}/\text{m}^3$	None
Total suspended particulates	91 $\mu\text{g}/\text{m}^3$	Annual	Increased frequency of acute respiratory disease	80 $\mu\text{g}/\text{m}^3$	14
	250 to 300 $\mu\text{g}/\text{m}^3$	24 hour	Mortality increase	260 $\mu\text{g}/\text{m}^3$	None
	70 to 250 $\mu\text{g}/\text{m}^3$	do	Aggravation of respiratory disease	260 $\mu\text{g}/\text{m}^3$	None
Suspended sulfates	100 $\mu\text{g}/\text{m}^3$	Annual	Increased frequency of chronic bronchitis	75 $\mu\text{g}/\text{m}^3$	33
	10 $\mu\text{g}/\text{m}^3$	24 hour	Increased infections in asthmatics	None	None
	15 $\mu\text{g}/\text{m}^3$	Annual	Increased lower respiratory infections in children	None	None
Nitrogen dioxide	140 $\mu\text{g}/\text{m}^3$	do	Increased severity of acute respiratory illness in children	100 $\mu\text{g}/\text{m}^3$	40
Carbon monoxide	23 $\mu\text{g}/\text{m}^3$	8 hour	Diminished exercise tolerance in heart patients	10 $\mu\text{g}/\text{m}^3$	**130
	73 $\mu\text{g}/\text{m}^3$	1 hour	Diminished exercise tolerance in heart patients	40 $\mu\text{g}/\text{m}^3$	**82
Photochemical oxidants	200 $\mu\text{g}/\text{m}^3$	do	Increased susceptibility to infection	160 $\mu\text{g}/\text{m}^3$	25

*Safety margin equals effects threshold minus standard divided by standard X 100.

**Safety margins based upon carboxyhemoglobin levels would be 100 percent for the 8 hour standard and 67 percent for the 1 hour standard.

TABLE 2.—THRESHOLD AND ILLUSTRATIVE HEALTH RISKS FOR SELECTED AMBIENT LEVELS OF SUSPENDED SULFATES

Adverse health effect	Threshold concentration and exposure duration	Illustrative health risk		
		Definition	Level	Sulfur dioxide equivalent
Increase in daily mortality	25 $\mu\text{g}/\text{m}^3$ for 24 hr or longer	21% percent increase in daily mortality	38 $\mu\text{g}/\text{m}^3$ for 24 hr	600 $\mu\text{g}/\text{m}^3$ for 24 hr
Aggravation of heart and lung disease in the elderly	9 $\mu\text{g}/\text{m}^3$ for 24 hr or longer	50 percent increase in symptom aggravation	48 $\mu\text{g}/\text{m}^3$ for 24 hr	750 $\mu\text{g}/\text{m}^3$ for 24 hr
Aggravation of asthma	6 to 10 $\mu\text{g}/\text{m}^3$ for 24 hr	75 percent increase in frequency of asthma attacks	30 $\mu\text{g}/\text{m}^3$ for 24 hr	450 $\mu\text{g}/\text{m}^3$ for 24 hr
Excess acute lower respiratory disease in children	13 $\mu\text{g}/\text{m}^3$ for several yr	50 percent increase in frequency	20 $\mu\text{g}/\text{m}^3$ annual average	100 to 250 $\mu\text{g}/\text{m}^3$ annual average
Excess risk for chronic bronchitis	10 to 15 $\mu\text{g}/\text{m}^3$ for up to 10 yr	50 percent increase in risk	15 to 20 $\mu\text{g}/\text{m}^3$ annual average	100 to 250 $\mu\text{g}/\text{m}^3$ annual average

TABLE 3.—BEST JUDGMENT ESTIMATES FOR "SIGNIFICANT RISK" LEVELS FOR EXPOSURES TO SULFUR OXIDES AND SUSPENDED PARTICULATES USING THE MORTALITY CRITERIA

Adverse effect	24-hour exposure level (ug/m ³)		
	Sulfur dioxide	Suspended sulfate	Total suspended particulates
Mortality threshold.....	400	25	300

ENERGY REQUIREMENTS ARE BALANCED WITH ENVIRONMENTAL CONSIDERATIONS—COAL PROVIDED WITH PLAN TO AID FUEL NEEDS

Mr. RANDOLPH. Mr. President, the conference report on the Energy Supply and Environmental Coordination Act of 1974 is the end product of more than 6 months' work in the Senate. This legislation is concerned with matters that were earlier addressed in the Emergency Energy Act, S. 2589, which was unwisely vetoed by the President. It contains provisions to alleviate conditions like those imposed on this country by the severe energy shortage which struck last winter and which could affect us again.

The conference report before the Senate is not a hastily conceived measure. Nor is it one written in a panic induced by sharply reduced foreign petroleum supplies. The energy crisis, I must emphasize, is not a situation that developed suddenly last autumn. It had been developing for many years as our appetite for oil grew faster than domestic production. The Arab oil embargo merely precipitated a serious shortage earlier than expected.

The Energy Supply and Environmental Coordination Act is our response to a new set of energy and environment realities with which we must live in the years ahead. The production of energy in amounts adequate for our national needs is an attainable goal compatible with our commitment to environmental protection. The writing of this legislation took place with that conviction in mind.

The provisions of this measure were determined following a series of productive conferences with conferees from the House of Representatives. I am particularly appreciative of the contributions of my able colleague from West Virginia, Representative HARLEY O. STAGGERS, the distinguished chairman of the House Commerce Committee. His awareness of the issues and his deep concern for the problems we faced were evident in his approach to the task of the conference. He exhibited leadership that enabled us to bring our deliberations to a successful conclusion with realistic and workable legislation.

Major contributions to our efforts were made by Senator EDMUND S. MUSKIE, the knowledgeable chairman of our Subcommittee on Environmental Pollution, and by the diligent Senator from Tennessee (Mr. BAKER), the ranking minority member of the committee. I am likewise indebted, for their helpful participation and contributions, to Senator MONTAYA and Senator STAFFORD, the other conferees from the Public Works Committee.

The Senate was also represented in the conference by members of the Com-

mittee on Interior and Insular Affairs, including the distinguished chairman of that committee, Senator JACKSON, and Senators BIBLE and FANNIN.

Mr. President, a major feature of this legislation are provisions facilitating many electric powerplants to switch to coal from other fuels. Coal is our most abundant domestic energy resource, one for which we need not rely on foreign countries. If this Nation is to be successful in approaching energy self-sufficiency in the years ahead, we must increase our utilization of America's most abundant energy resource—coal.

This legislation serves as a clear signal that a national commitment to a greater use of coal is an essential part of our natural energy production system. Furthermore, it reflects congressional belief that the use of coal is not incompatible with environmental quality enhancement. Under the provisions of this measure, according to the EPA, some 23 electric generating plants now fueled with oil or natural gas should be able to convert to coal. These plants involve approximately 40 generating units and produce a substantial amount of power.

It is important to stress that conversion to coal is not permitted in any area where such conversion would endanger public health or violate primary air quality standards. Nevertheless, according to preliminary data furnished by the EPA, units should be able to immediately convert to coal consistent with the requirements set forth in this conference agreement. An additional 5 powerplants, involving 9 units, before conversion will require additional particulate controls and some 7 more powerplants, or 11 units, will require either low sulfur coal or stack gas scrubbers.

In recognition of the present public debate on the availability of sulfur oxide control, encouragement is provided under the conference agreement to the preferential use of low sulfur coal, at this time, rather than stack gas scrubbers.

The conversion of these 23 powerplants would require approximately 23 million tons of coal per year, or a 4-percent increase in our national demand for coal.

The authority granted by this legislation for powerplants to convert to coal carries with it a challenge. The coal industry, the utility industry and the suppliers of pollution control equipment all must work together so that coal can achieve its potential in meeting the energy needs of our country and the American people. The passage of this legislation also will be a signal of our confidence in coal as a reliable source of energy in the future and our commitment to energy self-sufficiency. Such a signal should encourage the flow of capital resources to the mining industry and thus enable it to make the substantial investments necessary for assured, long-term coal supplies.

Mr. President, adoption of this conference report by the Senate and its signing by the President will not relieve us, however, of our responsibilities in the energy field. Despite some relief since the lifting of the Arab oil embargo, the energy crisis is far from being resolved.

Government must return without delay to the formulation and implementation of a national fuels and energy policy aimed at freeing this Nation from excessive reliance on foreign energy supplies. It has often been pointed out that our country, with 7 percent of the world's population, consumes more than one-third of the world's energy. This fact makes it essential that energy occupy a continuing and prominent position in our planning for the future.

Other energy legislation will be brought to the Senate. Today we have an opportunity to take an important step forward in meeting immediately our country's energy requirements in a realistic manner, and I urge the Senate to take that step by approving this conference report.

Mr. BAKER. Mr. President, I join my colleagues, the able chairmen of the Subcommittee on Environmental Pollution, the Senator from Maine (Mr. MUSKIE), and of the full committee, the Senator from West Virginia (Mr. RANDOLPH), in congratulating the conferees on completing action on this valuable and necessary legislation.

The Senate version of H.R. 14368 made a number of improvements over the House version of the bill, and I referred to those when the bill was considered on the floor of the Senate. I am pleased to report that the conference version before us is still better in a number of respects.

I believe that the procedures and criteria have been much improved with regard to authority that the Federal Energy Administrator will be given to order powerplants and other major fuel burning sources to convert to coal.

The Federal Energy Administrator will make a number of determinations regarding the practicability of conversions and with regard to whether those plants have the capability and necessary plant equipment to convert. The Environmental Protection Agency, however, will make the vital determinations as to when and under what conditions such conversions can take place compatibly with Clean Air Act requirements. This division of responsibility, which was a feature of the Senate version of the bill, has been improved by dovetailing the administrative actions required of both agencies. For example, when an FEA order to convert to coal is proposed, EPA must indicate how soon and under what conditions the Clean Air Act requirements can be met. Only after such EPA notification can the coal conversion order take effect. This assures that we can have the maximum practicable conversion to coal over the years ahead while assuring that requirements for clean and healthful air are achieved.

I have faith that the momentum toward cleaner air which was begun with the 1970 amendments to the act will continue unabated. A principal reason for this faith is that—as the conference report clearly provides—before a long-term order by FEA to convert to coal takes effect and before the corresponding long term compliance date extension is granted by EPA—that is, one which extends beyond June 30, 1975, and which permits a utility to burn coal until

1979—EPA must approve a compliance plan, which includes the means for and schedule of compliance, that assures both that interim requirements can be met and that full compliance with more stringent requirements will be attained by 1979.

This means that, for a compliance date extension beyond June 30, 1975, a stationary source which converts to coal must comply with primary standard conditions—low sulfur fuel, intermittent controls, continuous emission control devices, or a combination of these—and regional limitations, and, as soon as practicable but not later than 1979, must, pursuant to the plan it submits and has approved before the extension is granted, obtain either a long-term supply of complying coal or, if such coal is not available, another source of coal and a contract or other enforceable obligation for a continuous emission control device. In either event, the source must meet, by the end of its compliance date extension, the most stringent degree of emission control that it would have had to meet by 1975 or 1977 under the State implementation plan.

These requirements should not delay coal conversions since EPA is required to develop the regulations governing plans for means for and schedules of compliance within 90 days after enactment and must make the requisite findings precedent to granting a compliance date extension within 60 days after it is proposed.

The requirement in the conference report and in the statement of managers for a long-term supply of low-sulfur coal as the preferred method of compliance with the Clean Air Act requirements is one which I sponsored and which I support fully. This does not mean that the conferees intend to push utilities toward the use of low sulfur western coal. On the contrary, the long-term contracts are intended to provide a period in which high Btu, low sulfur eastern coal can be developed by the opening of new deep mines.

I am concerned about the conference report provision that powerplants unable to obtain sufficient low sulfur coal or coal alternatives to meet emission limitations applicable under the law must undertake to obtain continuous emission reduction systems which are capable of meeting these limitations by 1979 while burning high sulfur coal. Although the term "continuous emission reduction system" is broad enough to encompass a broad range of technology, I foresee the possibility that certain specific solutions to the problem of sulfur oxide emissions might receive undue emphasis. For this reason, I want to emphasize that the term is meant to indicate any technology involving advanced techniques of combustion of coal—such as the fluidized-bed process—or after-treatment of combustion gases—for example flue gas desulfurization, better known as scrubber technology.

In my estimation, processes which attempt to after-treat combustion gases will not provide the ultimate solution to the sulfur problem. Such processes are of necessity ancillary to the power gener-

ation function and must therefore result in compounding power generation problems.

The limestone scrubbing technology, for instance, requires the reheating of cooled stack gases. This and other aspects of the technology entail a considerable cost in energy. Most current scrubbers experience problems with clogging and scaling, and compound environmental problems because they require large amounts of surfaced-mined materials and because they generate large quantities of limestone slurry which must be recovered, stored by ponding or otherwise disposed of. Eventually these problems with scrubbers may be resolved through technological advances. I recognize that only with a sufficient number of demonstrations by industry can this or any other technology be developed. We will make a serious mistake, however, if we dedicate technical research capacities only to the resolution of these problems to the exclusion of other technologies which involve fewer secondary environmental and energy problems than scrubbers. I believe that, in time, liquid or gaseous fuels derived from coal, solvent-refined coal, and fluidized bed combustion will prove to be better alternatives if the coal and utility industries make large scale efforts to bring these technologies to fruition. Meanwhile, I trust that the Administrator of EPA will not proceed to order all powerplants converted to scrubbers before they are proved reliable, efficient, and cost effective.

Mr. President, the provisions of the conference report with respect to coal conversion and clean air requirements for stationary sources represent a remarkable conciliation of what have appeared to be incompatible goals, that is, further use of our plentiful domestic fuel reserves and continued progress toward clean air. In these objectives and in its specific provisions, I believe that the bill may well serve as a model for other changes in the Clean Air Act that will be required in the months ahead.

I am reassured by the fact that we are at last dealing in this conference report with the critical need of the automobile industry for some temporary extensions in the very stringent requirements which were laid down in the 1970 amendments. This will permit the auto makers to achieve maximum fuel economy, to explore alternative types of engines, and to make reliable progress toward taking the automobile out of the air pollution problem.

I support fully the action the committee has taken today to reaffirm the intention of the National Environmental Policy Act that such environmental regulatory actions as those under the Clean Air Act are not among those for which environmental impact statements are needed. NEPA was intended to inject environmental consciousness into agencies with construction, development and other such responsibilities. It would be redundant and in many cases counterproductive if applied to EPA's environmental regulatory activities.

The extension of the authorizations for appropriations for the Clean Air Act

contained in this legislation means that we will be able to consider other changes in the act that may be required without the pressing deadlines of funding expiration facing us.

In conclusion, Mr. President, I wish to congratulate my colleagues, the distinguished chairman of the Public Works Committee (Mr. RANDOLPH), the most able and dedicated subcommittee chairman (Mr. MUSKIE), the knowledgeable ranking minority member of the subcommittee (Mr. BUCKLEY), and my able minority colleague on the conference committee (Mr. STAFFORD). All of these gentlemen have contributed immeasurably to developing legislation which is much improved over the previous versions which were considered earlier in this session. I urge prompt and unanimous support of this legislation by my Senate colleagues and prompt signature of the bill by the President.

The PRESIDING OFFICER. The question is on agreeing to the conference report.

The conference report was agreed to.

SPECIAL ENERGY RESEARCH AND DEVELOPMENT APPROPRIATION ACT, 1975

The Senate continued with the consideration of the bill (H.R. 14434) making appropriations for energy research and development activities of certain departments, independent executive agencies, bureau offices, and commissions for the fiscal year ending June 30, 1975, and for other purposes.

Mr. BIBLE. Mr. President, I yield back the remainder of my time.

Mr. HASKELL. I yield back the remainder of my time.

The PRESIDING OFFICER. The question is on agreeing to the amendment. On this question the yeas and nays have been ordered, and the clerk will call the roll.

Mr. McCLELLAN. Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The second assistant legislative clerk proceeded to call the roll.

Mr. McCLELLAN. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

The question is on agreeing to the amendment of the Senator from Colorado. The yeas and nays have been ordered, and the clerk will call the roll.

The assistant legislative clerk called the roll.

Mr. ROBERT C. BYRD. I announce that the Senator from Indiana (Mr. BAYH), the Senator from Arkansas (Mr. FULBRIGHT), and the Senator from Louisiana (Mr. LONG), are necessarily absent.

I further announce that the Senator from Montana (Mr. METCALF) and the Senator from Missouri (Mr. SYMINGTON), are absent because of illness.

I also announce that the Senator from Iowa (Mr. CLARK) is absent because of illness in the family.

I also announce that the Senator from

Wyoming (Mr. McGEE) is absent on official business.

I further announce that, if present and voting, the Senator from Iowa (Mr. CLARK) would vote "yea."

Mr. GRIFFIN. I announce that the Senator from Oregon (Mr. HATFIELD), the Senator from New York (Mr. JAVITS), the Senator from Maryland (Mr. MATHIAS), and the Senator from Illinois (Mr. PERCY) are necessarily absent.

I further announce that, if present and voting, the Senator from Oregon (Mr. HATFIELD) would vote "nay."

The result was announced—yeas 22, nays 67, as follows:

[No. 252 Leg.]

YEAS—22

Abourezk	Hathaway	Mondale
Biden	Huddleston	Muskie
Chiles	Hughes	Nelson
Church	Johnston	Proxmire
Gravel	Kennedy	Ribicoff
Hart	McIntyre	Schweiker
Hartke	Metzenbaum	Stevenson
Haskell		

NAYS—67

Alken	Domenici	Moss
Allen	Dominick	Nunn
Baker	Eagleton	Packwood
Bartlett	Eastland	Pastore
Beall	Ervin	Pearson
Bellmon	Fannin	Pell
Bennett	Fong	Randolph
Bentsen	Goldwater	Roth
Bible	Griffin	Scott, Hugh
Brock	Gurney	Scott,
Brooke	Hansen	William L.
Buckley	Helms	Sparkman
Burdick	Hollings	Stafford
Byrd,	Hruska	Stennis
Harry F., Jr.	Humphrey	Stevens
Byrd, Robert C.	Inouye	Taft
Cannon	Jackson	Talmadge
Case	Magnuson	Thurmond
Cook	Mansfield	Tower
Cotton	McClellan	Tunney
Cranston	McClure	Weicker
Curtis	McGovern	Williams
Dole	Montoya	Young

NOT VOTING—11

Bayh	Javits	Metcalf
Clark	Long	Percy
Fulbright	Mathias	Symington
Hatfield	McGee	

So Mr. HASKELL's amendment was rejected.

Mr. McCLELLAN. Mr. President, I move to reconsider the vote by which the amendment was rejected.

Mr. BIBLE. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

The PRESIDING OFFICER. The bill is open to further amendment.

Mr. BAKER. I send to the desk an unprinted amendment and ask the clerk that it be stated.

The PRESIDING OFFICER. The amendment will be stated.

The second assistant legislative clerk read as follows:

On page 8, line 1, delete "\$1,023,690,000" and insert in lieu thereof "\$1,032,690,000".

Mr. BAKER. Mr. President, I will not take very long. I am very hopeful that the manager of the bill will see fit to accept this amendment.

This deals with an additional \$9 million of funding for the Atomic Energy Commission to expand and extend our research on controlled thermonuclear research. All of us believe, I think, that the ultimate clean fuel in abundant

quantity may well result from our research in this area.

This is a relatively modest amendment, Mr. President. It represents what we believe we can efficiently spend; and I would hope the managers of the bill might see fit to accept this modest amendment.

Mr. PASTORE. Will the Senator yield?

Mr. BAKER. Yes, I yield to the Senator.

Mr. PASTORE. I understand this amendment was allowed by the House and cut by the Senate committee; is that correct?

Mr. BAKER. That is my understanding.

Mr. STENNIS. Mr. President, concerning the amendment that the Senator offers, the Subcommittee on Appropriations, and the Appropriations Committee, too, did not decrease this item from what the budget had allowed. Instead we approved the full budget, which was an increase of \$29 million over fiscal 1974.

We did strike out the \$9 million, as the Senator from Tennessee says, that had been added by the House.

The Senator from Tennessee has several amendments here, six in all, I believe.

Mr. BAKER. Five.

Mr. STENNIS. Five in all. We have discussed these amendments, their pros and cons, back and forth. This first one that he calls up here is one as to which I have decided, everything considered, that the \$9 million increase could well apply, along with the other increases. It does not have to be spent. I was not opposed—we were not opposed—to the program at all. It is just a matter of trying to stay within the budgeted amount and save some money or to stop the spending of money unnecessarily for any purpose.

So under the reconsideration of this matter, Mr. President, and making adjustments here as to this amendment as well as the other amendments, the Senator from Tennessee has in mind, and if it is agreeable to the Senate, the committee will recede from its position and accept the amendment.

Mr. PASTORE. Will the Senator yield?

Mr. BAKER. I am happy to yield to the Senator from Rhode Island.

Mr. PASTORE. I will not prolong this discussion in view of the fact that the Senator from Mississippi has accepted the amendment.

But to correct the record, it is true that this amount is slightly higher than the budget estimate. But it is an amount that was authorized by the Joint Committee on Atomic Energy.

Why did we authorize a larger amount? The mere fact is that in recent years we have been having difficulty in establishing nuclear plants throughout the country, and the objection has come from the public merely on the grounds of safety and contamination and environmental considerations.

I have no fear about the safety of a nuclear plant. But the argument has been made time and time again that we ought to get in thermonuclear power,

which is clean power, and that is what we are talking about. In this time of an energy crunch, the best place to put our money in research is in trying to develop a nuclear power that is absolutely clean and uncontaminated. That is what this money is all about. This is the amount that was studied by the Joint Committee on Atomic Energy, and while it was not requested by the administration it was authorized by Congress.

Mr. BAKER. Mr. President, I thank the Senator from Rhode Island.

I am most pleased that the distinguished Senator from Mississippi has agreed to accept the amendment.

Mr. President, the amendment would increase the total figure for Atomic Energy Commission operating expenses by \$9 million. One of the most hopeful programs of the energy research and development effort is the controlled thermonuclear research program of the AEC. Its primary goal is the development of a major new prime source of energy which could be essentially inexhaustible. The system also has the potential of utilizing an inexpensive fuel supply, and of having inherent safety and minimum environmental impact. The most significant long-term impact of the introduction of fusion power will be the utilization of an entirely new fuel for which there are no competing needs. This could result first in an independence of foreign sources of fossil fuels and, thereafter, the release of U.S. fossil fuels for other more vital applications.

The AEC's objective for the controlled fusion power program is to have in operation a demonstration electrical power reactor by the mid-to-late 1990's. The AEC is concentrating on magnetic confinement techniques based upon plasma physics.

They have reported that during the past year there has been progress in solving some of the more fundamental problems of plasma physics. This lends encouragement that the objectives will be met. The AEC has also reported that the outlook for further significant gains over the next few years now appears excellent.

The Joint Committee on Atomic Energy and the House Appropriations Committee recommended an additional \$9 million be added to the AEC request for \$82 million in operating expenses to insure that promising work will continue in materials research, exploratory concepts, and technique improvements to speed up the possible achievement of the various milestones required to operate a demonstration plant. The Senate Appropriations Committee, however, did not concur in this \$9 million add-on. Although the committee report strongly supports CTR, it argues that the sharp increase in funding of this project in the last 2 years militates against funding it at a level in excess of what OMB requested.

What is overlooked, however, is the fact that the funding increases are in direct proportion to the phenomenal increases in CTR technology; and in the wake of such promising breakthroughs, it behooves us to fund this program at

the higher level. In this way, we might precipitate additional breakthroughs resulting in the actual operation of a CTR demonstration plant before the mid-to-late 1990's.

For this reason, I urge adoption of this amendment.

I am prepared to proceed to a vote on the amendment.

The PRESIDING OFFICER. Does the Senator yield back the time?

Mr. BAKER. I am happy to yield back the time.

Mr. STENNIS. I yield back the time.

Mr. McCLELLAN. Mr. President, I ask for the yeas and nays on final passage of the bill.

The yeas and nays were ordered.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Tennessee.

The amendment was agreed to.

Mr. BAKER. Mr. President, I move to reconsider the vote by which the amendment was agreed to.

Mr. PASTORE. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. BAKER. Mr. President, I call up an unprinted amendment and ask that it be stated.

The PRESIDING OFFICER. The amendment will be stated.

The second assistant legislative clerk read as follows:

On page 8, line 23, delete "\$432,470,000" and insert in lieu thereof "\$433,970,000".

Mr. BAKER. Mr. President, this amendment deals with an increase of \$1,500,000 for the initiation of planning and developmental work on a molten salt breeder reactor demonstration plant. It is, once again, a modest sum but, in my view, it is absolutely essential for the future of our energy program that we continue with our development of this promising technology.

I have discussed this with the Senator from Mississippi. The Senator from Rhode Island and I have agreed that this is a highly desirable amendment. It will be my hope that it might be accepted by the manager of the bill.

Mr. President, this amendment would increase by \$1.5 million the total figure in the bill for Atomic Energy Commission plant and capital equipment expenditures. In Public Law 93-276, the Congress authorized project 75-5-g, the molten salt breeder reactor demonstration plant. All that was envisioned here was the initiation of the preliminary planning in preparation to the possible construction of a demonstration plant. As most already know, such construction normally takes between 7 and 9 years. The \$1.5 million authorized was supposed to fund an investigation of the feasibility of forming an industrial-governmental cooperative effort necessary for this sort of undertaking.

There is no question in my mind that molten salt holds a great deal of promise as a supplement to the liquid metal fast breeder reactor and the Joint Committee's approval of these funds would seem to confirm that fact. Moreover, the Atomic Energy Commission, in testimony before the Joint Committee, spoke of the

enormous potential of the molten salt concept. And yet, the Senate Appropriations Committee eliminated the funds for the molten salt demonstration plant on the basis that it was premature, "primarily because of the lack of sufficient base technology to proceed with such planning at this time."

Although I will not question the fact that there are specific technological questions in the surface cracking which was experienced in the past, I am told by the Oak Ridge National Laboratory that these problems have largely been resolved and all that remains is the need to test the new surface over a period of 2 or 3 years. However, this can be done while preliminary planning for the demonstration plant begins. Indeed, if we were to wait the full 3 years before any work was begun on integrating industrial and governmental efforts, then a molten salt demonstration plant would not be possible until the late 1980's with a commercial plant out of the question until the mid-1990's.

While that may seem to be a reasonable target date for some of the less developed technologies, it is a serious setback to a technology as developed and as promising as molten salt. This is why I urge the restoration of the \$1.5 million so that the necessary preliminary work can go forward and we might realize the true commercial benefits of this concept before the turn of the century.

Mr. STENNIS. Mr. President, I appreciate the remarks of the Senator from Tennessee. After consideration of this amendment, along with others to which we have already made reference, I am glad to recommend to the Senate that we restore this amount of \$1.5 million for the preliminary planning covered by this amendment.

Mr. BAKER. Mr. President, I thank the Senator from Mississippi, and I yield back the remainder of my time.

The PRESIDING OFFICER. Is all remaining time yielded back?

Mr. STENNIS. I yield back the remainder of my time.

The PRESIDING OFFICER. All remaining time having been yielded back, the question is on agreeing to the amendment of the Senator from Tennessee (Mr. BAKER).

The amendment was agreed to.

Mr. BAKER. Mr. President, I move to reconsider the vote by which the amendment was agreed to.

Mr. McCLELLAN. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. BAKER. Mr. President, I send to the desk an amendment and ask for its immediate consideration.

The PRESIDING OFFICER. The amendment will be stated.

The second assistant legislative clerk read as follows:

On page 8, line 1, delete "\$1,023,690,000" and insert in lieu thereof "\$1,027,690,000".

Mr. BAKER. Mr. President, I intend to withdraw this amendment. I have two others in a similar category on which I shall not insist on a vote. I would like to offer them, and would like my statements in reference thereto to be included

in the Record, but, on the basis of conversations that we have had with the distinguished manager of the bill and the distinguished Senator from Rhode Island, I will withdraw the amendments.

Mr. President, this amendment would increase the total figure in the bill for Atomic Energy Commission operating expenses by \$4 million. This money was authorized by the joint committee and approved by the House for research and development of a catalytic process for coal liquefaction. As everyone knows, coal is America's most abundant natural resource. Coal liquefaction envisions the conversion of coal into synthetic liquid fuels. The benefits of an effective and relatively low-cost conversion method should be obvious.

They were obvious to the Senate Appropriations Committee who included funds for this matter under Department of the Interior programs. However, by eliminating the \$1 million authorized for the Atomic Energy Commission's work in this area, they have missed a unique opportunity to take advantage of a team of 30 highly qualified scientists and engineers at Oak Ridge National Laboratory. This team has special expertise in the chemistry and chemical engineering process necessary for the development of an effective conversion process. Moreover, Oak Ridge has been studying coal conversion for over a year and has, in fact, coordinated its efforts with the Interior Department who has transferred moneys to the AEC for that purpose.

In proposing the restoration of these funds, I am not attempting to undermine the Interior Department's efforts in this regard, but rather attempting to complement them and enlist the incomparable resources of the Oak Ridge National Laboratory in this important energy project.

Mr. President, before withdrawing the amendment, I yield to the Senator from Alabama on another matter.

Mr. ALLEN. Mr. President, as I understand, this time is being yielded by the Senator from Tennessee on his time.

Mr. BAKER. Mr. President, I do not wish to delay the consideration of the pending bill, but the Senator from Alabama asked me to yield so he could speak on a matter which I believe is of significance to the Senate, which is not directly involved, but which I believe to be important.

Mr. ALLEN. Mr. President, I thank the distinguished Senator from Tennessee, also the distinguished Senator from Arkansas, and the distinguished Senator from Mississippi.

SENATE RESOLUTION 339—SUBMISSION OF A RESOLUTION COMMENDING SECRETARY OF STATE HENRY KISSINGER

Mr. ALLEN. Mr. President, I wish to offer at this time a Senate resolution. I do not ask for the immediate consideration of the resolution, because there may be some Senators who would not agree, and I certainly would not wish to take undue advantage of them.

I ask unanimous consent, however, that the resolution that I propose to

offer be allowed to remain at the desk for the signatures of other cosponsors, such cosponsors to be considered as having been cosponsors at the time the resolution is introduced.

The PRESIDING OFFICER. Is there objection?

Mr. ROBERT C. BYRD. Mr. President, reserving the right to object, the distinguished Senator knows that I personally have no objection, but for several years there have been some objections to this type of request. There were some by the late Senator Dirksen, at the time he was a Member of the Senate, and subsequent thereto. I am sure if the Senator would limit the time to today I would have no objection.

Mr. ALLEN. That is what the Senator from Alabama was requesting.

Mr. ROBERT C. BYRD. I am sorry; I misunderstood.

Mr. ALLEN. That at the end of the day, the consideration of the resolution be deferred in accordance with the Senate rules, but that it lie at the desk until the close of business today.

Mr. ROBERT C. BYRD. I have no objection.

The PRESIDING OFFICER. Is there objection? Without objection, the resolution will be received and appropriately referred.

Mr. ALLEN. Mr. President, this is a resolution offered in support of Dr. Henry Kissinger and his efforts as Secretary of State to bring lasting peace to troubled areas throughout the world, and to express our confidence in Dr. Kissinger and in his integrity, his ability, and his veracity.

The resolution reads as follows:

Whereas, Secretary of State Henry Kissinger has done a masterful job in the cause of peace throughout the world—in the Mideast, with Russia, and China, and elsewhere in the world; and

Whereas, a principal factor in the success he has achieved has been the confidence that the opposing sides in the various areas of negotiation have had in Dr. Kissinger's integrity, sincerity, and veracity; and

Whereas, the entire world is indebted to Dr. Kissinger for his efforts in the cause of world peace; and

Whereas, the people of the United States are grateful to Dr. Kissinger for his brilliant work, Now Therefore Be it Resolved by the United States Senate that:

1. Dr. Kissinger be commended on his outstanding contributions to the cause of world peace.

2. Deep gratitude to Dr. Kissinger for his services is hereby expressed by the Senate.

3. That the United States Senate holds in high regard Dr. Kissinger, and regards him as an outstanding member of this Administration, as a patriotic American in whom it has complete confidence, and whose integrity, and veracity are above reproach.

4. That the U.S. Senate wishes for him success in his continuing efforts to achieve a permanent peace in the world.

Mr. President, the sponsors of this resolution—and I feel confident that had we had a little more time we could have obtained the sponsorship of very nearly every Member of the Senate—are, in addition to myself, my distinguished senior colleague from Alabama (Mr. SPARKMAN), the distinguished Senator from South Carolina (Mr. THURMOND), the distinguished Senator from Nebraska

(Mr. CURTIS), the distinguished Senator from Tennessee (Mr. BAKER), who was kind enough to yield to me at this time, the distinguished Senator from Wyoming (Mr. HANSEN), the distinguished Senator from Washington (Mr. JACKSON), the distinguished Senator from Georgia (Mr. NUNN), the distinguished Senator from Florida (Mr. CHILES), the distinguished Senator from Kentucky (Mr. HUDDLESTON), the distinguished Senator from Nevada (Mr. BIBLE), the distinguished Senator from Arkansas (Mr. MCCLELLAN), the distinguished Senator from New Hampshire (Mr. CORRON), and the distinguished Senator from Michigan (Mr. GRIFFIN).

Mr. President, I feel that at this critical time in international affairs, there would be a vacuum in the Senate unless the Senate expresses its confidence in Dr. Kissinger and in his ability, his integrity, and his veracity. I feel that he has done an outstanding job in the cause of world peace, and at this time, while he is in the Mideast with the President, certainly the U.S. Senate very properly should go on record as expressing its confidence in Dr. Kissinger, and to thank him. I think that failure to do this heretofore has been a notable omission, to thank him for his efforts, the superhuman efforts that he has exerted in an effort to bring peace to the Mideast.

Mr. President, I submit the resolution under the request that was acceded to by the Senate.

Mr. STENNIS. Mr. President, will the Senator yield to me quite briefly?

Mr. ALLEN. I yield.

Mr. STENNIS. I am very much interested in the subject matter of the Senator's resolution. I have been tied up here, as the Senator knows, on appropriation matters, and have not had a chance to look it over thoroughly, but I certainly expect to do so, and there will be opportunity, now, for joining the Senator as cosponsors for the remainder of today.

Mr. ALLEN. That is correct, yes.

Mr. STENNIS. I will certainly look it over with that in view.

I commend the Senator for his effort.

Mr. ALLEN. I thank the Senator.

Mr. BAKER. Mr. President, I commend the distinguished junior Senator from Alabama for his initiative in this respect, and I express my gratitude to him for including me as a cosponsor of his resolution.

Mr. THURMOND. Mr. President, it is outrageous that Secretary of State Henry Kissinger who has achieved such diplomatic successes under very difficult circumstances must now carry the extra burden of serious and misleading innuendo being leveled against him. The unattributed leaks of information about him are scurrilous, dangerous and damaging to our foreign policy.

Secretary Kissinger has just completed several weeks of the most sensitive diplomatic negotiations which resulted in a cease fire in the Middle East. Such an accomplishment was possible only because of his dedication, skill, and integrity.

These leaks circulating about the role Secretary Kissinger played in national

security wiretaps are contemptible. He says he did not initiate any wiretaps. The whole question raised by these reports revolves around a matter of semantics and is not worthy of such national debate. There is a clear difference between such words as "initiate," "authorize," "recommend," or "request" and I suggest reference to a common dictionary for explanations of such distinctions. Secretary Kissinger is a man of truth whose standing both at home and abroad needs no defense.

Mr. President, the question of wiretaps is a matter which comes under the purview of the Director of the Federal Bureau of Investigation, the Attorney General, and the President, and such official eavesdropping is certainly not unprecedented in previous national administrations. When approved procedures are followed, it is not illegal, nor is it immoral. If wiretapping was authorized by the President in keeping with national security policy and laws, then this whole matter is nothing more than verbiage calculated to embarrass and damage Secretary Kissinger.

The circulation of anonymous reports challenging his truthfulness about these wiretaps is typical of so many derogatory insinuations which get general distribution in our national life today. It is unfortunate, to say the least, that "leaks" of misleading information can exist in our Government and gain not only national but international circulation.

The resignation of Secretary Kissinger would be most damaging to our Nation and its international relations. These whispered assaults on his honor which gain gross amplification in the echo must be stopped.

Mr. President, I am pleased to join the distinguished Senator from Alabama (Mr. ALLEN) and other Senators in authoring the resolution expressing full confidence in Secretary Kissinger.

SPECIAL ENERGY RESEARCH AND DEVELOPMENT APPROPRIATION ACT, 1975

The Senate continued with the consideration of the bill (H.R. 14434) making appropriations for energy research and development activities of certain departments, independent executive agencies, bureau offices, and commissions for the fiscal year ending June 30, 1975, and for other purposes.

Mr. BAKER. Mr. President, I am now prepared to withdraw my amendment.

The PRESIDING OFFICER. Without objection, the amendment is withdrawn.

Mr. BAKER. I shall not call up my other two amendments at the desk, dealing further with the matter discussed with the distinguished Senator from Mississippi. I ask unanimous consent, however, that my remarks in conjunction with the other amendments may appear in the RECORD.

There being no objection, the statements were ordered to be printed in the RECORD, as follows:

On page 8, line 23, delete "\$432,470,000" and insert in lieu thereof "\$462,470,000".

Mr. BAKER. Mr. President, this amendment would increase the total figure in the bill for

Atomic Energy Commission Plant and Capital Equipment Expenditures by \$30 million. Of that amount, \$20 million would go to the Cascade Improvement Program (CIP) while the remaining \$10 million would go to the Cascade Upgrading Program. Although these programs were funded at a higher level by the Joint Committee and the House Appropriations Committee, the Appropriations Committee in the Senate reduced funding for the Cascade Improvement and Upgrading Programs by \$30 million. My amendment would attempt to restore that cut.

There are a number of reasons why, in my judgment, the additional \$30 million is necessary, but first I should explain what these two programs entail.

The Cascade Improvement Program is designed to increase the capacity of the AEC's three gaseous diffusion plants located at Oak Ridge, Tennessee, Paducah, Kentucky, and Portsmouth, Ohio. The CIP would incorporate the most advanced gaseous diffusion technology into the existing plants in an effort to increase the uranium enrichment productive capacity of the plants by one-third. At present, the maximum capacity of the unimproved diffusion plants is about 17 million separative work units per year. The Cascade Improvement Program will add 5.6 million units while the Cascade Upgrading Program will add an additional 4.7 million units.

Whereas the Cascade Improvement Program would increase the actual productive capacity in these plants of enriched uranium, the Cascade Upgrading Program would, simply stated, upgrade the three plants to operate at a substantially higher power level of about 7,400 megawatts. This, in turn, has a direct impact on the number of separative work units produced annually.

The Appropriations Committee's report states that these funding levels will provide for the orderly and planned pace of these two programs which are proceeding essentially on schedule. The report, however, does not discuss the effect of not providing the additional \$30 million included in the House-passed version of the bill. The effect of such a reduction would be to defer modification of 114 stages from 1978 until the end of the program. This would result in the loss of approximately 1.1 million separative work units. In addition, some existing procurement contracts would have to be renegotiated. These contracts were negotiated in prior years and contain some favorable terms. Renegotiation of these contracts would adversely affect delivery schedules as well as costs. Approximately 17 million dollars is needed to avoid renegotiating existing contracts. And finally, there would be added costs due to renegotiating existing contracts, additional engineering costs associated with rescheduling the program, etc. It is estimated that program costs would increase by some \$10 million due to inflation, assuming a conservative rate of 6.5 percent.

If, however, the \$30 million is restored, the productive capacity would be increased, revenues to the Government for the additional enriched uranium would increase, and substantial long-term savings would be realized. For these reasons, I urge adoption of this amendment.

On page 8, line 1, delete "\$1,023,690,000" and insert in lieu thereof "\$1,025,690,000".

Mr. BAKER. Mr. President, this amendment would increase by \$2 million the total figure in the bill for Atomic Energy Commission Operating Expenses. In its report on this bill, the Appropriations Committee has recommended that the \$2 million for preliminary planning for a second LMFBR demonstration plant be deleted. This is a reversal of form since last year the Committee recommended and the Senate approved \$2 million for the exact same purpose, although the Appropria-

tions Act as signed into law did not contain specific funds for this purpose. The Committee this year states that planning for a second LMFBR demonstration plant should be deferred at this time and should await further progress and work in the LMFBR base technology program and on the first demonstration plant. Such a deferral would cause a serious hiatus in the nation's highest priority nuclear power effort. This effort, the Liquid Metal Fast Breeder Reactor program, was very carefully laid out to assure that we attained our objectives in a timely manner. An important factor included in this program was the development of an industrial base to supply such energy generating systems. To accomplish this, the program plan provided for at least two cooperative government-industry demonstration plants. The first of these demonstration plants has been organized and is proceeding. It is now very important to commence the organization of the participants for the second plant. Only in this way will we develop the industrial base we must have to bring this essentially limitless source of energy into existence. Only by proceeding with parallel efforts will we be able to attain our goals in time to meet our needs.

I, therefore, urge my colleagues to support this amendment which provides \$2 million for this worthwhile effort.

Mr. STENNIS. As I understand, the Senator has withdrawn the amendment that he formerly offered. Would the Senator identify the other amendments to which he referred so that we will have it in the RECORD here?

Mr. BAKER. There are three amendments which I introduced and withdrew, having to do with coal liquefaction, cascade improvement, and the second liquid metal fast breeder demonstration plant.

The references are on page 26 of the report. Subparagraph 2 is \$20 million for CIP, which I withdrew; \$10 million for CUP, which I withdrew; and on page 24, No. 2, \$4 million for synthetic fuels. Those are the three amendments which I sent to the desk and have either withdrawn or did not call up.

Mr. STENNIS. I thank the Senator from Tennessee very much. Turning to page 23 of the report at the bottom of the page, item No. 1—

Mr. BAKER. That is right—I am sorry—one of the amendments dealt with that item for a second Liquid Metal Fast Breeder demonstration plant. I sent that to the desk and withdrew it.

Mr. STENNIS. That was withdrawn, too?

Mr. BAKER. Yes.

Mr. STENNIS. I thank the Senator very much. That makes the record complete. I appreciate his presentation.

Mr. President, I yield back the remainder of my time.

Mr. McCLELLAN. Mr. President, I yield back the remainder of my time. If there are no other amendments, I ask for third reading.

The PRESIDING OFFICER. If there is no further amendment to be proposed, the question is on the engrossment of the amendments and the third reading of the bill.

The amendments were ordered to be engrossed and the bill to be read a third time.

The bill was read the third time.

Mr. MANSFIELD. Mr. President, I ask unanimous consent for 2 minutes, and

further ask unanimous consent that the vote occur at the end of my dialog.

The PRESIDING OFFICER. Without objection, it is so ordered.

UNANIMOUS-CONSENT AGREEMENTS

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that at such time as H.R. 11221, an act to provide full deposit insurance, is called up and made the pending question before the Senate, there be a limitation of 1 hour on the bill, to be equally divided between the Senator from New Hampshire (Mr. McINTYRE) and the Senator from Texas (Mr. TOWER); that there be a limitation of 30 minutes on any amendments; that there be a limitation of 1 hour on an amendment by the Senator from Wisconsin (Mr. PROXMIER); that there be a time limitation of 10 minutes on any amendment to an amendment, debatable motion, or appeal; and that the agreement be in the usual form.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that at such time as S. 585, a bill to amend section 303 of the Communications Act of 1934, is called up and made the pending question before the Senate, there be a limitation of 1 hour thereon, to be equally divided between the Senator from Rhode Island (Mr. PASTORE) and the Senator from New Hampshire (Mr. COTTON); that there be a limitation of one-half hour on any amendments thereto; that there be a limitation of 20 minutes on any debatable motion or appeal; and that the agreement be in the usual form.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that at such time as S. 2784, a bill to amend title 38 of the United States Code, is called up and made the pending question before the Senate, there be a limitation of 1 hour, to be equally divided between the Senator from Indiana (Mr. HARTKE) and the Senator from South Carolina (Mr. THURMOND); that there be a limitation of 30 minutes on any amendment thereto; that there be a limitation of 20 minutes on any debatable motion or appeal; with the agreement to be in the usual form.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. ROBERT C. BYRD. Mr. President, did the Chair propound the last request?

The PRESIDING OFFICER. The Chair has ruled, and there was no objection.

Mr. ROBERT C. BYRD. For the record, am I not correct in that I asked, as to each of the three agreements, that they be in the usual form?

The PRESIDING OFFICER. That is correct. They are a part of the 3 unanimous-consent request agreements.

SPECIAL ENERGY RESEARCH AND DEVELOPMENT APPROPRIATION ACT, 1975

The Senate continued with the consideration of the bill (H.R. 14434) mak-

ing appropriations for energy research and development activities of certain departments, independent executive agencies, bureau offices, and commissions for the fiscal year ending June 30, 1975, and for other purposes.

Mr. MANSFIELD. Mr. President, if I may have the attention of the distinguished chairman of the committee and other members of the Appropriations Committee, on page 18 of the report there is the following statement:

The additional \$5,000,000 recommended by the Committee will initiate work on an MHD engineering test facility and provide additional research on MHD techniques and applications at the Montana College of Mineral Science and Technology and other units of the Montana University System.

It is my understanding that it was the intention of the committee that this increase in funds of \$5 million for magnetohydrodynamics (MHD) is intended to initiate work on an MHD engineering test facility at an early date and to provide additional research on MHD techniques and application at the Montana College of Mineral Science and Technology, formerly called the Montana School of Mines. This is one of the great mining schools not only in this country but in the world. Along with Montana Tech, the Montana State University at Bozeman and AVCO Everett Research Laboratory will enter into a cooperative effort to conduct this research. AVCO Corp. is one of the leading industrial MHD research concerns in the country. Is it correct that this is how this money is intended by the Appropriations Committee to be spent?

Mr. McCLELLAN. My recollection is that this was discussed in committee and that was the purpose of the inclusion of the additional \$5 million. The other was already substantially committed.

Mr. MANSFIELD. That is the answer I wanted to the question I raised. I thank the distinguished chairman of the committee for reconfirming my understanding of the intent of the Appropriations Committee in proposing this appropriation.

I note the distinguished Senator from Nevada (Mr. BIBLE), the subcommittee chairman who handled this important measure, is in the Chamber, and I would like to ask him a question. Is it his understanding that this additional \$5 million for MHD research is intended specifically for research at Montana College of Mineral Science and Technology, Montana State University at Bozeman, in cooperation with the AVCO Everett Research Laboratory, as well as to begin work on development of an MHD engineering test facility?

Mr. BIBLE. This matter was discussed thoroughly by the committee members, and it was agreed that MHD research should be conducted in Montana since the coalfields are there, as well as expertise in mining techniques developed by the Montana College of Mineral Science and Technology. In addition, as the distinguished majority leader has pointed out, Montana State University has been working with the AVCO Everett Research Laboratory since 1972 with considerable success in the MHD field.

This type of research and development

program should be accelerated and directed toward the commercial availability of this technology by the mid-1980's. The next step in this important program is the design and construction of an experimental test facility of an appropriate size. The \$7.5 million requested by the Office of Coal Research for fiscal year 1975, together with the additional \$5 million which has been provided by this committee, will allow this research to be expanded in Montana and will also permit the initiation of design and planning for an experimental test facility.

Mr. MANSFIELD. Does the distinguished Senator from Nevada agree with me that when these funds are appropriated they should be allocated with a minimum of delay by the Office of Coal Research to these participating universities and research facilities?

Mr. BIBLE. By all means. Too much time has already been lost in conducting MHD research. I would expect that the Director of the Office of Coal Research would give immediate attention to this problem. I trust he will work closely with the Montana College of Mineral Science and Technology and other units of the Montana University system in accelerating and expanding MHD research there and that he will also get on with the task of developing an MHD engineering test facility. Those are clearly the goals of this additional appropriation.

Mr. MANSFIELD. I would hope that Dr. William Gouse, Acting Director of the Office of Coal Research, would read these remarks and learn the intent of the Senate Appropriations Committee and the Senate in making this appropriation.

Mr. HANSEN. Mr. President, actually the Energy Information Act was the subject of hearings by the Interior Committee and had been through several markup sessions but was still pending in the committee for final approval and reporting.

As it is now, the Energy Information Act has been broadened into a national resources and materials information system, a vastly more encompassing and complex bill than its predecessor on which it was based.

And even its predecessor was so complex that few of us on the committee fully understood its implications. Now even before the committee has completed its deliberations on the Energy Information Act or an explanatory report has been filed, we have a bill reported by its authors, two Senators who are here to explain its implications on the Senate floor. But none of us will have the opportunity to study a committee report of the history and background of the proposed amendment nor will we know who might have filed separate or minority views in a committee report so those of us who might have filed these separate views must now do so on the Senate floor under the bypass procedure its authors have taken in bringing the completely revised bill up as a floor amendment.

So I would like to refer to what the Director of the Office of Management and Budget and the Administrator of the Federal Energy Administration said about the bill in its original version in letters to Senator Jackson.

I ask unanimous consent that the letters be printed in the RECORD.

There being no objection, the letters were ordered to be printed in the RECORD, as follows:

EXECUTIVE OFFICE OF THE PRESIDENT, OFFICE OF MANAGEMENT AND BUDGET,

Washington, D.C., May 28, 1974.

Hon. HENRY M. JACKSON,
Chairman, Committee on Interior and Insular Affairs, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: We understand that your Committee is redrafting S. 2782, a bill to establish a National Energy Information System. We would like to take this opportunity to make known to you our position on this bill.

The matter of energy information has been considered especially important by the Administration for some time. For example, in his April 18, 1973 energy message, the President directed the Department of the Interior to establish an Office of Energy Data and Analysis. Last December the President asked for legislation creating the Federal Energy Administration, with responsibilities for energy information. In the absence of final action on the FEA, in January of this year the President called for the enactment of legislation to provide broad authorities to collect and disseminate energy information. The Energy Information Disclosure Act (S. 3151), which was introduced on March 11, 1974, contained the Administration's proposal.

Since that time, the FEA Act, P.L. 93-275, was enacted which provides the Administrator broad authorities to gather energy information. These authorities include the authority to collect information by special or general order, issue subpoenas for records, and conduct on-site inspections of energy facilities. The Act also requires broad disclosure of energy information to both the public and the Congress.

In addition, the Federal Energy Office has a fully operating organization with a staff of professionals in both the field and headquarters to carry out the responsibilities of the Administrator under the FEA Act. For the past five months, the FEO has been collecting, analyzing, and disseminating an enormous amount of energy information in a timely fashion. These activities are being expanded. The FY 1975 budget more than triples the substantial efforts begun in 1974.

While FEA's authorities extend for only two years, this is not a good reason for assuming that it cannot undertake the longer term energy information programs that are needed. In fact, the FEA Act provides that its functions will either pass to a successor energy agency or revert to the Department of the Interior. In summary, the FEA has ample authorities to gather, evaluate, and disseminate energy information, and in cooperation with other agencies that now and in the future will be collecting energy information, will fulfill all of the objectives called for in the proposed national energy information system.

Because of this Act (P.L. 93-275), the FEA Administrator has all of the necessary authorities, and S. 3151 is no longer required at this time.

In light of the above, it is the Administration's position that S. 2782 is not necessary to achieve a viable, creditable national energy information system. Congress has already given that mission and the necessary resources and authorities to the Federal Energy Administration.

We particularly question the provision in S. 2782 to create an independent National Energy Information Administration. This proposal would result in separating energy data collection and analysis from policy and program formulation and implementation. The Congress has recognized the importance of keeping these activities closely tied together in the FEA Act. We strongly agree and,

therefore, we believe it desirable and advisable to work within the present FEA authorities and its organization.

With warm personal regards,
Sincerely,

ROY L. ASH,
Director.

FEDERAL ENERGY OFFICE,
Washington, D.C., May 28, 1974.

HON. HENRY M. JACKSON,
U.S. Senate,
Washington, D.C.

DEAR SENATOR JACKSON: For several months now, we have been working closely with your staff on the development of an "Energy Information" Bill, after having submitted in March a proposal designed to meet our data-related requirements. As you recall, I testified extensively in committee hearings about the need for such legislation. It appears that while staff discussions have cleared up some technical differences between the Administration proposal (S. 3151) and the Energy Information Act (S. 2782), our basic objections have not changed.

We strongly believe that the basic assumption underlying creation of an independent information agency in S. 2782 is an unnecessary duplication of FEA functions and responsibilities and not responsive to our primary needs for coordination of energy information. Energy data collection and analysis cannot be conducted separately from policy and program formulation and implementation, if we expect to have an effective national energy policy.

The establishment of a separate agency at this time would also be duplicative of our efforts to date and would provide little additional information to the public. The Federal Energy Office has already established and staffed a National Energy Information Center. With a staff of 100 and directed by a former Deputy Commissioner of the Bureau of Labor Statistics, Dr. Daniel Rathbun, it has already implemented a wide range mandatory data system and public information dissemination. A mandatory weekly reporting system for all refineries, bulk terminal operators, pipeline companies, and importers is already operational and provides accurate and timely data on domestic petroleum operations. A separate import system, relying directly on 7000 Customs Bureau inspectors, is also operational. It is providing independent weekly information on quantities of petroleum imports and country of origin.

Finally, the Center's "Monthly Energy Indicators" is providing comprehensive summary information on quantity and prices in most energy sectors. For your information, I have appended copies of the publications. In the coming months significantly more data and information will be developed and provided to the Executive, Congress, and the public.

In addition to unwarranted duplication of functions, enactment of S. 782 seems unnecessary given our current statutory authorities. Federal Energy Administration Act of 1974 provides broad, mandatory reporting authorities which should be adequate for the energy information purposes that we foresee at the time. We feel it would be wise to gain experience with our current authorities, develop a more comprehensive understanding of our specific data needs, and pinpoint gaps in existing authorities as we implement new programs before developing further energy reporting legislation.

I appreciate your help in this very important matter and hope my comments have been useful.

Sincerely,

JOHN C. SAWHILL,
Administrator.

Mr. HANSEN. Mr. President, those are just a few of the reasons why this legislation is neither wanted or needed by the administration and I can see no reason for imposing another needless and unnecessary reporting requirement on business and industry.

Mr. President, inasmuch as we are actually writing this legislation on the Senate floor, I would like to quote from some of the testimony before the committee for the enlightenment of Senators who are seeing this hastily rewritten bill for the first time, and I am one of them. I ask unanimous consent to have printed in the RECORD a letter from the President of Exxon Co., U.S.A. to my good friend and colleague, the junior Senator from Louisiana (Mr. JOHNSTON).

There being no objection, the letter was ordered to be printed in the RECORD, as follows:

EXXON CO., U.S.A.,

Houston, Tex., March 20, 1974.

HON. J. BENNETT JOHNSTON,
U.S. Senate, Russell Senate Office Building,
Washington, D.C.

DEAR SENATOR JOHNSTON: During my appearance at the hearings of Senator Haskell's Special Subcommittee on Integrated Oil Operations on December 6, 1973, you asked for suggestions on how the Government could require information from oil companies that would meet its needs for adequate and creditable energy data. The transcript of the hearings indicates that this question would be included in the questionnaire that the Committee plans to distribute. However, we have been giving extensive thought to this matter over the past several weeks, and would like to comment on this question at this time. Much of this effort is reflected in our testimony on January 16 before Representative John Dingell's Subcommittee on Activities of Regulatory Agencies Relating to Small Business. I am attaching a copy of our statement in case you have not had an opportunity to read it.

Our position as expressed in this testimony might be summarized as follows:

(1) We recognize the Government's need for timely and sufficiently accurate statistics on the petroleum and other energy industries to serve as a basis for sound energy policy. This type of data is needed also by the petroleum industry to plan and conduct its own operations.

(2) A large body of information is available currently in the form of government reports and industry trade group compilations. To a certain extent, these data lack timeliness and completeness. Of greater apparent concern in the minds of some, however, is the lack of credibility of the data which originate within the industry.

(3) Exxon U.S.A. stands ready to participate in efforts to devise a system that will provide adequate, timely, and more creditable data on the energy industry, while maintaining protection of that proprietary information whose public disclosure could lessen competition and compromise antitrust statutes.

In this letter, I would like to offer some further thoughts on the degree to which the government should enlarge the existing information system, on the data that are most critical in developing short and long range projections, and on possible means of data verification that would minimize extensive manpower requirements and cost while providing necessary credibility. It is imperative that the government have firm objectives in mind before trying to spell out the type and volume of information it desires, and before designing a system to obtain it. In addition, a clear differentiation needs to be made between statistics that can be measured and

certified and those that are based on assumptions and projections. While the government can require certification of the past and the present, it cannot expect companies to certify forecasts of the future. The government may wish to solicit these forecasts from industry, but only through the government's own analysis of available data can it reach a judgment on the quality of the forecasts.

HISTORICAL AND CURRENT OPERATING DATA

It would be most efficient if one governmental agency were responsible for receiving and cataloging current data on the energy industry, using electronic data processing techniques and adequate analytical manpower to minimize time lags. When aggregated, these data would then serve as a historical file which could be used by both government and industry for projections into the future. The data included would be the type of volumetric supply, production, demand and inventory information now reported to Bureau of Mines, Department of Commerce, State regulatory bodies, and the API, AGA, etc. If aggregated on an appropriate basis for release to the public, there should be no problem in protecting individual company confidentiality, even in times of normal supply. Reporting intervals might be for the prior week and the prior month. Crude and product production data should be averaged to smooth out short term fluctuations. Inventory data should be measured at a defined point in time, and should include volumes in transit. Weekly inventories might include only the large major terminals to reduce the amount of data processed and where trends relative to the prior week may be of primary interest. Monthly inventories could be more detailed and include secondary terminals to provide a more precise benchmark of absolute supplies. The relative importance of inventory data versus production data needs to be weighed when allocating the manpower required to provide and analyze this information. For instance, during a typical winter season, only around 15 percent of the industry's distillate supply comes from inventory, and the remaining 85 percent from current refinery production or direct product imports.

Industry data could be certified by the managements of each of the individual companies reporting. Verification could be provided through spot audits by appropriate government agencies.

CURRENT PRICE, COST AND PROFIT DATA

Several of the pending proposals for energy information legislation include sections on detailed price, cost, and profit data. In many instances, the objectives for these data are not made clear. The following paragraphs attempt to illustrate the many pitfalls we feel are inherent in the development and use of these types of statistics.

During the current supply crisis, the spot price data reported in trade journals for those limited volumes sold in the wholesale market do not give a true indication of the price being paid by a majority of petroleum customers. It would be feasible for companies to report average sale prices for major products produced at their refineries or imported from overseas, and average purchase prices for crude and other raw material if this information is of use to the government. It could be handled on a monthly basis as have recent data submitted to the Federal Energy Office. This type of data is already verified yearly through normal auditing and IRS procedures, as are total operating cost and profit data. However, breaking down yearly operating cost and profit data into weekly or monthly segments, or by product line or functional profit centers could create more problems through misunderstanding and misuse to both industry and government than whatever questionable benefits the government might gain. These problems are highlighted below.

Operating cost estimates by individual functional profit centers may be of some value to an individual company for the purpose of spotting changes or measuring efficiency versus a standard for that particular operation. Even for this limited use, however, comparisons must take into account externally created changes in through-put, raw material types, product mix, product quality, equipment outages, etc. In some cases actual costs may not be known for 30 to 60 days, thereby making even a monthly reporting cycle subject to certain aberrations in input data. In evaluating our own operations, we are careful to fully assess the variability of available cost data before drawing concrete conclusions about an individual profit center, even after six months of operating data have been compiled.

Profit data by function or product line are necessarily based on reasonable but arbitrary allocations of known total costs and investments. These allocations must include decisions on the appropriate value for raw materials of varying qualities, on the costs to be shared between products manufactured and handled in common facilities, and on the appropriate values to use in transferring products between functions. Only after such allocations are made can profits by function or product line be calculated, and these are generally useful only within an individual company to compare trends after a base case has been established. It is very likely that each company allocates its total costs in a different manner. In addition, no two companies are alike in the raw materials they employ, the facilities they operate, nor the products they manufacture. These considerations argue strongly against the use of functional or product line profit data to make comparisons among companies.

In summary, we believe that existing quarterly and annual reports by petroleum companies on their overall cost and profit data is sufficient for government monitoring purposes. In addition, Federal procedures already exist for verification of these data. It is questionable whether the benefit to the government for additional cost and profit data can justify the cost to both the government and industry.

OIL AND GAS RESERVE DATA

Petroleum company reporting of oil and gas reserves has received considerable attention in Congress and the news media. Summarized below are definitions of reserves that are accepted generally within the industry:

Proven reserves are current estimates of producible hydrocarbon accumulations in underground porous rocks that are determined by analysis of data from producing wells. The greater the number of wells drilled in a reservoir, and the longer they have been producing, the better the estimate of the potential recovery from a field. For new fields, many assumptions must be made in calculating and estimating the reserves.

Potential reserves are inferred from geological information in areas that have not been drilled. Obviously, these reserves are not proven until wells are drilled, and their size indicates them to be commercially attractive. Their potential output is not available until production and transportation facilities are installed and linked to existing systems.

In using proven reserve estimates, one needs to remember that the most important statistic for short range forecasts is the daily production the field has shown that it can sustain economically. After these fields reach full development, as have the majority of those in the continental U.S., their production rate plateaus and begins to decline. In many cases, increasing the percentage of recoverable oil through advanced techniques tends to extend the producing life of the

field rather than increase its daily production rate.

As a company, we list our proven reserves in a supplement to our annual shareholders report. We would take no exception to providing the same information to the federal government, in whatever detail deemed necessary, provided safeguards are used to protect confidentiality. We do object to publication of estimates on any basis which would make it possible for our competition to identify the data with specific properties, or in ways which would jeopardize the value of our investment in developing that information. We are especially sensitive about releasing outside the company any detailed data on reserves that are adjacent to tracts that have not been leased, or detailed information about producing structures that could be extended to other unleased areas.

Certification or verification of proven reserve data is more difficult than the substantiation of any other petroleum industry information because of the many assumptions and estimates used in deriving the figures. We certainly would be glad to certify our reserve data as representing our best efforts, and technically competent independent private auditors or an appropriate federal agency could verify our calculations. It should be recognized that producing state agencies already have available the raw data necessary for analyzing or verifying reserve estimates and maximum efficient production rates. However, we would be glad to cooperate with a survey by the government on oil reserves similar to the one made recently on natural gas supplies. The procedures used in the Natural Gas Survey and the strong involvement by the FPC and other governmental agencies are described in the attached statement to Congressman Dingell's Subcommittee, beginning on page 10.

Obviously, no one can "certify" or "verify" potential reserves. No one company can foretell how successful its exploration efforts will be. However, these estimates, as developed by individual companies, universities, and other groups or individuals on an industry-wide basis, can be used to scope potential levels of hydrocarbon availability in the future. This then can serve as a basis for quantifying the needs for other forms of energy. The bases for these estimates could be provided to the government by the oil companies, and others, and the government could then use these data in making its own assessment of the future.

FORECASTS

We find it necessary to make forecasts of both our own operations and the overall business environment in order to make operational and investment decisions. Forecasts of our operations are based on Exxon proprietary data on facilities capability and expansion plans, our anticipated raw material availability, profitability expectations for the last incremental volumes of our various product lines, and, of course, the projected business environment. Our forecasts of the business environment are based on published data that are available from the government and various trade associations. These data are used to estimate total energy demand, total energy supplies, and the portion of supply that might be served economically by petroleum products. There are many critical assumptions involved that could alter the future relative to past trends. These might include, for example:

Political, economic, or technological effects on total demand;

Economic and technological effects on the discovery and recovery of new oil and gas reserves;

Economic, environmental, or technological effects on the use of oil, gas, coal, nuclear, or other forms of energy, etc.

Thus, the intelligent use and critique of these forecasts requires a basic understanding of the underlying assumptions. Exxon

has made and will continue to make the results of these environmental forecasts available to government. Since they are projections, they obviously cannot be certified. If an extensive energy information system is developed, the government could be in as good a position to make these projections as is industry. This assumes, of course, that government is willing to maintain the manpower and incur the costs required to analyze the data and forecast future trends.

We hope that this letter provides the information you were seeking, and we would be happy to discuss it further at your convenience.

Sincerely,

RANDALL MEYER.

Mr. HANSEN. Also, Mr. President, I have the statement of my good friend, Dave True, of Casper, Wyo., who also testified to the reasons why the proposed legislation is redundant and unnecessary. Dave True is an independent oil operator, one of the thousands who are not affiliated with any major oil company but who do more than two-thirds of the exploratory exploration and drilling in the United States. These independents, Mr. President, do not have elaborate office setups, computer systems, or a battery of CPA's and lawyers to compile the mass of information and prepare and file the voluminous reports that would be required by this legislation.

The Federal Government is making life more and more difficult and expensive for small business and independent oil operators and rather than require all of the additional data, and I might say useless data because most of it would probably never be used, the Federal Government should be centralizing and utilizing all of the reports that it now requires rather than stockpiling more to take up storage space.

Mr. President, I ask unanimous consent that the full statement be printed in the RECORD.

There being no objection, the testimony was ordered to be printed in the RECORD, as follows:

TESTIMONY OF H. A. TRUE, JR., CHAIRMAN, NATIONAL PETROLEUM COUNCIL, BEFORE THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS OF THE U.S. SENATE, FEBRUARY 6, 1974

Mr. Chairman and distinguished Members of the Senate Committee on Interior and Insular Affairs: I am H. A. True, Jr., an independent oil and gas producer from Casper, Wyoming. I appear before you today in my capacity as Chairman of the National Petroleum Council in response to your invitation to testify on The Energy Information Act (S. 2782). I am accompanied by Vincent M. Brown, Executive Director of the National Petroleum Council.

Cooperation between the petroleum industry and the Federal Government has existed in fact since the commencement of World War II—during the war years through the Petroleum Industry War Council, and since 1946 through the National Petroleum Council. The Council is an industry advisory committee to the Secretary of the Interior, created by direction of the President of the United States. Its sole function is to advise, inform, and make recommendations to the Secretary of the Interior, or the Director of the U.S. Office of Oil and Gas on any matters pertaining to oil and gas about which the Secretary or Director requests information.

In the almost 28 years of its existence the National Petroleum Council has issued some 205 reports requested by the Government on virtually every facet of the oil and gas industries' operations. In my opinion we have

operated in a "gold fish bowl" at all times. There are always government representatives present at our meetings, and all progress, interim, and final reports, in addition to transcripts or summary minutes of meetings are filed with the government and made available to the public.

My testimony today will focus upon the most recent report of the Council and its data relating to the immediate energy crisis. Vincent Brown will then discuss the role of the NPC in the collection of industry data for the Government.

With respect to The Energy Information Act, I endorse the general concept of a centralized method for retaining information and data on the most complex industries in the United States—the energy industries. Whether the mechanism for this should be a Federal agency or an academically oriented institution sponsored by the Government, I am not qualified to recommend. In any event I do know that data is only as good as its source, and once good data is obtained, its proper analysis is the essence of its usefulness. Data collecting just for the purpose of having data is meaningless—there must be a stated need for it, and once provided, it should be utilized and made available to all. The use of data to the detriment of true competition within the energy industries should be avoided.

I know the government already has at least one organization that has developed over the years a vast amount of detail and analysis on the U.S. energy resource base, and on the facilities and operations of the energy industries—that is, the National Petroleum Council.

Now I would like to say a few words about recent data and projections made by the National Petroleum Council relating to the current energy situation as aggravated by the Arab oil embargo. This is timely, I believe, in light of the great confusion and debate over "data," resulting in the conclusions by some people that there is no energy crisis, or resulting in the implication that some industry information sources, like the National Petroleum Council, gave the Government and the public a "bum steer."

The National Petroleum Council, prior to the oil embargo, had been examining the impact on the Nation of a "hypothetical" denial of 1.5-3.0 million barrels per day of imported petroleum liquids under both long-term and short-term scenarios. Under the short-term, or January 1, 1974 scenario, we were dealing with only existing facilities—while the long-term, or January 1, 1978 scenario, allows time for the construction of additional storage facilities and the orderly implementation of emergency preparedness measures.

In July of last year our Committee on Emergency Preparedness issued an Interim Report discussing such areas as: methods to curtail petroleum consumption in a short-term emergency, the potential for fuel convertibility, emergency oil and gas production, and possible alternatives for maintaining emergency standby petroleum supplies. The report stressed the distinction between short-term imports interruption and the increasingly tight petroleum supply situation the Nation has been experiencing for several years.

After the imposition of the Arab embargo on October 18, 1973, Interior requested that we immediately submit all data possible pertaining to the short-term or January 1, 1974 cutoff scenario.

This we did in a volume entitled Emergency Preparedness for Interruption of Petroleum Imports into the United States—A Supplemental Report dated November 15, 1973, which presented our initial findings and conclusions pertaining to the fourth quarter 1973 and first quarter 1974 oil supply/demand balances. The Committee also pre-

sented a separate volume of its discussion papers which contain the background data and methodologies employed by the Committee in preparing the November 15 report.

The report, in analyzing the effect on the Nation of a denial of 2.0-3.0 million barrels of petroleum liquids per day, contained several findings and conclusions, chief of which was the fact that the domestic energy supply situation was tenuous even before the embargo. On October 26, before the impact of the embargo could be felt, primary inventories of gasoline, distillates and heavy fuel oil were 71 MMB below normal, while crude oil stocks were 14 MMB below normal. In addition, total oil imports into the United States had reached an all-time high level of 7½ MMB/D. This increased dependence upon imported petroleum is the result of many factors working together over a period of years, all of which the National Petroleum Council has examined in its reports to the United States Department of the Interior. I will outline briefly some of the principal factors:

Decline in exploration for and production of domestic crude oil and natural gas.

Delay in siting and construction of petroleum refineries and nuclear plants.

Decrease in use of coal due to environmental and other reasons.

Restrictions on the industry to explore, develop and produce the 96 billion barrels of discoverable oil and the 170 trillion cubic feet of discoverable gas located on the North Slope of Alaska; and the 90 billion barrels of oil and 214 trillion cubic feet of gas discoverable in coastal waters off the continental United States.

Establishment of unrealistically low prices for natural gas by the FPC.

The Committee projected the impact on U.S. petroleum supply and demand given its estimate that by the end of 1973, the magnitude of the embargo would reach 3 million barrels per day. It concluded that unless the United States took immediate emergency action to increase domestic production, reduce energy consumption, and equitably distribute the net shortfall, the impact would be severe.

In other words we were saying what could happen if nothing was done promptly. This point was repeatedly missed by many of those who read the report. Fortunately, quite a few things were done or otherwise occurred which reduced the potential seriousness of the shortage. This we can be thankful for. I am delighted that our projections proved to be too pessimistic by the end of 1973. However, 1974 has just begun and the Committee believes the potential for a severe situation still exists.

A number of factors worked to lessen the impact of the embargo during the last six weeks of 1973.

1. Implementation of the Emergency Petroleum Allocation Act of 1973,

2. Organization of the Federal Energy Office on December 4, 1973,

3. Logistical re-deployment of world oil movements and reduction in the production outbacks originally announced by the Arab nations,

4. Significant public response to the President's November 7 and November 25, 1973, messages,

5. Voluntary and mandatory energy conservation measures, and

6. Markedly warmer than normal weather in November and December.

Required oil supplies were projected to be reduced, assuming a 30-day time lag for supplies enroute, by about 1.2 MMB/D of crude oil and 0.8 MMB/D of refined products. The impact of the denial was then projected to increase as demand seasonally increased to 1.8 MMB/D of crude and 1.2 MMB/D of products by the end of the year and to continue at that level during the first quarter of 1974.

Import data reported by the American Petroleum Institute indicate that by the end of the year crude supplies were reduced by 1.2 MMB/D and product supplies by 0.6 MMB/D. The primary reason for the difference in estimates is not one of absolute volume but one of timing. Imports did not suddenly drop off 30 days after the announcement of the embargo but gradually declined over a 60-day period. Meanwhile, public cooperation with federal energy conservation measures began almost immediately in November. The combination of these factors alleviated serious potential shortages and actually allowed inventories of certain products to be increased over expected levels.

The effects of the embargo are just now being felt in the United States with total imports running at about 5 million barrels per day. The full effects of this continued shortfall will become increasingly felt in the first quarter of 1974.

The Committee is now reappraising the entire situation in light of the above developments. We are attempting to determine for the first half of 1974 the effects of such supply factors as the magnitude and duration of the embargo, the absolute levels of crude and product imports and the potential contributions, if any, of additional oil and gas production. On the demand side of the equation, we are examining such variables as weather, price, electricity and gas savings, as well as public acceptance of FEO energy conservation measures. In addition we will discuss methods of inventory management. We will report our findings to the Secretary of the Interior hopefully in the next week or two. There are some general observations I would like to give you today:

The supply situation for petroleum liquids is currently better than anticipated; however, the Committee estimates that the full impact of the denial should become more evident in the first quarter of 1974 as demand takes its seasonal jump upward and as inventories are drawn down.

In the initial report the Committee projected its results based upon a hypothetical 3 million barrels per day cutoff of imports. We believe now that the gross shortfall in supply (when compared to pre-denial supply/demand balances for the first quarter of 1974) will approximate 2.7 million barrels per day. There is a large degree of judgment involved in the estimate, and actual import levels could be within a range of plus or minus 10 percent of this estimate.

If the fuel use savings as targeted by the FEO are actually achieved, (i.e., about 2.4 million barrels per day less than pre-denial demand estimates), then the first quarter 1974 consumption will run 6 percent less than first quarter 1973 actual consumption (or 14 percent less than pre-denial first quarter 1974 estimates), assuming of course the continuation of the embargo. I would like to point out that even if the embargo were lifted today and if Arab nation oil production were increased, 60 to 90 days would be required before supplies would be restored, thus the first quarter import situation is virtually unchangeable. This estimate still envisions a U.S. requirement for total imports in the order of 5 million barrels per day. To achieve these savings will require even greater public cooperation than was experienced in the last quarter of 1973, particularly with regard to motor fuel use as the Nation heads into the good weather driving season. Otherwise, such savings would have to be mandated, most likely in the form of rationing, lest inventories be depleted and even more severe dislocations occur.

The product which appears to be in the most critically short supply during the first quarter 1974 is residual fuel oil, mostly on the East Coast. A gross shortfall of some 850,000 barrels per day is indicated and use

curtailment measures are expected to be about 375,000 barrels per day. By drawing inventories down to minimum historical levels, an additional 29,000 barrels per day could be made available. The only alternative to the transfer of gasoline into residual market through adjusted refinery yields. Such a change will however rob Peter to pay Paul and cause an even greater problem with gasoline.

It should be noted that the demand for petroleum products is also likely to be constrained by past and prospective increases in refined products prices. On this note, if I may take off my NPC hat and put on my independent oil and gas producer hat, requiring price roll backs at this point in time will most assuredly have extreme repercussions on future domestic supply availability and while saving the consumer a few pennies a gallon today, will prove very costly in the long run.

Another consideration which will tend to decrease fuel consumption in the next several months is the expected low rate of increase in the Gross National Product. In fact, if industrial production decreases as many forecasters expect, potential petroleum demand will further decline.

At the same time, an important potential constraint on petroleum imports and ultimately upon the real GNP is the potential of sharply higher costs of petroleum imports upon the U.S. balance of trade. Petroleum consumption could be even further restrained by our financial capacity to make payment for extremely costly oil imports.

With the quadrupling in costs of foreign imports which has occurred over the last few months, the 1974 import bill could approach \$20 billion, even at the present embargoed level of imports, given the current prices.

The effect of the impact of these reduced supplies on the economic growth and employment was also examined by the Committee and reported in the November Supplemental Interim Report. For example, a 2 million barrels per day annual net denial of petroleum liquids was estimated to result in a 5.6 percent reduction in total energy usage, a \$48.4 billion (or 3.6 percent) decrease in real GNP and a rise in unemployment from the then current 4.9 percent to over 6 percent. Since November 1973 the Federal allocation measures and positive conservation response have worked together to reduce the immediate economic effect of the fuel shortage. However, some direct effects have already been seen—spot unemployment and reduced air schedules, for example—and secondary effects are beginning to take their toll. Automobile and recreation vehicle manufacture and residential construction have been affected by current fuel supply problems and uncertain future conditions. It is assumed that the conservation measures and the fuel allocation policies will continue to be at least moderately effective, in which case the economic impact of fuel shortages may not be severe as originally estimated. Nevertheless, if oil imports are not substantially increased well before year end, it is not thought possible that real GNP can be increased significantly above the current level, or that unemployment rates in the neighborhood of 6 percent could be avoided.

Gentlemen, the shortages facing the Nation today can be alleviated. It is the belief of the National Petroleum Council's Committee on Emergency Preparedness that certain policies must be implemented immediately for both our short-term and long-term energy stability:

An all-out effort to increase, without further delays, the exploration for and development of our vast domestic energy resources within a framework of adequate economic incentives, and in a stable economic atmosphere.

Continued Federal, state and local action is needed within the framework of cooperation of private industry and public interest to minimize detrimental effects occasioned by the current energy crisis upon the economy and social well-being of the Nation.

Federal, state and local governments in cooperation with industry and the public should step up their educational programs through all communications media to assure public awareness of conservation measures and to solicit the full support of all the citizens of this Nation.

Long range Federal policies should be developed whereby energy conservation becomes a national goal to be pursued as a major national project of the highest priority.

The current imports dependency did not appear overnight. Reports that Congress and the Federal Government had no warning of the impending crisis are simply erroneous. As early as July 1971, the National Petroleum Council advised the U.S. Department of the Interior that "the availability of foreign oil to meet shortfalls in domestic supplies cannot be assured. Significant limitations could arise for political or logistical reasons. . . . It is essential that the many considerations bearing on the selection of an optimum national energy posture be brought into sharp focus at the earliest possible date." In December 1972 the Council attempted to place the Nation's growing dependence upon imports in the perspective of the long-term energy situation: "During the next three to five years, a further deterioration of the domestic energy supply position is anticipated. . . . The long lead times required for orderly development of energy resources make it essential that national energy objectives and sound enabling policies be established promptly."

Fortunately, the United States has an adequate energy resource base. Action taken now would markedly improve our energy situation in future years. To attract the vast capital requirements to develop our indigenous resources, the energy industries will need higher prices and appropriate national energy policies. This was the advice repeatedly and urgently submitted by the National Petroleum Council to the Federal Government over the past four years.

Mr. HANSEN. Mr. President, both those who would be required to report this mass of unneeded information and those who would receive and compile it are opposed to this bill.

The Federal Energy Administration and the Department of the Interior already have all the authority they need to require whatever reports they want on energy or all natural resources.

This proposal is an unnecessary and expensive overkill and should be killed by the Senate rather than further punishing industry.

Let us give them a chance to go out and develop our natural resources rather than spend all their time filling out useless reports.

As a further example of the real hardships this bill would impose on small business and industry, I would like to refer to a letter from a small refiner in Wyoming. He has applied for an exemption to present reporting requirements of the Emergency Petroleum Allocation Act. If he cannot comply with present reporting requirements, you can imagine what he would face under this bill.

I ask unanimous consent that the letter be printed in the RECORD.

There being no objection, the letter

was ordered to be printed in the RECORD, as follows:

SAGE CREEK REFINING Co.,
Cowley, Wyo., June 5, 1974.

MELVIN GOLDSTEIN,
Director, Office of Exceptions & Appeals, Federal Energy Office, Winder Building, Washington, D.C.

DEAR SIR: I would like to ask that Sage Creek Refining Company be excused from filing Form F.E.O.-96 with the Federal Energy Office. I make this request due to the extreme hardship that filing this report would place on Sage Creek.

We are a very small company with a crude capacity of 1200 Bbls per day and an average run of around 500 Bbls per day. We have operated the refinery at a loss every year since we started in 1958, and have been kept going by the profits from our service stations which have always done well but could not have been supplied without the help of the refinery.

The only way that we have been able to keep the refinery open is by keeping our labor force small, working long hours and saving wherever possible. Our bookkeeping system is simple and we have a C.P.A. figure a financial statement and compute our income tax once a year. To fill out this monthly report would require that we hire a C.P.A. full time or purchase expensive computers, either one of which the refinery could not afford at this time.

Even though there has been an energy shortage the competition in this area has kept our prices from 6c to 7c per gallon below the major oil companies on all of our products. I'm sure that our raw materials are costing us more on the average than the larger companies. The cost has tripled on some of our blending stocks. I am sure that we are staying within the guidelines of the regulations set up by the F.E.O. because there is no one that I know of who is below us in the price at this time.

If there is anything else that you need to make your decision we would be glad to supply it. We hope that you will give this request serious consideration because it may very well make the difference of whether we continue to operate our refinery or not. Thank you.

Sincerely,

ROBERT N. BAIRD,
President.

Mr. HANSEN. Mr. President, my good friend, the junior Senator from Arizona (Mr. GOLDWATER) wrote an article for the May issue of *Nation's Business* which should be carefully heeded by every businessman in this country.

It is not just the oil industry that is under attack and threatened, it is every industry and businessman in the United States. Senator GOLDWATER wrote:

In the current drive for government ownership of business, the oil industry just happened to be the first juicy target for the liberal-leftist cabal. And already we know from signs that are evident in all parts of the nation that today's energy crisis will be tomorrow's steel crisis, and tomorrow's steel crisis will be the next day's crisis for the entire competitive enterprise system.

Mr. President, I hope all businessmen will heed Senator GOLDWATER's warning. This bill is a good example of what he was writing about and I also hope that other segments of business and industry will join in opposing the spate of punitive legislation aimed at the petroleum industry and in opposing this bill which is aimed at practically all industry.

Mr. MCINTYRE. Mr. President, the Energy R. & D. appropriation bill at long

last will provide the money we need to enlarge our energy supplies, and over the long run should bring down the fuel prices we are facing today.

It should provide the basis for cheap electricity, cheaper oil, more methane both from natural gas wells and from synthetic methods, and better ways to move our fuel around. I am pleased that we are moving in the right direction.

This bill provides us with the means to increase our historic energy base. But it does a lot more, it gives us the means to move ahead to free ourselves from the dependence on the companies that have taken control of so much of our national affairs—by this I mean the oligopoly of the Nation's major oil companies.

This bill does nothing to stop the oil companies from giving us more fuel, but it also provides funds for us to free ourselves from total dependence on those companies for oil, gas, and indirectly, electricity. While I would not want to forecast lower prices for fuels, I certainly think this bill could go a long way to stopping price increases.

Providing \$2.2 billion for energy research is probably the best investment this Congress could make this year. It is easily more than double the amount of money we spent 2 years ago and a hefty increase over what we spent last year.

This is a step that will put us in better stead than spending trillions of dollars on the arms race. This R. & D. bill puts money into things that we need, things we can use. Of course, it does put money on the horses that are already running: Coal, nuclear energy, oil, and electricity. But at the same time it gives us funds to free ourselves from the total dependence on those fuels such as \$72 million for research on renewable energy, like solar, geothermal, windmills, and water power. They are the only way to freedom for us all. These are fuels that cannot be monopolized, that cannot be taken over. They are there for us all. No oil company, no small country, can hold these fuels from us.

Mr. President, I am pleased to support this bill, as amended.

Mr. KENNEDY. Mr. President, the energy research and development appropriation which we have before us today includes funding for programs which are of particular concern to me as chairman of the Subcommittee on the National Science Foundation, as a member of the Senate Ocean Policy Study, and as a New England Senator concerned with the hardships our area has faced as a result of our heavy dependence on imported fuel and our position at the end of the energy supply line.

There are two particular items in the pending bill that I want to call to the special attention of my colleagues. These items will have a critical effect on the formulation of a well-balanced policy for the development of existing energy sources and will provide needed Federal funding of research into the new technologies we will need in the next decades if we are to utilize a wide range of renewable and nonpolluting alternative energy sources—the sun, the wind, the oceans, and the earth itself.

First, this legislation includes \$19,157,000 to gather necessary information on the impact of oil and gas development on the U.S. Outer Continental Shelf. This funding is essential if we are to meet the recognized concerns raised as a result of the recent study by the Council on Environmental Quality, which included a strong recommendation that an accelerated leasing program be undertaken in the Georges Bank area off the New England coast. Although that study cited the lack of information available in such critical areas as the effect of such development on the ocean and coastal environment, on fish and wildlife and on our recreational areas and beaches—no funds were requested by the administration in its \$2.2 billion energy research program to gather this information.

These are critical questions to those of us in New England. The research which the National Oceanic and Atmospheric Administration will conduct with the funds provided in this appropriation will provide us with the knowledge we need to evaluate accurately the impact of offshore oil and gas development and to measure that impact against other short and medium term solutions such as additional refinery capacity, hydroelectric power, the stockpiling of imported petroleum products and a concerted energy conservation effort.

As a member of the ocean policy study, which has heard extensive testimony on the inadequacy of Federal data-gathering efforts on the OCS and on the critical need for a stepped-up research program I welcome the inclusion of this funding in the special energy appropriation.

The ocean policy study has made the energy potential of the OCS and the impact of its extraction on the environmental and socioeconomic conditions of the coastal zone its first area of investigation. And the initiative of its chairman, Senator HOLLINGS, in seeking this funding, is a clear indication that the study is meeting its responsibility to influence both the legislative and executive approaches to ocean policy and to insure a strong voice for the Congress in the determination of priorities for the use of our oceans. As a newly appointed member of the study, I look forward to participating in its work and to extending to concerned Massachusetts fishermen, recreation interests, consumer groups, environmentalists, and the business and industrial community the opportunity to present their views to the study.

Second, Mr. President, the pending appropriation includes \$101.8 million for the energy research programs of the National Science Foundation. These programs will develop such needed information on new technologies for energy conservation, for coal gasification and liquefaction, for the development of solar and geothermal energy sources and for oil and gas resource assessments.

These are areas in which the foundation first began research as early as 1950. Until the acute shortages we experienced last winter they are programs which were consistently underfunded by the administration. In fact, they are programs under which, as recently as last year, the Congress had to set funding

floors, in order to insure that the money was not impounded and to guarantee that federally funded research and development programs did not ignore this critical area.

As a result of this congressional action, the NSF now has a \$28 million energy research and technology program underway, which will be tripled under the pending appropriation. Already, projects funded by the Foundation are bringing us more information on the feasibility of using solar heating and cooling systems than all previous laboratory experiments to date. And with the funds included in the bill before us, the Foundation plans to move ahead rapidly into solar thermal conversion, wind energy conversion, bio-conversion to fuels, ocean thermal energy conversion, and photovoltaic energy conversion. Its efforts include a wide range of potential technology combinations to help this Nation meet its energy needs in the next decade and beyond, and the investment will provide the broad base of knowledge needed to resolve energy issues over the long term, and to increase the efficiency of current energy usage and systems.

As chairman of the Subcommittee on the National Science Foundation, I have had the opportunity over the last 6 years to follow closely the Foundation's growing involvement in the development of a selected number of research programs directed to critical areas of national need. Its energy research and technology program is one important part of that effort, and I urge prompt approval of the funds requested so that the Foundation can begin to allocate the new funding as soon as possible.

Mr. SCHWEIKER. Mr. President, one of the most significant items of H.R. 14434, the Energy Research Appropriations Act for fiscal year 1975 is the doubled commitment to coal research.

For many years, long before the concept of an energy crisis was understood by the public, I have been pressing for expanded research and development of methods to utilize our significant coal reserves.

Last year, during consideration of the fiscal year 1974 Interior Department appropriations bill, I sponsored an amendment to double the funding for the research activities of the Office of Coal Research bill from \$43.5 million to \$95 million.

This year, the Appropriations Committee has doubled coal research funds once again, appropriating \$258.4 million for the Office of Coal Research, and \$137.3 million for research and development activities of the Bureau of Mines. I strongly urge my colleagues to support these important new funding levels for coal research.

The simple fact is that our Nation's long-range energy needs cannot be met unless we fully utilize our most abundant domestic energy source—coal. Coal represents 87 percent of proven fossil fuel reserves in our country, and must be utilized.

The Arab oil embargo dramatically demonstrated to the American people, and the Congress, that we cannot remain dependent on foreign energy

sources. This is one of the reasons I have been vigorously opposing the billion-dollar natural gas deals with the Soviet Union being sponsored by the U.S. Export-Import Bank—we must never again depend on foreign energy sources that can be turned off by a hostile government or as part of international negotiations.

Coal is our most plentiful energy resource. Coal is readily available now in our mines. And most important, the environmental problems caused by the burning of coal are currently being solved by modern technology. Coal can be converted into clean-burning pipeline gas and fuel oil at a price competitive with other sources of energy on the market today. The processes of coal gasification and coal liquefaction can convert coal into clean-burning fuels at low costs, but we must have the necessary research commitments to significantly expand these processes. I have personally seen the future U.S. Bureau of Mines coal gasification plant at Bruceton, near Pittsburgh, and have seen some of its current work. When fully completed, this plant will be able to economically convert 75 tons of coal daily into 300,000 cubic feet of clean-burning gas. This is the kind of modern technique that can help us become self-sufficient in energy.

Mr. President, the energy crisis, and the oil embargo, this past winter was of great concern to all Americans. It taught us a lesson we must never forget—that we must take all steps possible to become self-sufficient in energy. I have introduced my own bill, S. 2956, to create a Federal Energy Production Corporation to stimulate immediate production of American energy sources. Other measures have been introduced and debated covering oil shale, atomic energy, solar, geothermal, and other energy sources. These are all steps we must take.

But in addition to these energy concepts, we must make immediate commitments of immediate sources of energy. Coal is the most significant of the processes that is immediately available. But we must expand the research money available for coal to guarantee that the new technologies can quickly move from research into production.

I commend the members of the Appropriations Committee for making this commitment to coal, and to coal research, and am confident that this financial commitment will play an important role in helping this Nation to become more self-sufficient and thereby help prevent future energy crises.

The PRESIDING OFFICER. The bill having been read the third time, the question is, Shall it pass?

On this question the yeas and nays have been ordered and the clerk will call the roll.

The assistant legislative clerk called the roll.

Mr. ROBERT C. BYRD. I announce that the Senator from Indiana (Mr. BAYH) and the Senator from Arkansas (Mr. FULBRIGHT) are necessarily absent. I further announce that the Senator

from Wyoming (Mr. McGEE) is absent on official business.

I also announce that the Senator from Montana (Mr. METCALF) and the Senator from Missouri (Mr. SYMINGTON) are absent because of illness.

Mr. GRIFFIN. I announce that the Senator from Oregon (Mr. HATFIELD), the Senator from New York (Mr. JAVITS), and the Senator from Illinois (Mr. PERCY) are necessarily absent.

I further announce that, if present and voting, the Senator from Oregon (Mr. HATFIELD) would vote "yea."

The result was announced—yeas 92, nays 0, as follows:

[No. 253 Leg.]

YEAS—92

Abourezk	Ervin	Montoya
Aiken	Fannin	Moss
Allen	Fong	Muskie
Baker	Goldwater	Nelson
Bartlett	Gravel	Nunn
Beall	Griffin	Packwood
Bellmon	Gurney	Pastore
Bennett	Hansen	Pearson
Bentsen	Hart	Pell
Bible	Hartke	Proxmire
Biden	Haskell	Randolph
Brock	Hathaway	Ribicoff
Brooke	Helms	Roth
Buckley	Hollings	Schweiker
Burdick	Hruska	Scott, Hugh
Byrd	Huddleston	Scott
Harry F., Jr.	Hughes	William L.
Byrd, Robert C.	Humphrey	Sparkman
Cannon	Inouye	Stafford
Case	Jackson	Stennis
Chiles	Johnston	Stevens
Church	Kennedy	Stevenson
Clark	Long	Taft
Cook	Magnuson	Talmadge
Cotton	Mansfield	Thurmond
Cranston	Mathias	Tower
Curtis	McClellan	Tunney
Dole	McClure	Welcker
Domenici	McGovern	Williams
Dominick	McIntyre	Young
Eagleton	Metzenbaum	
Eastland	Mondale	

NAYS—0

NOT VOTING—8

Bayh	Javits	Percy
Fulbright	McGee	Symington
Hatfield	Metcalfe	

So the bill (H.R. 14434) was passed.

Mr. McCLELLAN. Mr. President, I move to reconsider the vote by which the bill was passed.

Mr. ROBERT C. BYRD. Mr. President, I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. McCLELLAN. Mr. President, I move that the Senate insist on its amendments and request a conference with the House of Representatives on the disagreeing votes thereon, and that the Chair be authorized to appoint the conferees on the part of the Senate.

The motion was agreed to; and the Presiding Officer appointed Mr. McCLELLAN, Mr. STENNIS, Mr. PASTORE, Mr. BIBLE, Mr. PROXMIRE, Mr. MONTAYA, Mr. HOLLINGS, Mr. YOUNG, Mr. HRUSKA, Mr. FONG, Mr. HATFIELD, Mr. STEVENS, Mr. MATHIAS, and Mr. BELLMON conferees on the part of the Senate.

Mr. McCLELLAN. Mr. President, I ask unanimous consent that the Secretary of the Senate be authorized to make any necessary technical and clerical corrections in the engrossment of the Senate amendments.

The PRESIDING OFFICER (Mr. BARTLETT). Without objection, it is so ordered.

ASSISTANCE TO THE STATES RELATING TO ANIMAL HEALTH RESEARCH

Mr. TALMADGE. Mr. President, I ask the Chair to lay before the Senate a message from the House of Representatives on H.R. 11873.

The PRESIDING OFFICER (Mr. BARTLETT) laid before the Senate a message from the House of Representatives announcing its disagreement to the amendments of the Senate to the bill (H.R. 11873) to authorize the Secretary of Agriculture to encourage and assist the several States in carrying out a program of animal health research, and requesting a conference with the Senate on the disagreeing votes of the two Houses thereon.

Mr. TALMADGE. I move that the Senate insist upon its amendments and agree to the request of the House for a conference on the disagreeing votes of the two Houses thereon, and that the Chair be authorized to appoint the conferees on part of the Senate.

The motion was agreed to; and the Presiding Officer (Mr. BARTLETT) appointed Mr. TALMADGE, Mr. MCGOVERN, Mr. ALLEN, Mr. CLARK, Mr. YOUNG, Mr. DOLE, and Mr. BELLMON conferees on the part of the Senate.

ORDER OF BUSINESS

The PRESIDING OFFICER. What is the will of the Senate?

Mr. ROBERT C. BYRD. Mr. President, under the order does the Senate now return to the bill, S. 3523?

The PRESIDING OFFICER. It does. The Senator is correct.

NATIONAL COMMISSION ON SUPPLIES AND SHORTAGES ACT OF 1974

The Senate continued with the consideration of the bill (S. 3523) to establish a Temporary National Commission on Supplies and Shortages.

The PRESIDING OFFICER. Thirteen minutes remain for the proponents, and 39 minutes remain for the opponents. Who yields time?

Mr. HUMPHREY. Mr. President, I send to the desk an amendment.

The PRESIDING OFFICER. The amendment will be stated.

The amendment was read, as follows:

On page 4, line 14, insert the following: strike out the word "reports", and add between "its" and "specific" the words "first report".

On page 4, strike out everything between "including" in line 16 and "examination" in line 18, and insert between "including" and "examination" the following: "the format and structure for the establishment of an agency to provide for a continuing and comprehensive".

Mr. HUMPHREY. Mr. President, I suggest the absence of a quorum, with the time for the quorum call to be equally divided.

The PRESIDING OFFICER. Without objection, it is so ordered. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that I may proceed for 1 minute.

The PRESIDING OFFICER. Without objection, it is so ordered.

ENVIRONMENTAL CENTERS ACT OF 1974

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of Calendar No. 877, S. 1865.

The PRESIDING OFFICER. The bill will be stated by title.

The legislative clerk read as follows:

A bill (S. 1865) to amend the National Environmental Policy Act of 1969 in order to encourage the establishment of, and to assist State and regional environmental centers.

The PRESIDING OFFICER. Is there objection to the present consideration of the bill?

There being no objection, the Senate proceeded to consider the bill, which had been reported from the Committee on Interior and Insular Affairs with amendments to strike out all after the enacting clause and insert:

That this Act may be cited as the "Environmental Centers Act of 1974".

DEFINITIONS

SEC. 2. As used in this Act—

(1) The term "Administrator" means the Administrator of the Environmental Protection Agency.

(2) The term "State" means any State, the District of Columbia, the Commonwealth of Puerto Rico, or any territory or possession of the United States.

(3) The term "educational institution" means a public or private institution of higher education, or a consortium of public or private institutions of higher education.

(4) The term "State environmental center" means an organization which, on a statewide basis, carries out and coordinates research, training, and information dissemination; assists State and local governments; and performs other functions described in section 6 of this Act related to the protection and improvement of the environment.

(5) The term "regional environmental center" means an organization which, on an interstate basis, undertakes and coordinates research, training, and information dissemination; assists State and local governments; and performs other functions described in section 6 of this Act related to the protection and improvement of the environment.

(6) The term "environmental center" means a State environmental center or regional environmental center established pursuant to this Act.

(7) The term "other research facilities" means the research facilities of (A) any educational institution in which a State environmental center is not located and which does not directly participate in a regional environmental center, (B) public or private foundations and other institutions, or (C) private industry.

POLICY AND PURPOSES

SEC. 3. (a) It is the policy of the Congress to support basic and applied research, planning, management, education, and other activities necessary to maintain and improve the quality of the environment through the establishment of interdisciplinary environmental centers, in cooperation with and among the States, and thereby to achieve a more adequate program of environmental protection and improvement within the States, regions, and Nation. It is hereby recognized that research, planning, management, and education in environmental subjects are necessary to establish an environmental balance in local, State, and regional areas to assure the Nation of a quality environment.

(b) The purposes of this Act are to stimulate, sponsor, provide for, and supplement existing programs for the conduct of basic and applied research, investigations, and experiments relating to the environment; to provide for comprehensive study of environmental problems of particular importance to the several States; to provide for the widest dissemination of environmental information; to assist in the training of professionals in fields related to the protection and improvement of the Nation's environment; to provide for coordination of the above activities; and to authorize and direct the Administrator to cooperate with the several States for the purpose of encouraging and assisting them in carrying out the activities described above having due regard to the varying conditions and needs of the respective States.

DESIGNATION AND APPROVAL OF ENVIRONMENTAL CENTERS

SEC. 4. (a) The Administrator may provide financial assistance under this Act for the purpose of enabling any State, if such State does not participate in a regional environmental center receiving funds under this Act, to establish and operate one State environmental center if—

(1) such State environmental center is, or will be—

(A) located at an educational institution within the State; and

(B) administered by such educational institution;

(2) such educational institution is designated by the Governor of the State; and

(3) the Administrator determines that such State environmental center—

(A) meets, or will meet, the requirements set forth in section 5 of this Act; and

(B) has, or will have, the capability to carry out the functions set forth in section 6 of this Act.

(b) The Administrator may provide financial assistance under this Act for the purpose of enabling two or more States, if none of such States has a State environmental center assisted under this Act, to establish and operate a regional environmental center if—

(1) such regional environmental center is, or will be—

(A) located at an educational institution within one of such States, or in educational institutions within two or more of such States if such institutions agree to operate jointly as the regional environmental center; and

(B) administered by such educational institution or institutions;

(2) such educational institution in each State is designated by the Governor of the State to participate in the regional environmental center; and

(3) the Administrator determines that such regional environmental center—

(A) meets, or will meet, the requirements set forth in section 5 of this Act; and

(B) has, or will have, the capability to carry out the functions set forth in section 6 of this Act.

(c) Each Governor, in designating an educational institution to be a State environmental center or to participate in a regional environmental center, shall take into account those institutions of higher education in the State which, at that time, are carrying out environmentally related research and education programs; and shall, insofar as possible, avoid duplication of such programs.

ELIGIBILITY REQUIREMENTS FOR ENVIRONMENTAL CENTERS

SEC. 5. Each environmental center shall—

(1) be organized and operated so as to coordinate, support, augment, and implement programs contributing to the protection and improvement of the local, State, regional, and national environment;

(2) have (A) a chief administrative officer, hereinafter referred to as the "Director", and (B) a treasurer who shall carry out the duties specified in section 11 of this Act, each of whom shall be appointed by the chief executive officer of the educational institution concerned, in the case of a State environmental center, or jointly approved and appointed by the chief executive officers of the educational institutions concerned, in the case of a regional environmental center.

(3) have a nucleus of administrative, professional, scientific, technical, and other personnel capable of planning, coordinating, and directing interdisciplinary programs related to the protection and improvement of the local, State, regional, and national environment;

(4) be authorized to employ personnel to carry out appropriate research, planning, management, and education programs;

(5) be authorized to make contracts and other financial arrangements necessary to implement subsection (b) of section 6 of this Act; and

(6) make available to the public all data, publications, studies, reports, and other information which result from its programs and activities, except information relating to matters described in section 552(b)(4) of title 5, United States Code.

FUNCTIONS OF ENVIRONMENTAL CENTERS

SEC. 6. (a) Each environmental center shall be responsible for the following functions—

(1) the planning and implementing of research, investigations, and experiments relating to the study and resolution of environmental pollution, natural resource management, environmental health, and other local, State, and regional environmental problems and opportunities;

(2) the training of environmental professionals through such research, investigations, and experiments, which training may include, but is not limited to, biological, ecological, geographic, geological, engineering, economic, legal, energy resource, natural resource, and land use planning, social, recreational, and other aspects of environmental problems;

(3) the establishment, operation, and maintenance of a comprehensive environmental education program directed at the widest possible segment of the population, which program may include, but is not limited to, public school curricula development, undergraduate degree programs, graduate programs, nondegree college level course work, professional training, short courses, workshops, and other educational activities directed toward professional training and general education;

(4) the widest possible dissemination of useful and practical information on subjects relating to the protection and enhancement of the Nation's environment and the establishment and maintenance of a reference service to facilitate the rapid identification,

acquisition, retrieval, dissemination, and use of such information;

(5) the coordination of efforts in the several areas required to achieve the purposes and objectives of this Act; and

(6) the submission, on or before September 1 of each year, of a comprehensive report of its program and activities during the immediately preceding fiscal year to the relevant Governor or Governors, the Administrator, and the Environmental Centers Research Coordination Board established under section 9 of this Act.

(b)(1) Each environmental center is encouraged to contract with other environmental centers and with other research facilities to undertake any function listed in subsection (a) of this section in order to achieve the most efficient and effective use of institutional, financial, and human resources.

(2) Each environmental center is encouraged to make grants, contracts, and cooperative agreements through fund matching or other arrangements with—

(A) other environmental centers, research facilities, and individuals the training, experience, and qualifications of which or whom are, in the judgment of the Director, adequate for the conduct of specific projects to further the purposes of this Act; and

(B) local, State, and Federal agencies to undertake research, investigations, and experiments concerning any aspects of environmental problems related to the mission of the environmental center and the purposes of this Act.

(c) In the carrying out of the functions described in clauses (a) (3) and (4) of this section, the services of private enterprise firms active in the fields of information, technical services, publishing multimedia or educational materials, and broadcasting are to be utilized whenever feasible so as to avoid creating Government competition with private enterprise and to achieve the most efficient use of public funds in fulfilling the purposes of this Act.

AUTHORIZATION OF APPROPRIATIONS FOR GRANTS

SEC. 7. (a) There is authorized to be appropriated for grants to environmental centers for the purposes of this Act \$7,000,000 the first full fiscal year following the enactment of this Act; \$10,000,000 for the second full fiscal year following the enactment of this Act; \$15,000,000 for the third full fiscal year following the enactment of this Act; and \$20,000,000 for each of the next two fiscal years. The sums authorized for appropriation pursuant to this subsection shall be dispersed in equal shares to the environmental centers by the Administrator, except that each regional environmental center shall receive the number of shares equal to the number of States participating in such regional environmental center: *Provided*, That sums allocated under this subsection in each fiscal year after the third full fiscal year following the enactment of this Act shall be made available only to those environmental centers for which the participating States provide \$1 for each \$2 provided under this subsection.

(b) In addition to the sums authorized by subsection (a) of this section, there is further authorized to be appropriated \$10,000,000 for each of the three full fiscal years following the enactment of this Act; and \$15,000,000 for each of the two succeeding fiscal years, which shall be allocated by the Administrator, after consultation with the Environmental Centers Research Coordination Board, to the environmental centers on the following basis; one-fourth based on population using the most current decennial census, one-fourth based on the amount of each State's total land area, and one-half based on the assessment of the Administrator with respect to (1) the nature and relative sever-

ity of the environmental problems among the areas served by the several environmental centers, and (2) the ability and willingness of each center to address itself to such problems within its respective area; except that sums allocated under this subsection shall be made available only to those environmental centers for which the States concerned provide \$1 for each \$2 provided under this subsection.

(c) In addition to the sums authorized to be appropriated under subsections (a) and (b) of this section, there is authorized to be appropriated for each of the five full fiscal years following the enactment of this Act, such sums as may be necessary to provide to each regional environmental center during each of such fiscal years an amount of money equal to 10 per centum of the funds which will be disbursed and allocated to such center during that fiscal year by the Administrator under such subsections (a) and (b).

(d) Not less than 10 per centum of any sums allocated to an environmental center shall be expended only in support of work planned and conducted on interstate or regional programs.

AUTHORIZATION OF APPROPRIATIONS FOR ADMINISTRATION

SEC. 8. There is authorized to be appropriated \$1,000,000 for each of the five full fiscal years after the enactment of this Act, to be used by the Administrator solely for the administration of this Act and to carry out the purposes of section 9 of this Act.

ENVIRONMENTAL CENTERS RESEARCH COORDINATION BOARD

SEC. 9. (a) There is established the Environmental Centers Research Coordination Board (hereinafter referred to in this section as the "Board"), for the purposes of assisting the Administrator with program development and operation, consisting of the following sixteen members—

(1) a Chairman, who shall be the Administrator;

(2) one representative each from (A) the Council on Environmental Quality; (B) the National Science Foundation; (C) the Department of the Interior; (D) the Department of Agriculture; and (E) the National Institutes of Health;

(3) five members, appointed by the Administrator, each of whom shall be the Director of a State or regional environmental center authorized in this Act, and who shall be selected to represent the widest possible geographic cross section of the Nation; and

(4) five members, appointed by the Administrator, who shall be appointed on the basis of their abilities to represent the views of (A) State government; (B) private industry; (C) the public academic community; (D) the private academic community; and (E) not-for-profit organizations the primary objective of which is the improvement of environmental quality.

(b) Selection of Board members pursuant to clause (a) (2) of this section shall be made by heads of the respective entities after consultation with the Administrator.

(c) The Chairman of the Board may designate one of the members of the Board as Acting Chairman to act during his absence.

(d) The Board shall undertake a continuing review of the programs and activities of all environmental centers assisted under this Act and make such recommendations as it deems appropriate to the Administrator and the relevant Governors with respect to the improvement of the programs and activities of the several centers. The Board shall, in conducting its review, give particular attention to finding any unnecessary duplication of programs and activities among the several environmental centers and shall include in its recommendations suggestions for minimizing such duplications. The Board shall also coordinate its activities under

this section with all appropriate Federal agencies and may coordinate such activities with such State and local agencies and private individuals, institutions, and firms as it deems appropriate.

(e) The Board shall meet at least four times each year. The members of the Board who are not regular full-time officers or employees of the United States shall, while carrying out their duties as members, be entitled to receive compensation at a rate fixed by the Administrator, but not exceeding \$100 per diem, including traveltime, and, while away from their homes or regular places of business, they may be allowed travel expenses, including per diem in lieu of subsistence as authorized by law for persons intermittently employed in Government service.

ENVIRONMENTAL CENTER ADVISORY BOARDS

SEC. 10. (a) The Governor of each State having a State environmental center assisted under this Act, and the Governors of States participating in each regional environmental center assisted under this Act, shall appoint, after consultation with the Director of the environmental center concerned, an advisory board which shall—

(1) advise such environmental center with respect to the activities and programs conducted by the center and the coordination of such activities and programs with the environmental protection and enhancement activities and programs of Federal, State, and local governments, of other educational institutions (whether or not directly participating in an environmental center assisted under this Act), and of private industry; and

(2) make such recommendations as it deems appropriate regarding—

(A) the implementation and improvement of the research, investigations, experiments, training, environmental education, information dissemination, and other activities and programs undertaken by the environmental center; and

(B) new activities and programs which the environmental center should undertake or support.

(b) All recommendations made by an advisory board pursuant to clause (a) (2) of this section shall be promptly transmitted to the Governor or Governors concerned, the Director of the environmental center, the chief executive officer of each educational institution in which the environmental center is located, and the Administrator.

(c) Any recommendations made by an advisory board pursuant to clause (a) (2) of this section shall be responded to, in writing, by the Director of the environmental center within one hundred and twenty days after such recommendations are received. In any case in which any such recommendation is not followed or adopted by the Director, he, in his response, shall state, in detail, the reason why the recommendation was not, or will not be, followed or adopted.

(d) All recommendations made by an advisory board pursuant to clause (a) (2) of this section, and all responses by the Director thereto, shall be matters of public record and shall be available to the public at all reasonable times.

(e) (1) Each advisory board appointed pursuant to this section shall have not to exceed fifteen members consisting of representatives of—

(A) the agencies of the relevant State or States which administer laws and programs relating to environmental protection or enhancement;

(B) the educational institution or institutions in which the environmental center is located;

(C) the business and industrial community; and

(D) not-for-profit organizations, the primary objective of which is the improvement of environmental quality, and other public interest groups.

The Director of the environmental center shall be an ex officio member of the advisory board. Each advisory board shall elect a chairman from among its appointed members.

(2) The term of office of each member appointed to any advisory board shall be for three years; except that of the members initially appointed to any advisory board, the term of office of one-third of the membership shall be for one year, the term of office of one-third of the membership shall be for two years, and the term of office of the remaining members shall be for three years.

(f) Each advisory board appointed pursuant to this section shall meet not less than once each year.

(g) Funds provided under section 7 of this Act may be used to pay the travel and such other related costs as shall be authorized by the Director of the environmental center which are incurred by the members of each advisory board incident to their attendance at meetings of the advisory board or its official committees; except that the amount of travel and related costs paid under this subsection to any member of an advisory board with respect to his attendance at any meeting of the Advisory Board may not exceed the amount which would be payable to such member if the law relating to travel expenses for persons intermittently employed in Government service applied to such member.

MISCELLANEOUS

SEC. 11. (a) Sums made available for allotment to the environmental centers under this Act shall be paid in quarterly installments during each fiscal year. Each treasurer appointed pursuant to clause (2) of section 5 of this Act shall receive and account for all funds paid to the environmental center under the provisions of the Act and shall transmit, with the approval of the Director, to the Administrator on or before the first day of September of each year, a detailed statement of the amount received under provisions of this Act during the preceding fiscal year and its disbursement, on schedules prescribed by the Administrator. If any of the moneys received by the authorized receiving officer of the environmental center under the provisions of this Act shall be found by the Administrator to have been improperly diminished, lost, or misapplied, they shall be replaced by the environmental center concerned and until so replaced no subsequent appropriations shall be allotted or paid pursuant to this Act to that environmental center.

(b) Moneys appropriated under this Act, in addition to being available for expenses incurred in research, investigations, experiments, education, and training conducted under authority of this Act, shall also be available for printing and publishing of the results thereof.

(c) Any environmental center which receives assistance under this Act shall make available to the Administrator and the Comptroller General of the United States, or any of their authorized representatives, for purposes of audit and examination, any books, documents, papers, and records which are pertinent to the assistance received by such environmental center under this Act.

DUTIES OF ADMINISTRATOR

SEC. 12. The Administrator shall—

(1) prescribe such rules and regulations as may be necessary to carry out the provisions and purposes of this Act;

(2) indicate to the environmental centers from time to time such areas of research and investigation as to him seem most important, and encourage and assist in the establishment and maintenance of cooperation among the several environmental centers;

(3) report on or before January 1 of each year to the President and to Congress regarding the receipts and expenditures and work of all the environmental centers as-

sisted under the provisions of this Act and also whether any portion of the appropriations available for allotment to any environmental center has been withheld, and, if so, the reason therefor; and

(4) undertake a continuing survey, and report thereon to Congress on or before January 1 of each year, with respect to—

(A) the interrelationship between the types of programs conducted by environmental centers pursuant to this Act; and

(B) ways in which the activities provided for in this Act for improving the Nation's environment may be integrated with other environmentally related Federal programs.

The Administrator shall include in any report required under this paragraph any recommendations he deems appropriate to achieve the purposes of this Act.

Mr. BELLMON. Mr. President, I urge the Senate to adopt S. 1865 to create a network of environmental centers to conduct research on and monitoring of environmental problems at the State or regional level. Congress has been generous with the Federal Establishment in providing funds to conduct national research on the environment. Certainly Congress needs the best knowledge and data it can get on the standards which it is setting nationwide to clean up the air and water. State and local governments, faced with the need to make similar decisions, need the same facts relating to their States or communities. S. 1865 will provide a way to get such information.

Too often, we are telling States and localities to meet certain standards, but we are not telling them how. Too often, States and localities have environmental problems that the Federal Establishment dismisses as of purely local concern.

Therefore, I believe it is essential that these jurisdictions be equipped, modestly, to address these problems on the basis of their own decisions and on the basis of their own perceptions of their needs. Let us talk a little about what this measure will and will not do.

It will not provide a lot of money to build new buildings and research establishments. It will provide some money for the Governor of each State, or possibly several States together, to designate an existing educational institution or institutions to carry out research and train professionals in fields that are of prime environmental concern to the State or region.

Mr. President, this bill was reported out of the Senate Interior Committee unanimously. It has been cosponsored by a distinguished group of Senators. It was passed by the 92d Congress as part of a bill containing other legislative features, and it suffered a pocket veto.

The bill was reintroduced with some assurance from the administration that it will be signed this time. This bill in its emphasis on decisionmaking at the State and local level actually translates new federalism concepts into the research and development area. The highly respected chairman of the House Subcommittee on Fisheries and Wildlife Conservation and the Environment, the Honorable JOHN DINGLELL, has introduced the same measure in the House as H.R. 35 and we are assured of speedy consideration in that body.

Mr. President, I am most hopeful that

this is a bill whose time has finally come. It is meritorious. We need it now. The States and localities need it now. The public deserves it now.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that the committee amendments be considered en bloc.

The PRESIDING OFFICER. Without objection, the amendments are considered and agreed to en bloc.

The bill is open to further amendment. If there be no further amendment to be proposed, the question is the engrossment and third reading of the bill.

The bill was ordered to be engrossed for a third reading, was read the third time, and passed.

The title was amended, so as to read: "A bill to authorize and encourage establishment of, and to render assistance to, environmental centers in the several States and regions of the Nation, and for other purposes."

NATIONAL COMMISSION ON SUPPLIES AND SHORTAGES ACT OF 1974

The Senate continued with the consideration of the bill (S. 3523) to establish a temporary National Commission on Supplies and Shortages.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that no time be charged against either side on the quorum call which I suggested.

The PRESIDING OFFICER. Without objection, it is so ordered. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER (Mr. DOMENICI). Without objection, it is so ordered.

Mr. MANSFIELD. Mr. President, I seek recognition for 5 minutes on the bill.

Will the Senator from Tennessee yield me 5 minutes?

Mr. BROCK. I yield 5 minutes to the majority leader.

Mr. MANSFIELD. Mr. President, at the outset of this session the majority caucus and the Majority Policy Committee voted to support the establishment of an instrumentality designed to assist the Nation in dealing with potential future areas of crisis with regard to sufficient supplies of resources, materials, and commodities. Economic foresight was the way we perceived it, and it was agreed unanimously that some mechanism ought to be provided that gives us an alternative to the crash-based planning with which the Nation attempted to meet the energy problem. At the direction of the Democratic caucus, I pursued the issue with the Republican leadership, with the House joint leadership, and with the President. The joint leadership introduced a bill that was agreed to by all representing the executive and the legislative branches. In a sense, the genesis of this proposal was unique in the way both branches, both Houses, and both parties came together to find a solution to an issue of the highest priority. The

resulting bill, S. 3523, is what the Senate has been considering yesterday and today.

Let me say that I appreciate the deep and sincere interest in this issue by the Commerce Committee, the Government Operations Committee, and by other committees and individual Senators. Personally, I do not disagree with many of the views expressed on the issue, but feel constrained to suppress my personal concerns in the interest of preserving the unique cooperation achieved at the outset.

I should say that those who acted on behalf of the executive branch were Secretary of the Treasury George Shultz at the beginning, until his resignation; Secretary of the Treasury William Simon, Director Ash, Chairman Stein, Chairman Dunlop, and Chairman Flanigan. Not only do I think that the support of the administration and the House leadership are essential to the success of this proposal, with all due respect to the many Senators who have differed on certain specifics, it seems to me that unless these Department heads and Council heads cooperate fully in supplying the needed information to such an instrumentality, its usefulness would be greatly impaired. The leadership, therefore, sought to join in efforts that would assure the ultimate success of this first major step to meet an enormous problem. As it now stands, the proposal mandates that the specific recommendations as to a permanent facility be provided within 6 months. Thereafter this Commission would itself continue to perform the task of perceiving a potential crisis area and offering us alternative policy actions needed to offset that crisis until Congress acts on the recommendations for a permanent facility—I repeat, until Congress acts on the recommendations for a permanent facility. Congress would have 6 months to act and pending that action, this Commission itself has the authority to continue to perform these tasks on a transitional basis.

Let me close by stressing that this is a first step and with it is assured, I think, the cooperation between parties, between branches, and between Houses of Congress that will assure its success and ultimately the success of a future full-fledged, highly visible, and highly credible permanent mechanism within our national life to accomplish the task of economic foresight regarding the future needs of the Nation.

If after a year the transitional work of this Commission is unfinished, and Congress still has not acted on its recommendations, or if sufficient funds have not been made available, I see no reason why we simply cannot extend its life and provide supplemental resources. The important thing is that we get this project underway and that we do so cooperatively. This issue is too important to be jeopardized by further delay and long-range studies, which we have had up to our neck and coming out of our ears. We all agree with the objective involved, and I hope we will keep that in mind in considering further the proposal before us.

Mr. TUNNEY. Mr. President, will the Senator yield?

Mr. MANSFIELD. Yes, indeed.

The PRESIDING OFFICER. Who yields time?

Mr. TUNNEY. The Senator is yielding to me.

The PRESIDING OFFICER. The Senator's 5 minutes have expired.

Mr. TUNNEY. I yield time to myself on the bill.

Does the Senator have any kind of understanding with the administration with respect to a continuation of the responsibilities of the Commission if, after a year, its work is not done and Congress has not been able to determine what mechanism should be established for the evaluation of shortages? Would the administration agree to a continuation of the life of this Commission? Have representatives of the administration given any communication to the Senator that they are prepared to support the extension of the life of the Commission?

Mr. MANSFIELD. I may say to the distinguished Senator from California that we did not operate on the basis of understandings or deals. All the cards were laid on the table. The purpose was to be as careful as we could in the selection of a permanent Commission by way of the setting up of a temporary Commission to establish all the facts needed to be considered.

I personally would have no doubt that the administration, at least based on my interpretation of conversations and conferences with the men mentioned representing the executive branch, would be more than willing to consider an extension provided we showed some progress, some determination, and some objectivity in the meantime.

Mr. TUNNEY. I think that this is very important because, as the distinguished majority leader knows, there are a number of us who feel very sincerely—we may be wrong, but very sincerely—that we need a permanent mechanism right now, and that the study as to whether we do need a permanent Commission is superfluous because there have been studies in the past that have demonstrated we need it.

Mr. MANSFIELD. Mr. President, will the Senator yield?

Mr. TUNNEY. Yes.

Mr. MANSFIELD. The need is recognized for a permanent Commission. But we want to be absolutely certain rather than to jump ahead too fast, make mistakes and, hence, the transitional period so that we can be certain that we can do as good a job and create as good a permanent Commission as is possible and, in some way, bring to it all the findings of the congressional committees in both the House and the Senate, including the Commerce Committee on which the Senator serves with such distinction, all the agencies, officers and bureaus downtown, of which there are more than 50, so that we will have a clearinghouse of information already achieved and be able to plan for the future, and project shortages, say, in copper, in bauxite, which are with us at the present time.

We depend 100 percent on imports, and we will until and unless we begin to

develop the alumina clays in the States of Georgia, Montana, and Idaho and, perhaps, elsewhere.

On copper, the need is becoming apparent all the time that we are depending on outside sources, even though we import only 8 percent of our needs.

The purpose is to prepare, to plan, to anticipate, to develop substitutes and alternatives, and not be cut short as we were at the time of the energy crisis last October, even though we had been warned time and time again that this could happen.

We can, for example, take advantage of the excellent recommendation made 22 years ago by the Paley Commission. People have asked, "Well, why was that not put into operation?" I do not know what the answer is except that I would hazard the guess that with President Truman going out and President Eisenhower coming in, it was lost in the shuffle at that time. But what was said then holds up pretty much today and would be a fine working instrument to help a temporary Commission get under way toward the creation of a permanent Commission.

Mr. TUNNEY. During the course of our hearings administration witnesses testified before the committee—the two committees that were holding joint hearings, Government Operations and Commerce Committee—that such a permanent commission was not needed.

What I suppose I am trying to elicit from my very distinguished leader is the answer to a very basic question, and that is, assuming that Congress has not acted at the end of, the expiration of, the life of this Commission, is it the majority leader's understanding that the administration is prepared to see the life of this Commission extended for another 6 months or another 2 years until such time as Congress has an opportunity to act?

The importance of that is we are envisioning that this Commission will have the responsibilities immediately for collecting data on material shortages, monitoring that data, analyzing it and distributing information on a regular basis to Congress and to the executive branch. We do not want a hiatus between the expiration of the life of this Commission and a future point at which Congress would act, assuming that Congress does not act within a year.

Mr. MANSFIELD. I would agree with the assumption of the Senator from California; that would be my anticipation and my understanding; and frankly I would hope that it would be possible within the year to set up a permanent Commission, subject to the will of Congress at all times, and in that way get underway the kind of a permanent Commission which the distinguished Senator has been advocating during the course of this debate.

Mr. HUMPHREY. Mr. President, will the majority leader yield to me?

Mr. MANSFIELD. Yes, indeed.

Mr. HUMPHREY. I have an amendment pending which relates to this discussion, it may not be at all necessary to press it. I just wanted to get the counsel of the majority leader.

In the bill which comes to us now, the language on page 4 reads:

The Commission shall include in its reports specific recommendations with respect to institutional adjustments, including the advisability of establishing an independent agency to provide for . . .

My amendment, which is pending, would knock out the word "advisability" and would, in a sense, really set forth that the Commission was to report, as I have indicated in the language of the amendment, the format and structure for the establishment of an independent agency.

I ask the majority leader whether that complicates matters, or is it within what the majority leader thinks we ought to have in this legislation?

Mr. MANSFIELD. I would say that it complicates matters somewhat. The intent and the meaning which the Senator is intending to convey, and very constructively, I think, is contained within the contents of the bill now pending.

Mr. HUMPHREY. Does the Senator believe that the word "advisability" there leaves the option open to a point where an independent agency would not be recommended? In other words, a permanent commission would not be?

Mr. MANSFIELD. No, no. I would agree with the Senator from California and other Senators that what we are seeking to achieve on as solid a basis as possible is a permanent commission which could sort of act as a point organization; take out the possible deficiencies and come up with ways to develop alternatives, substitutes, or whatnot to overcome the crises not only in metals but in food, pure air, pure water. It covers the whole spectrum; it is not simply tied to supplies of food and minerals.

Mr. HUMPHREY. I understand.

Mr. MANSFIELD. It is not tied merely to scarcities in those areas.

Mr. HUMPHREY. My concern was whether or not the Commission—the temporary Commission—with its make-up should have the option of recommending or not recommending the establishment of an independent agency. What I had in mind was to make certain that what the Commission was to recommend, in whatever form it may suggest, is a permanent independent agency, and not leave it with the option which the present language would permit. The present language says "including the advisability of establishing an independent agency." The words "the advisability" disturbed me somewhat because I believe what the Senator from Montana wants is a permanent independent agency, and we ought not to let the temporary Commission fool with that.

Mr. MANSFIELD. The Senator can be assured that there will be no tampering; that the idea will be for the temporary Commission to lay the groundwork on the recommendations for a permanent Commission which it would have to come back to Congress to achieve.

Mr. HUMPHREY. Yes.

Mr. MANSFIELD. I think there is enough viability or flexibility in the language to achieve the results which both

the Senator from California and the Senator from Minnesota desire.

Mr. HUMPHREY. So the Senator would feel, from his point of view, since he had to negotiate this rather delicate arrangement for this legislation, that it would be desirable for my amendment to be withdrawn and to leave the language as it is; is that correct?

Mr. MANSFIELD. If the Senator would be so kind, because what we are seeking is something unusual in executive-legislative relations. As I indicated last night, all too often our relations with the White House and the executive branch are at arm's length, or on an adversary basis. This is one time when, on the basis of Senatorial initiative, we could work in cooperation and partnership with the administration in achieving a common goal.

I have felt throughout all my political years that there has been too much antagonism between the two branches, that there ought to be more in the way of accommodation and partnership, and this is one way in which we are trying to achieve that. Whether or not we succeed, of course, depends upon developments, but I am sure the Senator has my viewpoint in mind.

Mr. HUMPHREY. Mr. President, I withdraw the amendment.

The PRESIDING OFFICER. The amendment is withdrawn. Who yields time?

Mr. BROCK. Mr. President, I yield 4 minutes to the Senator from New Hampshire (Mr. COTTON).

Mr. COTTON. Mr. President, I have had mixed feelings about this measure.

In view of the fact that the leadership on both sides wanted to proceed in this way and that the desire was to establish a better working relationship with the executive on this rather vital matter, I am disposed to try to be as cooperative as the distinguished Senator from Minnesota, who always proves his breadth of vision by being most reasonable.

I am willing to meet him half way and perhaps support this measure, in view of the fact that we are going to have provision for a report in 6 months.

But, Mr. President, that does not mean I have lost my distrust and lack of confidence in this method of approach, which has been acquired over the last 20 years.

I remember well serving on a commission to try to establish a uniform method of dealing with Government security. I served as one of the two Senators on that commission. It was a commission consisting of some 16 people, including two Senators, two Members of the House, members from the American Bar Association designated by the president of the Bar Association, and several public members designated by the President of the United States. We operated for about 3 years. We kept asking for more time.

Actually, the work was done by a staff, and the only real decision that commission ever made was when it selected the staff. They journeyed to Washington, had their expenses paid on a per diem basis, and made their report. I remember the Senator from Mississippi (Mr.

STENNIS) and I introduced in the Senate, and the corresponding Members of the House of Representatives introduced in the House, legislation to implement that report. However, it was never even taken up by a committee, and so that is as far as we got.

My next experience was when I was appointed along with the distinguished chairman of the Commerce Committee, the Senator from Washington (Mr. Magnuson), to the Commission on Marine Science, Engineering and Resources.

Again, a staff was appointed, and again every 2 or 3 weeks we went downtown and met with distinguished citizens from all over the country until Congress acted without waiting for us. We never really got going on this matter of oceanography.

My most recent experience was serving on the Bicentennial Commission, from which I have resigned since it is just about as big a farce as I have ever seen.

It seems to me that we can cooperate with the White House because there are still a few Members of this body who are on good terms with the President, mostly because we have refrained from attacking him and have proceeded on the basis that we would live up to our oaths of office, and if an impeachment trial came we would vote according to the sworn evidence, and not according to the information furnished by the news media.

There are Members of this body who have confidence in the President. For that reason, I think that we could expeditiously, in view of the leadership's fine attitude of cooperation, establish a special committee in this body that would proceed to listen to the secretaries of the various agencies downtown and try to work out the kind of instrumentality that should deal with this problem.

But, there will be 13 members of this Commission; they will come from all Christendom; they will have their trips to Washington; they will listen to the report of their staff; and, hopefully, they will come up with some kind of recommendation. But when they do, it will have to be settled right here on the floor of the Senate and on the floor of the House of Representatives as to whether there is going to be an independent, quasi-judicial agency, with vast powers to deal with this problem, or whether the authority shall be delegated in some other manner.

The decision will be made right here. It will not be made in 1 month, 6 months, or 2 years. I do not want to be cynical, but I would almost wager that the first report we would get from that Commission would be a report asking that it be extended for another 6 months or another year.

But because of the leadership and the attitude taken by the distinguished majority leader, I am willing, like the Senator from Minnesota, to subordinate my own views and go along with this bill in its present form. However, I still adhere to the fears that I have expressed before, and I cannot refrain from expressing them here because they are the result of long personal experience.

I think that Congress is perfectly capable of handling this matter itself, but because of the strange situation between Congress and the executive branch and because of the attitudes of the majority leadership, I will therefore retract what I said to the distinguished Senator who is in charge of this debate, and out of respect for the majority leader and those who have hopes that this method of approach will work, I will vote for it.

Mr. BROCK. The Senator from New Hampshire has demonstrated nobility. We appreciate it very much.

Mr. MANSFIELD. I thank the Senator from New Hampshire very much.

Mr. DOLE. Mr. President, an ounce of prevention may—as the old saying goes—be worth a pound of cure. And in no area can I imagine a greater need for a few ounces of preventative action than in the processes by which our crucial agricultural and industrial sectors are supplied with the basic materials upon which their productivity is based.

This past year has brought home to nearly every American the importance of having basic materials available when needed. I know in the State of Kansas that shortages of everything from gasoline, propane, and other fuels to oilfield tubular steel, fertilizer, and baling wire have caused great anxiety, a good deal of alarm, and real economic hardship in some cases. Nationwide, these same problems have been experienced in a wide variety of items, and there is growing concern that various materials shortages may be one of the great areas of world crisis developing over the next few years. Certainly, the current food shortages in various parts of Africa point up the problem of adequate agricultural products.

Of course, the most spectacular area of shortage revolved around the export embargo of Arab-produced crude oil last winter. The fact that the shortages created by the embargo were manmade and not due to any exhaustion of resources did not lessen the impact on the entire world's economy. But the experience with the embargo may have had at least one beneficial result in that it sounded a clear warning that materials shortages can develop—for whatever reason—and very rapidly.

The obvious response to this warning is that we undertake the necessary steps to avoid being caught flat-footed by another shortage in one or a number of basic materials. And I am pleased to support S. 3532, the National Commission on Supplies and Shortages Act, as a highly appropriate and worthwhile attempt to arm America with a basic policy for assuring adequate supplies of essential resources.

The establishment of this Commission—charged with the responsibility to study short- and long-term supplies, explore possible alternative sources, review existing policies and provide an overall coordination for planning to deal with potential supply problems—is a sound and sensible approach to this important question. The success we have in formulating effective materials policies may very well be absolutely critical to our survival at some point in the future. So I

again wish to express my support for this measure and urge the Senate to grant its approval.

Additionally, I ask unanimous consent that an informative article on our potential metals shortages from the December 26, 1973 Wall Street Journal be printed in the RECORD at this point.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

WHAT NEXT? AMERICA'S DEPENDENCE ON IMPORTED METAL SEEN LEADING TO NEW CRISIS

(By Richard J. Levine)

WASHINGTON.—After the energy crisis could come a metals crisis.

That grim possibility is beginning to haunt officials here as the Arab oil embargo stirs new fears about the nation's growing dependence on foreign supplies of many crucial mineral ores.

At this point, the concern is centered among middle-echelon bureaucrats, private economists and industry executives. But it is starting to spread to the ranks of government policymakers, reaching in recent days the offices of Interior Secretary Rogers Morton, Federal Reserve Board Chairman Arthur Burns and energy czar William Simon.

What worries these men is the possibility that the Arab oil embargo may give dangerous ideas to the less-developed countries in Africa, Asia and Latin America that supply the U.S. with minerals. They are concerned that these so-called third-world nations—viewing the Arabs' use of oil to force Israeli withdrawal from occupied lands—may decide to use their mineral wealth not to achieve political ends but to jack up their economic positions. The result could be skyrocketing prices and dwindling supplies on world markets.

"Recent events are very disturbing," says Mr. Burns. "What happened in oil could happen" in copper and other raw materials, he adds. Mr. Morton suggests that, unless protective steps are taken, such as maintaining stockpiles, the U.S. could face a "minerals crisis and a materials crisis." There is "no reason why the group of countries that supply most of our bauxite (the ore from which aluminum is produced) can't get together the way the (oil-producing) countries got together on the price of oil," he says. Jamaica and Surinam are the original source of about two-thirds of the aluminum used in the U.S., with Canada and Australia also major producers.

Perhaps the man most responsible for spreading the word about the metals-dependence problem has been C. Fred Bergsten, an international-economics expert at the Brookings Institution who formerly worked for Henry Kissinger on the National Security Council staff. Mr. Bergsten outlined the problem in an article last summer in Foreign Policy magazine entitled, "The Threat From the Third World." It drew little attention at the time, but then came the oil embargo. Recently, Mr. Bergsten has been busy updating his ideas before congressional committees.

"While the oil situation itself must be the focus of policy attention at the moment, we must recognize its far broader implications for the longer run," he says. "Perhaps the broadest lesson to be learned . . . is that countries will adopt extreme, even wholly irrational, policies when frustrated repeatedly in achieving their most cherished aspirations."

Underlying the concern of Mr. Bergsten and others are some harsh facts about the ever-increasing reliance of the U.S. on foreign metals since it became a net importer in the 1920s.

According to the Interior Department, the U.S. already depends on imports for more

than half its supply of six of 13 basic raw materials required by an industrialized society (aluminum, chromium, manganese, nickel, tin and zinc.) By 1985, the country will also depend on imports for more than half its iron, lead and tungsten. And by the year 2000, its imports will have to supply more than half its copper, potassium and sulphur. (The 13th material is phosphorus, which is so abundant in the U.S. that imports even in the year 2000 are expected to be negligible.)

INCREASING DEPENDENCE

Viewed another way, the projections suggest the U.S. may have to import \$18 billion of metals a year by 1985 and \$44 billion by the turn of the century, up from only \$5 billion in 1970. "What kind of an economy can stand that kind of pressure on its balance of payments?" asks an Interior Department planner.

At the department's Bureau of Mines, Paul Zinner, assistant director for planning, says the bureau has seen the metals problem coming for 20 years but has been unable to generate much high-level interest. "Since 1953, we've been saying annually we've got to do something about it. But nothing's happened because there's been no crisis. When you find you can't buy an auto because industry can't get materials, you'll get concerned."

As that concern builds, it is likely to be accompanied by the realization that the increasing dependence on overseas metals supplies must dictate changes in American foreign policy. Most obviously, in the view of some analysts, it will force Washington to lavish more attention and money on the less developed nations than in the past. "When we awaken to an oil crisis," says Mr. Bergsten, "we realize how vital to us are Nigeria, Indonesia and Ecuador"—countries that have crude for sale.

In recent years, Washington's foreign-policy machinery, under the tight direction of Henry Kissinger, has concentrated on building relations among the big powers—the Soviet Union, China, Japan, the allies in Western Europe. The result has been a slighting of the development areas of the world, which hold the resources the U.S. will increasingly need. "Our policy institutions aren't adapted to these newly emerging economic realities," says Federal Reserve Chairman Burns.

Many experts believe the U.S. metals-dependence problem will be reflected in rising prices, rather than in a cutoff of supplies. "You wouldn't suddenly find yourself without copper, for example, but you could find the price so high you couldn't afford it," Mr. Zinner says.

Increasing world-wide demand for metals presents suppliers with an opportunity to raise prices, and the oil crisis demonstrates how quickly suppliers can move. Immediately after Iran auctioned crude oil for as much as \$17.34 a barrel, Indonesia, Bolivia and Ecuador announced they intended to raise prices, too. "We can't close our eyes to the prices of oil in the last few months," declared Indonesia's minister of mining, Mohammad Sadi.

Earlier this week, six Persian Gulf oil producing countries more than doubled their posted price for crude oil to \$11.651 a barrel from \$5.11, effective Jan. 1, and more increases may be forthcoming.

Predicting how or where a metals crisis might erupt is difficult. John Morgan, acting director of the Bureau of Mines, says only that the U.S. could find itself in trouble in "any one" of the metals it imports heavily.

Right now, the aluminum situation appears particularly threatening. Among the danger signs: reports that the leading bauxite-producing countries plan to meet early next year to discuss establishment of a producer organization similar to the Organization of Petroleum Exporting Countries, or OPEC.

In addition to OPEC, which has shown its muscle in raising oil prices, there is the Inter-governmental Council of Copper Exporting Countries (Chile, Peru, Zambia and Zaire) and the International Tin Council (producing members are Malaysia, Bolivia, Indonesia, Nigeria, Zaire and Australia.)

In the long run, some government experts predict, one critical supply problem may be in uranium. "The world resources that are known, assuming that we have access to them, just aren't adequate," an Interior Department analyst says.

Still the situation isn't entirely bleak. For one thing, the U.S. remains rich in natural resources. In many instances, American industry has turned to foreign metal supplies because they have been cheaper than remaining domestic supplies.

For example, the U.S. has aluminum-bearing ore in Georgia and Alabama. But methods haven't yet been developed so these low-grade resources can be used economically. The U.S. also possesses much low-grade iron ore.

Some experts also question whether poor countries, lacking the unifying political cause of the Arabs, could actually get together to raise prices and control supplies. The major copper-exporting countries, says a Washington expert, "aren't geographically cohesive." However, such arguments are rejected by Brookings' Mr. Bergsten, who believes that joint action is more likely in some raw materials than it was in oil.

In any case, U.S. officials are talking about ways to conserve metals in the future as well as to increase U.S. production. Some officials, such as Interior Department Chief Morton, also believe it's time to take another look at the administration policy, established last spring in the hopes of lowering metal prices, of disposing most of the government's huge strategic materials stockpile.

"What the stockpile has provided," an Interior Department planner says, "is tremendous bargaining power for this country in the international sphere. With it, you don't let these bandits hold you up."

AMENDMENT NO. 1408

Mr. TAFT. Mr. President, I call up my amendment No. 1408 and ask that it be stated.

The PRESIDING OFFICER. The amendment will be stated.

The second assistant legislative clerk read as follows:

At the end of the bill insert the following new section:

ENFORCEMENT OF DECONTROL COMMITMENTS

SEC. 8. (a) Notwithstanding the expiration of the Economic Stabilization Act of 1970, as amended—

(1) any commitment made or given as a condition of, in connection with, in exchange for, or in the course of decontrol or the grant of other relief from or under such Act, prior to May 1, 1974, shall continue in full force and effect, except that the President may modify any such commitment if he determines that modification would be in the national interest and publishes in the Federal Register the basis for such determination.

(2) the authority and provisions of sections 203 (relating to Presidential control authority), 208 (relating to sanctions), 209 (relating to injunctions and other relief), and 211 (relating to judicial review) of that Act (as in effect on April 30, 1974) may be invoked against, and shall apply to, any person who violates any commitment made or given as a condition of, in connection with, in exchange for, or in the course of decontrol or the grant of other relief to such person from or under such Act, prior to May 1, 1974, or any modification of any such commitment pursuant to the provisions of this subsection.

(b) The authority conferred by section 203 of the Economic Stabilization Act of 1970 shall be exercised with respect to the violation of a decontrol commitment only to the extent necessary to apply appropriate corrective action to the person who committed the violation, and any such exercise of authority shall be accompanied by a statement explaining the reason for such exercise of authority and the President's analysis of why such exercise of authority constitutes appropriate corrective action within the meaning of this subsection.

Mr. TAFT. Mr. President, I have listened with a great deal of interest—as I have been in the Chamber during most of the debate on this measure—and this amendment No. 1408 has been pending which I have described in some detail in the CONGRESSIONAL RECORD on page 18755. I find that when it was introduced, I thought it was a pretty good idea and would fit in pretty well with the committee bill. Its only purpose was to provide some kind of authority to the President to go ahead in some manner—and I am not sure I had it spelled out currently—to enforce the commitments the price control authorities had worked out with some 17 different industries before expiration of the wage and price control legislation.

At the time the wage and price control legislation was in being, I attempted to point out the necessity for some continuing authority to move on the commitments if they were violated. I do not know whether they had been or not. We are not watching them to find out whether they have been violated. I know that one very large company did raise its prices under an exemption within the commitment, but I do not have any idea about it; but here we are sitting here and we have been debating for several days whether we should set up a Commission to advise the Senate and the House as to the structure of the agency that would best control shortages of supply, which in most cases relate to overall economic factors and not just to the actual amount of raw material supplies available that might be involved, did not have the economic factors in play.

To tackle this on the simple theory that they are shortages and that, somehow, the Commission will come up with a warning when shortages may occur, seems to me to be a rather superficial approach to the argument. I already have an amendment and am very happy that the committee adopted an amendment which is somewhat broader in its language, so that insofar as commercial interests are concerned, or on prices, employment practices, business practices, the Commission will have the authority to go into those matters.

I must say, at this point, that I am talking on this amendment but I am really referring to the entire process here and I share many of the doubts expressed by the Senator from New Hampshire (Mr. CORTON) as to whether this will do a bit of good.

I am afraid that what we are facing is a major inflationary problem and a major shortage problem which does not relate to the unavailability of the raw materials in the world in energy sources but across the board all over, because the

economy is not working entirely properly and shortages occur and because we have not had any information available to all of us.

I must say, I certainly admire the effort and the enthusiasm expressed by the distinguished majority floor leader as to this legislation and the bipartisan work that has developed. But I should like to make a wager with him, or with anyone else in the Senate for that matter, that when the Commission reports and what the Senate does, if it does anything, will have very little to do with what the Commission reports to us. That has been the history of the past and that will be the history of the future. That is why I thought the motion to recommit was well taken and I thought the idea of extending the Commission for a 3-year or a 2-year life was helpful because we could expand it and change it into a different kind of body, in conference with the House, of course, which would take on the responsibility of monitoring and doing something about this. I thought such a monitoring agency, while it would monitor the supply of materials as well as the matter of prices and wages and the increases that have occurred and their effect upon the economy, were areas in which we should expand but on which the Senate and the House, the entire Congress and the administration, should be attempting now.

The inflation problem is what is behind the thing basically.

We are not tackling that in any way. We are not going to set up an agency by this action that has anything to do with inflation. We turned down the Muskie amendment. I do not want to perpetuate wage and price controls. I do not think they have worked very well. But it is simple folly to relax into a situation where we do not have the information available or any agency responsible for having information available as to what is happening to prices and wages and what is happening to supplies of vital war materials around the world. The action we are taking today is putting it off. Congress should respond to what the needs are by enacting legislation. This is a cream puff approach to what is a very hard-rock problem. The Senate should realize that.

I think the amendment which I have, might or might not help in that connection, so far as decontrol commitments are concerned. I bring this up today to make these points because I have already introduced it and have pending before the Banking Committee legislation which is entitled "The Inflation Restraint Act of 1974," which would include the language in this amendment. But it would also give monitoring authority over developments in wages, prices, and the supply of materials, which I think is vital we provide at this time. We are not doing it by this legislation.

I reserve the remainder of my time.

Mr. TUNNEY. Mr. President, I would hope that the distinguished Senator from Ohio would withdraw his amendment. He has made his point clearly. I supported this concept when it was first brought to the attention of the Senate a number of months ago. I think that the

point he is making is a very good one. However, I think it is unnecessary to have this amendment a part of this legislation. I am informed presently that there are only 17 major voluntary wage and price commitments in effect which would be covered by this amendment. The Cost of Living Council has advised the Commerce Committee staff that these are not being abused and that they are being carried out. Therefore, the amendment is unnecessary and seems to be irrelevant to the major purposes of the pending bill.

Although I think that what the Senator wants to achieve by his amendment is salutary, I would hope that he would withdraw it. However, if the Senator feels that he cannot withdraw it, I will move to table the amendment, not because I do not think it has validity as a concept, as I have already indicated, but I do not think it is pertinent to what the purposes of this bill are all about, and that the commitments are being lived up to.

Mr. TAFT. Mr. President, by way of explanation, let me say that the 17 commitments are commitments as to the industrial sector but there are also many individual companies in each sector, so that the commitments do cover a broader portion of the economy than has been implied. Some of them, for instance, the longest range ones, which expire on March 31 next year, are in the coal sector. Another longer range commitment relates to paper, another basic commodity, of which the Senate uses a good deal—and we have just increased our paper allowance again.

What I am trying to call to the attention of the Senate is the necessity for some action on broader inflation-related problems. I do intend, when we are through discussing this, to pull down the amendment at this time because the way the bill has been set up, it is not particularly appropriate to this particular bill. Had we gotten the changes that the committee had advocated on the bill and the changes that others had advocated on the bill, I think it would have been far more appropriate.

Nevertheless, I feel that the amendment covers an area in which we do have an obligation. I hope that the Committee on Banking, Housing and Urban Affairs, before which the related bill that I have proposed is now pending, will shortly have hearings on this matter and will, by emergency legislation if necessary, give at least somebody the authority and the power to monitor and to enforce the commitments that have already been made under the Cost of Living Council, which we have allowed now to expire.

I hope at the same time, and I would recommend at the same time, regardless of the ongoing studies that may or may not come as a result of this legislation, that we will set up some kind of a body to do current, effective economic monitoring, and to use the jawboning approach.

I think if we can somewhat broaden the basis of that from an executive type of jawboning by the White House through a congressional entity, we will do ourselves and the Nation a great deal of credit.

(At this point Mr. HUDDLESTON assumed the Chair.)

Mr. DOMENICI. Mr. President, will the Senator from Ohio yield?

Mr. TAFT. I am glad to yield.

Mr. DOMENICI. Let me compliment the Senator from Ohio for the discussion he has brought to the floor of the Senate. I honestly tell the Senator I would not have supported the amendment, but I support the discussion and would like to add a few thoughts of my own with reference to shortages in this country.

Obviously, it was a difficult job to get the bill to the floor of the Senate in a manner that is going to be accepted apparently by both Houses and by the Executive so that we can get on with the business of establishing some system in this country for getting at the facts with reference to the various products that our country now needs, that we are short of, and those we will be short of down the line.

I compliment the Senator for calling to our attention that before we can do anything about the shortages, before we can get the cooperation of the American people with reference to solutions, we have to have facts.

I still believe that a majority of the American people do not believe there is really an energy crisis. I submit that one glaring reason is that we have never had an objective, factfinding body that could support the propositions, logical, and normal, aimed at a solution, because there were still those who were in open combat as to the true state of facts.

Right now in this country we have a situation where we are out of baling wire; yet, no one can tell us precisely how much we will have for the farmers, or what the future holds. Right now we are talking about drilling more oil and gas wells in this country to develop energy; yet, we do not know wherein is the material to drill the wells. We do not know whether we have enough steel being produced, enough rigs, enough bits.

We also find that that which is available seems all of a sudden, to be in the hands of the huge, giant oil companies. Yet, we sit here and say it is the independents that we want to protect so that they can drill. Drill with what? Yet, nobody can give the facts to a Senator. The agency in charge of allocation does not know the facts. They do not think they have the total authority to get the facts.

Now we are talking about a world market in minerals. No one has even told the American people or Congress the status of mineral availability in this country. Those entities are busy about gathering facts in conflict; they are not in unison.

Then we are expected to pass trade bills, to pass all kinds of economic incentive bills for the mineral deposits of this country, either to cause them to move ahead or to slow down, or even to cut them out, to protect the environment.

We do not even have an inventory of the mineral wealth of this country, or a policy with reference to whether or not we want to become independent in mineral productivity.

So it seems to me that if anything can be gained from this trial 6 months, or the 6-months-to-report-commission, it should be this: that they should clearly and forthrightly explain to Congress the dilemma we are in with reference to available facts upon which to base a policy of materials, substances, and goods for the American people.

Mr. TAFT. Even the FEO does not have the facts, particularly in the oil area. It was incredible that when the Arab oil crisis arose, we did not have much knowledge on how much oil was being used or imported. We had to turn to industry. While I am sure the industry figures were designed to be honest with the public, they were certainly not figures that we should accept automatically. They were incomplete in many ways.

Mr. DOMENICI. I believe the Senator will acknowledge, certainly, that the private sector has some proprietary interest that in normal times we want to protect, but we are not even directing some objective factfinding body to see what ought to be protected, what ought to be made public, or how we can get proprietary facts and yet disclose to the public, without destroying patent rights and the like, the true state of affairs.

We do not know the status of petrochemicals in this country. We do not really know the status with reference to fertilizer—and we are talking about growing more crops. We still have nobody who can tell the Senate whether we should ban exports or not.

If they could tell us that and confirm that we do not have the facts upon which to base them, and recommend the method and manner whereby we might get objective third-party kinds of facts, much like the Council on Environmental Quality now gives to the Executive, if they would do just that for us to stimulate us into getting on with that kind of approach, then it would serve the purpose.

With reference to the Senator's objection to any more commissions, as the senior Senator from Rhode Island mentioned, based upon the Paley report and all kinds of commissions, I would like to say I think there is a distinction.

Let me suggest to the Senator from Ohio that America frequently, as one of its national traditions, does not really act until we have problems, until we are in a crisis.

I submit that the Paley report was far too silent for us to act upon. I submit that most of the commissions that reported on the energy crisis were talking too far in the distance for us to react. But right now we have found that this great economy of ours can suffer shortages, inflation, the kinds of things we never expected.

I believe that particular crisis atmosphere gives this—and, hopefully, a permanent factfinding body that will follow it—the impetus that others have not had. For that reason, and because I have a ray of hope, I will support it.

I compliment the Senator for calling to the attention of the Senate the shortcomings of the bill, yet his willingness to support its basic concept.

Mr. TAFT. I thank the Senator for his

remarks. I generally have thought of myself as being an optimist, but I must say that I differ with him in his optimism and his hopes for the effectiveness of this legislation.

It seems to me that this legislation is just going to put off Congress facing up to the problem in a way that I think it ought to face up to it—very directly. I do not think we need a commission report. I think we know what the basic problems are.

We ought to get down to business in our own committees and face this with a congressional initiative, do something about it here, and do something about it now.

The problems are not going to go away.

One thing that has not been mentioned, that we are going to lose another year on, is what the Senator from New Mexico just mentioned. The public does not believe there really is an energy crisis. I think that all the conservation philosophy that came out of the Arab crisis, which has resulted in a considerable saving of energy will evaporate. I believe it will go out the window as soon as the public becomes convinced, as I think they are pretty much, that there really was a phony crisis.

There was not a phony crisis. But unless we actually act and get the facts, and get them on the basis that people can believe, I do not think we are going to get the confidence of the public that is necessary for major measures of conservation.

Mr. BROCK. Mr. President, will the Senator yield?

Mr. TAFT. I yield.

Mr. BROCK. I shall take 1 minute to pursue a point. I am deeply interested in what the Senator has said. He is absolutely right. The functions defined in this legislation are congressional functions. They should be fulfilled by Congress.

But I must point out to the Senator that Congress today has such jurisdictional complexities and contradictions that it is almost impossible for us to consider this problem in its entirety in any single committee. That is one of the basic difficulties.

The Senator from Illinois is in the Chamber. He and I have been sponsoring a bill for 9 months to ask for a study of our committee structure in Congress.

Mr. TAFT. I appreciate the Senator's comments. I certainly concur with them and agree that this is extremely necessary.

I do not think we are going to do it overnight. There is difficulty that arises with regard to it, and I am sure the Senator knows of the situation. We can see the problem just by looking at the other body and observing what has been going on. After a couple of years of good work, all of a sudden there is a roadblock, because of the prerogatives of individuals and the policies of the committees, and other problems of that kind.

What I would like to suggest to the Senator, and maybe we could join in an initiative of this sort, would be to have perhaps a joint committee with legislative authority for this purpose, crossing the lines of other committees. Perhaps

that is the direction we should take. The jurisdictional problems will still be here when that special Commission comes back with this report and they will face the same stone wall we face now. We are not going to face the problem through this Commission, because the problem is in getting some congressional mechanism to face the problems and deal with responsibilities that are ours.

Mr. BROCK. Mr. President, I cannot share the Senator's pessimism with respect to our inability to reform Congress, nor that we cannot do something more. But I must agree with his objections to this Commission, because the Commission can perform an enormously useful function in bringing all the structural analysis into the fore so that it can be cohesively worked on and cogently refabricated so that we can arrive at a structure within the executive to deal with this problem. That does not relieve us of our responsibility in the legislature, but we have to have some mechanism to bring to pass executive and legislative cooperation on this matter.

The Senator has done a good job in bringing this matter to the attention of the Senate today. I am delighted to cosponsor the proposal. I have high hopes that something valuable comes out of this effort. That does not mean that we do not have to back it up in Congress.

Mr. TAFT. The problem will be in Congress.

Mr. BROCK. It always is.

Mr. TAFT. There is no question about that.

Mr. BROCK. I would love to add the Senator as a cosponsor of a resolution that the Senator from Illinois and I have.

Mr. TAFT. I shall examine it again.

Mr. BROCK. I thank the Senator.

Mr. TAFT. I thank the Senator for his remarks.

Mr. President, at this time I withdraw the amendment.

The PRESIDING OFFICER (Mr. DOMENICI). The amendment is withdrawn.

Mr. STEVENSON. Mr. President, will the manager of the bill yield for a question?

Mr. TUNNEY. I yield.

Mr. STEVENSON. The bill mandates the Commission to review existing policies and practices of Government which may affect supplies of natural resources and other commodities. Export controls can be used by the Government to alleviate the short-supply situations and export subsidies; DISC and Eximbank financing can be used in ways that exacerbate shortages in other commodities.

Is it the intent of the bill to include in that phrase, "the policies and practices of Government," export controls and export studies which could affect the supply of natural resources and other commodities?

Mr. TUNNEY. The answer is "Yes." In the committee report, on page 6, the committee stated:

These practices may or may not cause shortages. They may tend to increase supply or to simultaneously encourage conflicting results. The areas of government policy review should include: foreign, military, anti-trust, environmental, health and

safety, and import and export policies, as well as policies relating to the management of domestic agricultural and mineral resources, manpower and productivity policies, policies affecting the rate and nature of private investment, policies affecting industrial efficiency and competitiveness, and policies relating to science and technology.

The point I make is that the Committee on Commerce reviewed the problem of governmental activities as it relates to import and export policies. It felt these policies did have a substantial impact on material supplies and, therefore, this Commission should look at those import and export policies in its evaluations of existing and potential shortages.

Mr. STEVENSON. I thank the Senator. The reference to export policies would include export controls. I want to be sure the phrase would include export subsidies.

Mr. TUNNEY. Export subsidies would also be included, including DISC.

Mr. STEVENSON. I thank the Senator for the clarification.

Mr. TUNNEY. I thank the Senator from Illinois.

Mr. HUDDLESTON. Mr. President, will the Senator yield to me for 2 minutes on the bill?

Mr. TUNNEY. I yield 2 minutes to the Senator from Kentucky on the bill.

Mr. HUDDLESTON. Mr. President, this whole area of material shortages is one which I have had a particular interest in, as have many other Members of this body. I have done some special studies and drafted legislation. I know many other Members of this body have also drafted legislation. I think therein lies one of the important points in passing the bill that is before us now, and that is when we are confronted with a problem of this nature, there is a great tendency to move out in many different directions at the same time by many different individuals.

I think we are faced with a problem that will be with us for many years, and that is the question of short supply of raw materials necessary to keep our economy going and our factories operating to supply us with products we need. It will take long-range tools to meet this need.

Many of the materials that are necessary for us to sustain our life are already on the Earth and in full supply. There will not be any more. The good Lord has already placed on this planet all that man will have. The question of how we use that supply, extract it, and process it and what we do with it is a question that we will be confronted with for many years.

I commend the majority leader and members of the majority and the minority leadership in working out with the executive branch this approach, because when we formulate the kind of commission with the authority it needs it must be based on a sound foundation.

It is important that we study this problem. As I said, I have prepared legislation which I am withholding. I have prepared amendments to this particular bill that we are confronted with now. More amendments which I intend to

offer would have placed on the various agencies of the Federal Government somewhat broader and specific obligation as to how to respond to the needs of this country. But in view of the fact that the majority leader indicated to us, and those on the minority side have confirmed it, that there has been a spirit of cooperation expressed by the executive branch to make sure this commission has all the documents, data, and information necessary in order to draw guidelines for future action, I would like at this time to withhold that amendment and offer my support to this approach to the problem.

I do not think it is a problem that is going to be solved overnight. It will require long-term, intelligent action on the part of Government. I believe this approach for a commission that can assess the situation we are in now, to take inventory of supplies, look down the road to see where we are heading and then come back with recommendations to the Government is the kind of authority that will be necessary to deal with the problem.

I commend the sponsors of the bill and those who have been so much interested in it in offering this approach.

Referring to the words of the distinguished majority leader, this is a first step, and it should be looked upon as a first step and one which will lead to a solution that will enable us to provide this country with the guidance we will need.

I thank the Senator.

Mr. MANSFIELD. Mr. President, I appreciate the remarks just made by the distinguished Senator from Kentucky. I assure him that I appreciate most deeply his forbearance, along with other Senators, of the understanding which the joint leaders and the executive branch of Government tried to develop.

If the bill is enacted, any suggestion by any Member of Congress would be most welcome and would be given the most serious consideration.

May I say furthermore that the creation of this commission does not in any way impinge upon the right of any committee in the Senate to come forth with a resolution of its own or the right of any Senator or Member of the House to carry forward his ideas in the Chamber in which he is representing his State or his district.

But it is not an easy solution. We are not out of the energy crisis, as the distinguished Senator from Ohio seemed to indicate some of us thought. We have been concentrating on energy, but it goes far beyond energy. It takes in so much. It is all-encompassing. We hope the bill will pass. We hope it will be a good first step.

I want to express myself in accord with the general outline of expressions made by the distinguished Senator from California and the distinguished Senator from Kentucky, because I think they are both moving in the right direction.

Mr. TUNNEY. Mr. President, I do not want to prolong the debate, because I think we have heard from all sides what

the basic issues are, but before we reach the final vote on the legislation, I would like to say to the distinguished majority leader that although at times during the course of the debate I differed with him on some details, I take this opportunity to express to him my very deep respect for the position that he holds with regard to the need for a commission to study and to analyze and to monitor material shortages.

I think the majority leader has done an extraordinary thing in getting the administration to agree to anything, and I do not say that as a partisan. I happen to have sat on the committee and heard the administration witnesses come forward and testify against any commission of any kind on commodity shortages, saying it was not needed. The fact that the majority leader and the joint leadership were able to get the administration to agree to any form of commission shows the potency of the majority leader's persuasion; and I certainly want to express publicly the fact that, although I would have liked to have seen a longer-life commission, I think the majority leader has performed a great service to the country by getting the administration to agree that not only is this a problem that has to be studied now, but the actual monitoring of shortages has got to take place.

Mr. President, I ask unanimous consent that the bill be printed in the Record as passed, when it is passed.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. TUNNEY. Mr. President, there are no more requests for time on our side. I am not aware of any more amendments to be offered, so I move the third reading of the bill.

The PRESIDING OFFICER. The bill is open to further amendment.

If there be no further amendment to be proposed, the question is on the engrossment and third reading of the bill.

The bill was ordered to be engrossed for a third reading, and was read the third time.

The PRESIDING OFFICER. Do Senators yield back their time?

Mr. TUNNEY. I yield back my time.

The PRESIDING OFFICER. All time on the bill is yielded back.

The bill having been read the third time, the question is, Shall it pass?

The bill (S. 3523) was passed, as follows:

S. 3523

An Act to establish a National Commission on Supplies and Shortages

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "National Commission on Supplies and Shortages Act of 1974."

ESTABLISHMENT OF COMMISSION

SEC. 2. (a) There is established as an independent instrumentality of the Federal Government a National Commission on Supplies and Shortages (hereinafter referred to as the "Commission"). The Commission shall be comprised of thirteen members selected for such period of time as such Commission shall continue in existence (except that any individual appointed to fill a vacancy occurring prior to the expiration of the term

for which his predecessor was appointed shall be appointed for the remainder of such term) as follows:

(1) The President, in consultation with the majority and minority leaders of the Senate and the majority and minority leaders of the House of Representatives, shall appoint five members of the Commission from among persons in private life.

(2) The President shall designate four senior officials of the executive branch to serve without additional compensation as members of the Commission.

(3) The President of the Senate, after consultation with the majority and minority leaders of the Senate, shall appoint two Senators to be members of the Commission and the Speaker of the House of Representatives, after consultation with the majority and minority leaders of the House of Representatives, shall appoint two Representatives to be members of the Commission. Members appointed under this paragraph shall serve as members of the Commission without additional compensation.

(b) The President, in consultation with the majority and minority leaders of the Senate and the House of Representatives shall designate a Chairman and Vice Chairman of the Commission.

(c) Each member of the Commission appointed pursuant to subsection (a)(1) of this section shall be entitled to be compensated at a rate equal to the per diem equivalent of the rate for an individual occupying a position under level III of the Executive Schedule under section 5314 of title 5, United States Code, when engaged in the actual performance of duties as such a member, and all members of the Commission shall be entitled to reimbursement for travel, subsistence, and other necessary expenses incurred in the performance of their duties.

FUNCTIONS

SEC. 3. (a) It shall be the function of the Commission to make reports to the President and to the Congress with respect to—

(1) the existence or possibility of any long- or short-term shortages; employment, price, or business practices; or market adversities affecting the supply of any natural resources, raw agriculture commodities, materials, manufactured products (including any possible impairment of productive capacity which may result from shortages in materials, resources, commodities, manufactured products, plant or equipment, or capital investment) and the reason for such shortages, practices, or adversities;

(2) the adverse impact or possible adverse impact of such shortages, practices, and adversities upon consumers, in terms of price and lack of availability of desired goods;

(3) the need for, and the assessment of, alternative actions necessary to increase the availability of the items referred to in paragraph (1) of this subsection, to correct the adversity or practice affecting the availability of any such items, or otherwise to mitigate the adverse impact or possible adverse impact of shortages, practices, or adversities upon consumers referred to in paragraph (2) of this subsection;

(4) existing policies and practices of government which may tend to affect the supply of natural resources and other commodities;

(5) the means by which to coordinate information with respect to paragraphs (1), (2), (3), and (4) of this subsection.

(b) The Commission shall report within six months of the date of enactment of this Act to the President and Congress specific recommendations with respect to institutional adjustments, including the advisability of establishing an independent agency to provide for a comprehensive data collec-

tion and storage system to aid in examination and analysis of the supplies and shortages in the economy of the United States and in relation to the rest of the world.

(c) The Commission may, until June 30, 1975, prepare, publish, and transmit to the President and Congress such other reports and recommendations as it deems appropriate.

ADVISORY COMMITTEES

SEC. 4. (a) The Commission is authorized to establish such advisory committees as may be necessary or appropriate to carry out any specific analytical or investigative undertakings on behalf of the Commission. Any such committee shall be subject to the relevant provisions of the Federal Advisory Committee Act.

(b) In order to establish a means to integrate the study of supplies and shortages of resources and commodities into the total problem of balanced national growth and development, it shall additionally be the function of the Commission to establish an advisory committee to develop recommendations regarding the establishment of a policy making process and structure within the executive and legislative branches of the Federal Government and a system for coordinating these efforts with appropriate multi-State, regional and State governmental jurisdiction. For the purposes of carrying out this provision there is authorized to be appropriated not to exceed \$75,000 for the fiscal year ending June 30, 1975.

POWERS

SEC. 5. (a) Subject to such rules and regulations as it may adopt, the Commission, through its Chairman, shall—

(1) appoint and fix the compensation of an Executive Director at the rate provided for level III of the Executive Schedule under section 5314 of title 5, United States Code, and such additional staff personnel as is deemed necessary, without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, and without regard to chapter 51, and subchapter III of chapter 53 of such title relating to classification and the General Schedule under section 5332 of such title; and

(2) be authorized to procure temporary and intermittent services to the same extent as is authorized by section 3109 of title 5, United States Code.

(b) The Commission or any subcommittee thereof is authorized to hold such hearings, sit and act at such times and places, as it may deem advisable.

ASSISTANCE OF GOVERNMENT AGENCIES

SEC. 6. Each department, agency, and instrumentality of the Federal Government, including the Congress, consistent with the Constitution of the United States, and independent agencies, is authorized and directed to furnish to the Commission, upon request made by the Chairman, such data, reports, and other information as the Commission deems necessary to carry out its functions under this Act.

AUTHORIZATION OF APPROPRIATIONS

SEC. 7. There is authorized to be appropriated not to exceed \$500,000 for the fiscal year ending June 30, 1975, to carry out the provisions of this Act.

The title was amended, so as to read: "A bill to establish a National Commission on Supplies and Shortages."

Mr. MANSFIELD. Mr. President, I move to reconsider the vote by which the bill was passed.

Mr. ROBERT C. BYRD. Mr. President, I move to lay that motion on the table.

The motion to lay on the table was agreed to.

UNANIMOUS-CONSENT AGREEMENT ON S. 1485 AND S. 1486

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that at such time as Calendar Orders Nos. 831 and 832 (S. 1485 and S. 1486) are called up and made the pending business before the Senate, there be a limitation of 1 hour on each, with a limitation of one-half hour on any amendment, and with a limitation of 20 minutes on any debatable motion or appeal, to be equally divided in accordance with the usual form; that the agreements be in the usual form; and that the time on each of the bills be under the control of the distinguished majority and minority leaders or their designees.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. ROBERT C. BYRD. Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The second assistant legislative clerk proceeded to call the roll.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. ROBERT C. BYRD. Mr. President, there will be no more rollcall votes tonight.

ORDER TO CONSIDER H.R. 11221, FULL DEPOSIT INSURANCE, TOMORROW

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that at such time as morning business is concluded tomorrow, the Senate proceed to the consideration of H.R. 11221.

The PRESIDING OFFICER. Without objection, it is so ordered.

ORDER TO CONSIDER S. 585, AM AND FM BROADCASTS, TOMORROW

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that upon the disposition of H.R. 11221 tomorrow, the Senate proceed to the consideration of S. 585.

The PRESIDING OFFICER. Without objection, it is so ordered.

ORDER TO CONSIDER S. 1485 AND S. 1486 TOMORROW

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that upon the disposition of S. 585 tomorrow, the Senate proceed to the consideration of S. 1485 and S. 1486, in that order.

The PRESIDING OFFICER. Without objection, it is so ordered.

ORDER FOR PERIOD FOR TRANSACTION OF ROUTINE MORNING BUSINESS TOMORROW

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that following the orders for the recognition of Senators tomorrow, there be a brief period

for the transaction of routine morning business of not to exceed 15 minutes, with a limitation on each statement therein of 5 minutes.

The PRESIDING OFFICER. Without objection, it is so ordered.

ORDER FOR ADJOURNMENT TO 10 A.M.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that upon the adjournment of the Senate today, the Senate convene at 10 a.m. tomorrow.

The PRESIDING OFFICER. Without objection, it is so ordered.

TRANSACTION OF ROUTINE BUSINESS

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that there now be a period for the transaction of routine business.

The PRESIDING OFFICER. Without objection, it is so ordered.

REPORTS OF COMMITTEES

The following reports of committees were submitted:

By Mr. EASTLAND, from the Committee on the Judiciary, without amendment:

S. 2382. A bill for the relief of Caridad R. Balonan (Rept. No. 93-911);

S.J. Res. 192. A joint resolution to grant the status of permanent residence to Ivy May Glockner, formerly Ivy May Richmond nee Pond (Rept. No. 93-912);

H.R. 1961. An act for the relief of Mildred Christine Ford (Rept. No. 93-913);

H.R. 2514. An act for the relief of Mrs. Gavina A. Palacay (Rept. No. 93-914);

H.R. 5477. An act for the relief of Charito Fernandez Bautista (Rept. No. 93-915); and

H.R. 7685. An act for the relief of Giuseppe Greco (Rept. No. 93-916).

By Mr. EASTLAND, from the Committee on the Judiciary, with an amendment:

S. 864. A bill for the relief of Victor Henrique Carlos Gibson (Rept. No. 93-917);

H.R. 2537. An act for the relief of Lidia Myslinska Bokosky (Rept. No. 93-918); and

H.R. 5667. An act for the relief of Linda Julie Dickson (nee Waters) (Rept. No. 93-919).

By Mr. EASTLAND, from the Committee on the Judiciary, with amendments:

H.R. 4590. An act for the relief of Melissa Catambay Gutierrez (Rept. No. 93-920); and

H.R. 7682. An act to confer citizenship posthumously upon Lance Corporal Federico Silva (Rept. No. 93-921).

By Mr. JOHNSTON, from the Committee on Banking, Housing and Urban Affairs, without amendment:

S. 3270. A bill to amend the Defense Production Act of 1950, as amended (Rept. No. 93-922).

By Mr. MAGNUSON, from the Committee on Commerce, without amendment, and without recommendation:

H.R. 13163. An act to establish a Consumer Protection Agency in order to secure within the Federal Government effective protection and representation of the interests of consumers, and for other purposes (Rept. No. 93-923).

By Mr. COOK, from the Committee on the Judiciary, with an amendment:

S. 3355. A bill to amend the Comprehensive Drug Abuse Prevention and Control Act of 1970 to provide appropriations to the Drug Enforcement Administration on a continuing basis (Rept. No. 93-925).

SUBMISSION OF A CONFERENCE REPORT ON H.R. 7130, THE CONGRESSIONAL BUDGET AND IMPOUNDMENT CONTROL ACT OF 1974 (REPT. NO. 93-924)

Mr. ERVIN. Mr. President, from the committee of conference on H.R. 7130, the Congressional Budget and Impoundment Control Act of 1974, I submit the report of the conferees.

This report was filed in the House of Representatives on yesterday and is printed in the CONGRESSIONAL RECORD of June 11 at pages 18759-18780.

Because of the significance of this act, which is one of the most important pieces of legislation to be considered during my 20 years service in the Senate, I ask unanimous consent that the conference report together with the statement of the managers be printed as a Senate report.

The PRESIDING OFFICER (Mr. TAFT). Without objection, it is so ordered.

EXECUTIVE REPORTS OF COMMITTEES

As in executive session, the following favorable reports of nominations were submitted:

By Mr. EASTLAND, from the Committee on the Judiciary:

Otis L. Packwood, of Montana, to be U.S. attorney for the district of Montana;

Norwood Carlton Tilley, Jr., of North Carolina, to be U.S. attorney for the middle district of North Carolina;

Laurence C. Beard, of Oklahoma, to be U.S. marshal for the eastern district of Oklahoma;

Max E. Wilson, of North Carolina, to be U.S. marshal for the western district of North Carolina;

Keith S. Snyder, of North Carolina, to be U.S. attorney for the western district of North Carolina;

Gerald J. Gallinhouse, of Louisiana, to be U.S. attorney for the eastern district of Louisiana; and

Paul J. Henon, of Virginia, to be an Examiner in Chief, U.S. Patent Office.

(The above nominations were reported with the recommendation that they be confirmed, subject to the nominees' commitment to respond to requests to appear and testify before any duly constituted committee of the Senate.)

By Mr. EASTLAND, from the Committee on the Judiciary:

Robert W. Porter, of Texas, to be U.S. district judge for the northern district of Texas;

H. Curtis Meanor, of New Jersey, to be U.S. district judge for the district of New Jersey;

Donald S. Voorhees, of Washington, to be U.S. district judge for the western district of Washington; and

Robert M. Duncan, of Ohio, to be U.S. district judge for the southern district of Ohio.

By Mr. SPARKMAN, from the Committee on Banking, Housing and Urban Affairs:

Robert R. Elliott, of Virginia, to be General Counsel of the Department of Housing and Urban Development.

(The above nomination was reported with the recommendation that the nomination be confirmed, subject to the nominee's commitment to respond to requests to appear and testify before any duly constituted committee of the Senate.)

Mr. MAGNUSON. Mr. President, as in executive session, I report favorably sundry nominations in the U.S. Coast Guard which have previously appeared in the CONGRESSIONAL RECORD and, to save the expense of printing them on the Executive Calendar, I ask unanimous consent that they lie on the Secretary's desk for the information of Senators.

The PRESIDING OFFICER (Mr. BIDEN). Without objection, it is so ordered.

(The nominations ordered to lie on the Secretary's desk were printed at the end of the Senate proceedings in the RECORD of June 7, 1974.)

INTRODUCTION OF BILLS AND JOINT RESOLUTIONS

The following bills and joint resolutions were introduced, read the first time and, by unanimous consent, the second time, and referred as indicated:

By Mr. HUGH SCOTT (for himself and Mr. SCHWEIKER):

S. 3626. A bill to assure that an individual or family, whose income is increased by reason of a general increase in monthly social security benefits, will not, because of such general increase, suffer a loss of or reduction in the benefits the individual or family has been receiving under certain Federal or federally assisted programs. Referred to the Committee on Finance.

By Mr. COOK:

S. 3627. A bill to prohibit foreign assistance to India until India becomes a signatory to the Treaty on the Nonproliferation of Nuclear Weapons. Referred to the Committee on Foreign Relations.

By Mr. BELMONT (for himself and Mr. BARTLETT):

S. 3628. A bill to amend the Wild and Scenic Rivers Act of 1968 by designating the Illinois River at its tributaries as a potential component of the National Wild and Scenic Rivers System. Referred to the Committee on Interior and Insular Affairs.

By Mr. INOUE:

S. 3629. A bill for the relief of Ramon York Quijano;

S. 3630. A bill for the relief of Tarcisus York Quijano;

S. 3631. A bill for the relief of Paul York Quijano; and

S. 3632. A bill for the relief of Dennis York Quijano. Referred to the Committee on the Judiciary.

By Mr. ERVIN (for himself, Mr. GOLDWATER, Mr. KENNEDY, Mr. BAYH, and Mr. MATHEIAS):

S. 3633. A bill to protect the constitutional right of privacy of individuals concerning whom identifiable information is recorded by enacting principles of information practices in furtherance of articles I, III, IV, IX, X, and XIV of amendment to the U.S. Constitution. Referred to the Committee on the Judiciary.

By Mr. DOMENICI:

S. 3634. A bill to amend the Public Works and Economic Development Act of 1965 for the purpose of assisting local economies in regions of persistent economic underdevelopment by enabling the Federal cochairmen of designated regional commissions to acquire Federal excess personal property and to dis-

pose of such property to certain recipients. Referred to the Committee on Public Works.

By Mr. GRAVEL:

S. 3635. A bill to declare the commercial salmon fishery of the Bristol Bay area of Alaska to be undergoing a commercial fishery failure, to direct the Secretary of Commerce to take certain actions to restore such fishery, and to authorize additional funds for such purposes and for other United States fishery failures; and

S. 3636. A bill to compensate U.S. salmon fishing vessel owners and operators, salmon processors, and employees of such owners, operators and processors, for certain losses incurred as a result of salmon fishing by foreign fishing vessels under the terms of the International Convention for the High Seas Fisheries of the North Pacific Ocean. Referred to the Committee on Commerce.

STATEMENTS ON INTRODUCED BILLS AND JOINT RESOLUTIONS

By Mr. HUGH SCOTT (for himself and Mr. SCHWEIKER):

S. 3626. A bill to assure that an individual or family, whose income is increased by reason of a general increase in monthly social security benefits, will not, because of such general increase, suffer a loss of or reduction in the benefits the individual or family has been receiving under certain Federal or federally assisted programs. Referred to the Committee on Finance.

Mr. HUGH SCOTT. Mr. President, on behalf of my colleague from Pennsylvania (Mr. SCHWEIKER), and myself, I am pleased today to introduce a bill to correct an inequity in our social security system. The purpose of this bill is to disregard social security in determining allowable income for those receiving benefits from any other Federal or federally assisted program such as supplemental security income—SSI—aid to families with dependent children—AFDC—and veterans. Since the 11-percent increase in social security benefits this year, many people in these groups have found their total benefits have been reduced. This clearly was not the purpose of the social security increase.

Several months ago, recognizing that veterans had been negatively affected by the social security increase, I joined in cosponsoring a bill introduced by the Senator from New Mexico (Mr. MONTOYA). This bill was designed to aid those veterans whose total pension was reduced because of the raise in social security. Since that time I have been contacted by many constituents giving personal testimony that they too, although not in the veterans groups, were facing the same problem.

One lady from Allentown, Pa., who has a blind son receiving a disability pension writes:

Recently, as you know, there was an increase in Social Security—my son received this increase, but his SSI check was reduced by the amount of his increase in Social Security.

Consequently, while Senator MONTOYA's bill is a good one, my bill, I believe, is a better one because it recognizes a greater need. It does not focus solely on the veteran, but includes all

groups which have been treated unfairly by the social security increase.

My bill will provide that any individual or family whose income is increased because of subsequent increases in monthly social security benefits will not suffer a loss of or a reduction in the benefits due them under certain other Federal programs. Any individual who was receiving benefits for the month immediately preceding the first month the social security increase became effective will be entitled to any subsequent increase in those benefits and his total income will not be reduced as a result of that increase.

By my own rough estimates, this bill will aid more than 2.5 million people and benefits from other Federal programs. For example, of the total number of SSI recipients, 3.38 million as of May, 55 percent are also getting social security checks; of the 3 million AFDC families—1971 figures—4.4 percent of them are also receiving social security benefits; and approximately 1.5 million veterans, or 75 percent of the total number, also receive social security benefits. Each of these people have faced a reduction in their anticipated benefits. I am deeply concerned that so many Americans are suffering great hardships when social security increases should have meant relief.

Mr. President, I urge my colleagues to recognize this need and to act quickly on this vital measure, to end the intolerable burden upon millions of persons. I ask unanimous consent that the text of my bill be printed in the *RECORD* at the conclusion of my remarks.

There being no objection, the bill was ordered to be printed in the *RECORD*, as follows:

S. 3626

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a), in addition to any other requirement imposed as a criterion for determining eligibility to participate in or receive benefits provided by, or for determining the amount, type, or quantum of benefits to be provided under, any plan or program—

(1) which is designed to provide benefits to individuals or families who meet prescribed conditions,

(2) which establishes need (based on lack of or smallness of income or resources) as a criterion for determining eligibility of individuals or families to participate therein or receive the benefits provided thereunder, or for determining the amount, type, or quantum of benefits to be provided to individuals or families thereunder, and

(3) which is (A) a Federal plan or program, or (B) is a plan or program of a State (or political subdivision thereof) which is funded (wholly or in part) by Federal funds, there is hereby imposed the requirement that, in determining under such plan or program the income or resources of any individual who (or any family the members of which include any individual who), for the month immediately preceding the first month with respect to which a general social security benefits increase becomes effective, was—

(4) a recipient of benefits (or a member of a family which was a recipient of benefits) under such plan or program, and

(5) received (or had previously established entitlement to) a monthly insurance

benefit under section 202, 223, or 228, of the Social Security Act, there be disregarded any amount received by such individual—

(6) which is attributable solely to such general social security benefits increase, and

(7) for or with respect to any consecutive period of months (beginning with the first month with respect to which such general social security benefits increase became effective) with respect to each of which such individual is—

(A) a recipient of benefits (or a member of a family which is a recipient of benefits) under such plan or program, and

(B) entitled to such monthly insurance benefit. For purposes of paragraph (7) (A), an individual shall be deemed to be a recipient of benefits (or a member of a family which is a recipient of benefits) under such plan or program for any period after March 1974 with respect to which the requirement imposed by this subsection is not complied with if he would have been eligible to receive such benefits (or was a member of a family which would have been eligible to receive such benefits) had such requirement been complied with during such period.

(b) The requirement imposed by subsection (a) shall be applicable in the case of general social security benefit increases which become effective after March 1974, and shall be effective in determining eligibility to participate in or receive benefits under (and in determining the amount, type, or quantum of benefits under) a plan or program referred to in such subsection for periods after March 1974.

(c) The requirement imposed by subsection (a) with respect to any plan or program shall be deemed not to have been violated, in the case of any individual who immediately prior to the effective date of a general increase in the level of benefits provided under the plan or program (as determined in accordance with regulations of the Secretary of Health, Education, and Welfare) was entitled to have any amount of social security income disregarded because of such requirement, solely because the total amount of social security income was so required to be disregarded (in the case of such individual) immediately prior to such general increase is, on or after the effective date of such general increase, reduced (but not below zero) by an amount equal to the amount of such general increase.

(d) Notwithstanding any other provision of law, no Federal funds shall be paid to any State (or political subdivision thereof) with respect to any expenditures made under any plan or program (referred to in subsection (a)) for any period which commences on or after the first day of the first calendar month which begins more than 60 days after the date of enactment of this Act, unless, for such period, such plan or program is operated so as to comply with the requirement imposed by subsection (a).

SEC. 2. It shall be the duty of the Secretary of Health, Education, and Welfare to promulgate such rules and regulations as may be appropriate to assure the uniform implementation of the provisions of the first section of this Act; and such Secretary shall furnish appropriate information and data to and shall otherwise cooperate with and assist other Federal agencies with a view to assuring compliance with the provisions of such section.

By Mr. COOK:

S. 3627. A bill to prohibit foreign assistance to India until India becomes a signatory to the Treaty on the Nonproliferation of Nuclear Weapons. Referred to the Committee on Foreign Relations.

Mr. COOK. Mr. President, India has recently become the world's sixth nu-

clear power. A country that once denounced nuclear ambition and admonished those participating in the development and testing of nuclear weapons is now a member of that group. Prime Minister Indira Gandhi maintains that India's motives are for purely peaceful purposes—mining, prospecting for oil and gas, the discovery of underground sources of water, and the diversion of rivers for scientific and technological knowledge. However, if this is indeed the case, why then has India refused thus far to sign the Nonproliferation Treaty of 1968?

As most of my colleagues are undoubtedly aware, that treaty provides for the supply of nuclear materials to both nuclear-weapon and non-nuclear-weapon states for peaceful purposes to all parties of the treaty at cost, when nuclear materials are safe, and an economic credit. In addition, the treaty further urges the cooperation of all states in the attainment of this objective.

Let me briefly describe the current deplorable situation which exists in India. The population of 580 million persons faces famine—with 80 percent of the Indian people malnourished—and that population is increasing dramatically each year by 13 million. Seventy-five percent of those 580 million are illiterate, 75 percent of India's university graduates are unemployed, and one-half of the population lives on 10 cents a day.

Given these facts, there can be no justification whatsoever for the expenditure of \$173 million by the Indian Government on nuclear weapon development between 1968 and 1973, or for the \$315 million which it intends to spend over the next 5 years. One-third of all Indians live below the poverty level of \$30 per year. Housing is badly needed, yet the Indian Government allocated only \$200 million for that purpose during the same period in which it spent \$173 million for nuclear development. India's nuclear program will not provide more jobs, increase production, or solve the deficit balance-of-payments crisis which now confronts the Indian economy.

Even more important, the suspicion and fear that surrounds the Indian motives for the recent nuclear detonation could set off a wave of nuclear proliferation around the world if left unchecked.

Mr. President, I believe it is time for the United States, which between 1950 and 1971 contributed a record \$10 billion in assistance to India, to cut off all economic assistance of any sort to that country until it becomes a signatory of the Nonproliferation Treaty. If not, we have no way of guaranteeing that the money we so eagerly hand out to the Indians each year will not be spent for further nuclear weapon development, rather than to deter the famine which appears imminent, or for other needed social and economic programs.

Accordingly I am today introducing legislation to accomplish that objective. Representative STANFORD PARRIS of Virginia, is introducing identical legislation today in the House of Representatives. Under the terms of the legislation, all military and economic assistance, all

sales of agricultural commodities, and all licenses with respect to the transportation of arms, ammunition, and implements of war to the Government of India would be suspended until such time as India becomes a state party to the Treaty on the Nonproliferation of Nuclear Weapons. I would strongly recommend that this body proceed expeditiously to secure enactment of this legislation.

I ask unanimous consent that the full

text of the legislation, as well as additional documentation, be printed in the RECORD at this point.

There being no objection, the bill and material were ordered to be printed in the RECORD, as follows:

S. 3627

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all military, economic, or other assistance, all sales of defense articles and services (whether for

cash or by credit, guaranty, or any other means), all sales of agricultural commodities (whether for cash, credit, or by other means), and all licenses with respect to the transportation of arms, ammunitions, and implements of war (including technical data relating thereto) to the Government of India under any provision of law shall be suspended for the period beginning on the date of enactment of this Act and ending on the date that India becomes a State Party to the Treaty on the Non-Proliferation of Nuclear Weapons.

INDIA

[U.S. fiscal years, millions of dollars]

U.S. overseas loans and grants—Obligations and loan authorizations

Program	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1964-73
ECONOMIC PROGRAMS											
A. Official development assistance											
A.I.D. and predecessor agencies, total.....	344.1	265.3	309.9	211.7	300.9	203.4	223.7	205.9	5.6	16.6	2,087.1
Loans.....	337.2	256.1	300.0	203.3	287.7	194.0	195.0	196.0	-----	14.7	1,984.0
Grants.....	6.9	9.2	9.9	8.4	13.2	9.4	28.7	9.9	5.6	1.9	103.1
(Supporting assistance).....	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Food for Peace, total.....	268.0	391.2	567.1	359.8	325.0	268.7	222.2	234.8	104.6	64.2	2,805.6
Title I, total.....	236.8	360.6	518.8	276.7	282.2	211.1	180.7	156.2	-----	-----	2,223.1
Repayable in U.S. dollars—Loans.....	-----	-----	-----	23.7	64.4	102.2	111.0	128.3	-----	-----	429.6
Payable in foreign currency—Planned for country use.....	236.8	360.6	518.8	253.0	217.8	108.9	69.7	27.9	-----	-----	1,793.5
(Total sales agreements, including U.S. uses).....	(270.5)	(404.2)	(656.7)	(285.7)	(236.8)	(117.1)	(76.6)	(30.0)	(-)	(-)	(2,077.6)
Title II, total.....	31.2	30.6	48.3	83.1	42.8	57.6	41.5	78.6	104.6	64.2	582.5
Emergency relief, economic development and world food.....	6.7	2.8	18.2	45.4	2.6	6.1	-----	32.1	40.7	10.3	164.9
Voluntary relief agencies.....	24.5	27.8	30.1	37.7	40.2	51.5	41.5	46.5	63.9	53.9	417.6
Other official development assistance.....	1.7	3.2	24.9	6.1	6.2	5.4	3.8	3.8	3.3	.9	59.3
Peace Corps.....	1.7	3.2	8.9	6.1	6.2	5.4	3.8	3.8	2.6	.9	42.6
Other.....	-----	-----	16.0	-----	-----	-----	-----	-----	.7	-----	16.7
Total official development assistance.....	613.8	659.7	901.9	577.6	632.1	477.5	449.7	444.5	113.5	81.7	4,952.0
Loans.....	480.7	616.6	834.8	450.3	569.9	384.1	375.7	352.2	0.7	14.7	4,079.7
Grants.....	133.1	43.0	67.1	127.3	62.2	93.4	74.0	92.3	112.8	67.0	872.2
B. Other official economic programs											
Export-Import Bank loans.....	57.2	38.1	-----	14.1	45.0	-----	46.9	12.4	15.0	-----	228.7
Other loans.....	57.2	38.1	-----	14.1	45.0	-----	5.2	-----	-----	-----	5.2
Total other official loans.....	57.2	38.1	-----	14.1	45.0	-----	52.1	12.4	15.0	-----	233.9
Total economic programs.....	671.0	697.8	901.9	591.7	677.1	477.5	501.8	456.9	128.5	81.7	5,185.9
Loans.....	537.9	654.7	834.8	464.4	641.9	384.1	427.8	364.6	15.7	14.7	4,313.6
Grants.....	133.1	43.0	67.1	127.3	62.2	93.4	74.0	92.3	112.8	67.0	872.2
MILITARY PROGRAMS											
Military assistance (charged to FAA appropriation).....	35.2	29.1	7.1	-----	.1	.1	.1	.2	-----	-----	71.9
Credit sales (LMS).....	8.8	18.9	-----	-----	-----	-----	-----	-----	-----	-----	27.7
Grants.....	26.4	10.2	7.1	-----	.1	.1	.1	.2	-----	-----	44.2
Military assistance service funded grants.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Transfer from excess stocks.....	(2.0)	(0.2)	-----	-----	-----	-----	-----	-----	-----	-----	2.2
Other grants.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Export-import bank military loans.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total military programs.....	37.2	29.3	7.1	-----	.1	.1	.1	.2	-----	-----	74.1
Total economic and military programs.....	708.2	727.1	909.0	591.7	677.2	477.6	501.9	457.1	128.5	81.7	5,260.0
Loans.....	546.7	673.6	834.8	464.4	614.9	384.1	427.8	364.6	15.7	14.7	4,341.3
Grants.....	161.5	53.4	74.2	127.3	62.3	93.5	74.1	92.5	112.8	67.0	918.6

Compiled from U.S. A.I.D. sources by V.N. Pregeljo, Economics Div.

H.R. —

A bill to prohibit foreign assistance to India until India becomes a signatory to the Treaty on the Non-Proliferation of Nuclear Weapons

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all military, economic, or other assistance, all sales of defense articles and services (whether for cash or by credit, guaranty, or any other means), all sales of agricultural commodities (whether for cash, credit, or by other means), and all licenses with respect to the transportation of arms, ammunitions, and implements of war (including technical data relating thereto) to the Government of India under any provision of law shall

be suspended for the period beginning on the date of enactment of this Act and ending on the date that India becomes a State Party to the Treaty on the Non-Proliferation of Nuclear Weapons.

Mr. PARRIS. Mr. Speaker, India has recently become the world's sixth nuclear power. A country that once denounced nuclear ambition and admonished those participating in the development and testing of nuclear weapons is now a member of that group. Prime Minister Indira Gandhi maintains that India's motives are for purely peaceful purposes—mining, prospecting for oil and gas, the discovery of underground sources of water, and the diversion of rivers for scientific and technological knowledge. How-

ever, if this is indeed the case, why then has India refused thus far to sign the Non-Proliferation Treaty of 1968?

As most of my colleagues are undoubtedly aware, that Treaty provides for the supply of nuclear materials to both nuclear-weapon and non-nuclear-weapon States for peaceful purposes to all Parties of the Treaty at cost, when nuclear materials are safe and an economic credit. In addition, the Treaty further urges the cooperation of all States in the attainment of this objective.

Let me briefly describe the current deplorable situation which exists in India today. The population of 580 million persons faces famine—with 80 percent of the Indian people malnourished—and that population is increasing dramatically each year by 13 mil-

lion—75 percent of those 580 million are illiterate, 75 percent of India's university graduates are unemployed, and one-half of the population lives on 10 cents a day.

Given these facts, there can be no justification whatsoever for the expenditure of \$173 million which the government of India spent from 1968 to 1973 for nuclear weapon development or the \$315 million which they intend to spend over the next five years.

One-third of all Indians live below the poverty level of \$30 per year. Housing is badly needed, yet the Indian government only allocated \$200 million for that purpose during the same period in which it spent \$173 million for nuclear development. India's nuclear program will not provide more jobs, increase production, or solve the deficit balance of payments crisis.

Even more important, the suspicion and fear that surrounds the Indian motives for the recent nuclear detonation could set off a wave of nuclear proliferation around the world if left unchecked.

Mr. Speaker, I believe it is time for the United States, which between 1950 and 1971 contributed a record \$10 billion in assistance to India, to cut off all economic assistance of any sort to that country until it becomes a signatory of the Non-Proliferation Treaty. If not, we have no way of guaranteeing that the money we so eagerly hand out to India each year will not be used for further nuclear weapon development, rather than to deter a famine which appears imminent.

Accordingly, I am today introducing legislation to accomplish that objective. Representative Stanford Parris (R-Va.) is introducing identical legislation today in the House of Representatives. Under the terms of the legislation, all military and economic assistance, all sales of agricultural commodities, and all licenses with respect to the transportation of arms, ammunitions, and implements of war to the Government of India would be suspended until such time as India becomes a State Party to the Treaty on the Non-Proliferation of Nuclear Weapons. I would strongly urge that this body proceed expeditiously to secure the enactment of that legislation.

By Mr. BELLMON (for himself and Mr. BARTLETT):

S. 3628. A bill to amend the Wild and Scenic Rivers Act of 1968 by designating the Illinois River and its tributaries as a potential component of the national wild and scenic rivers system. Referred to the Committee on Interior and Insular Affairs.

Mr. BELLMON. Mr. President, the Illinois River in the State of Oklahoma has long been recognized as one of the most popular scenic and recreational areas in the United States. The free-flowing streams of the Illinois and its main tributaries, the Flint and Barren Creeks, provide a unique variety of fish and wildlife. The river annually draws thousands of visitors from all parts of the country to enjoy swimming, fishing, floating, and camping along the river's banks.

The fragile beauty of the river is gently tucked away among the heavily wooded hills of northeastern Oklahoma. The Oklahoma section of the Illinois River stretches approximately 70.5 miles north of Lake Tenkiller to the Arkansas State line. Within this relatively short stretch of river are found 95 species of fish and over 67 different species of birds. Wildlife is abundant. Frequenting the river area are deer, raccoon, bobcat, fox, and many other wild animals. The nat-

ural and scenic beauty of the area can in no way be quantified. One can sit on the river's banks and cliffs that hang over the gently flowing waters of the Illinois for hours and gaze upon a setting that is uniquely soul satisfying.

Mr. President, over the past few months there has been a great deal of concern among a significant number of Oklahomans that the fragile beauty and natural character of the Illinois River will be destroyed. This concern is justifiable. It is my understanding that approximately 70 percent of northwest Arkansas' treated sewage drains into the Illinois River. It has been further brought to my attention that Arkansas now has a plan to dump 100 percent of its treated sewage water into the Illinois River. I am also advised that a power plant is scheduled to be built in Gentry, Ark., and the fly-ash emitted from this plant and blown into the river is a significant threat to the esthetic beauty and quality of the Illinois. Threat of extinction does not come solely from outside the borders of the State of Oklahoma. Development in the river area may soon deface the river's beauty and deny access to the river to thousands whose lives have been enriched by the outdoor recreational opportunities it affords.

Mr. President, it is difficult to pass judgment in the battle between those who wish to build and develop and those who wish to preserve forever the national heritage of our environment. Each have valid objectives. Certainly powerplants are necessary to generate energy, and development is necessary to meet the needs of our Nation. However, there is also a valid need to give due consideration to what is the unique and unspoiled beauty of America's countryside.

Mr. President, it is my belief that today, more than at any other time in our history, it is necessary for us to pause and balance these two objectives, and that is my purpose in introducing this bill. Senator BARTLETT and I offer this legislation to provide information that Congress would need to decide whether or not the Illinois River truly encompasses the attributes needed to make it suitable for inclusion in the wild and scenic rivers system. Through the study this legislation authorizes, two competing interests can be reconciled logically and systematically.

Mr. President, I might add that in December of 1973 and January of 1974, Senator BARTLETT and I wrote a letter to Secretary Morton with respect to including the Illinois River for study under the Wild and Scenic Rivers Act. It is my understanding that the Office of Management and Budget is still reviewing the feasibility of this proposal. In order to move this request along, on May 28, 1974, I proposed an amendment to S. 2439, to include the Illinois River for study along with the New River in North Carolina. At that time the distinguished Senator from Colorado (Mr. HASKELL) stated that hearings would soon be held on other bills of the same nature and that if a measure calling for the study of the Illinois was introduced, it would receive committee consideration. I am very pleased to say that early

last week the Interior Committee contacted my office in regard to hearings on the Illinois River. I wish to thank the distinguished subcommittee chairman Senator HASKELL, for his thoughtfulness.

Mr. President, it seems entirely appropriate that a study of the Illinois River be authorized so that future decisions as to the status of the river can be made based upon careful evaluation of all facts related to the river's highest use.

Mr. President, I ask unanimous consent that the text of the bill be printed in the RECORD, along with an article appearing in the June 9, 1974, edition of the Sunday Oklahoman in regard to potential sewage pollution of the Illinois River.

There being no objection, the bill and article were ordered to be printed in the RECORD, as follows:

S. 3628

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That subsection (a) of section 5 of the Wild and Scenic Rivers Act [16 USC 1276(a)] is amended by adding at the end thereof the following:

(29) The Illinois River in the State of Oklahoma, including the Flint and Barren Fork Creeks, beginning at the upper limits of the Tenkiller Lake, thence upstream to the Arkansas state line.

Sec. 2. The studies of the rivers named in section 1 of this Act shall be conducted in accordance with the provisions of the Wild and Scenic Rivers Act; provided that such studies shall be complete and reports made thereon to Congress not later than one year from date of enactment of this Act.

Sec. 3. The sum of \$175,000 is hereby authorized for purposes of the study designated in Section 1 of this Act.

[From the Sunday Oklahoman, June 9, 1974]
ILLINOIS RIVER NEEDS YOU: BELIEVE IT OR NOT, ARKANSAS PLANS TO TURN SCENIC WONDERLAND INTO SEWER

(By Glenn Titus)

This proposal may be a little hard to believe but then the way things have been going at the various levels of government lately it takes quite a bit to be shocking.

However, if you are one who has enjoyed the sparkling water of the Illinois River this little idea may cause you to register a tremor of five or six on the Richter scale.

Arkansas is planning to use one of Oklahoma's few scenic rivers as a sewer for partly treated effluent.

The plan, if approved by the U.S. Environmental Protection Agency, will be for the placement of two large waste water treatment plants along the Illinois River in Arkansas.

One plant would treat all of the waste water from the eastern half of Washington and Benton Counties, that includes Fayetteville and Rogers, and a western plant would be located at Siloam Springs.

These plants would handle municipal and industrial waste from the whole area and process it to the secondary treatment state and then dump it into the Illinois River, letting the final treatment occur downstream in Oklahoma.

The plan's proponents see nothing wrong with it.

Secondary treatment is clean water and meets the federal standards they say, but the Arkansas Health Department says that the city of Siloam Springs must discontinue using drinking water from the Illinois River if the plan is implemented.

Does this mean that the sewage is treated well enough for Oklahomans to swim in, but

is not clean enough for Arkansawyers to run through their water purification plant to use as domestic water?

The treated sewage water from Siloam Springs is now dumped into Lake Francis, a reservoir on the Illinois. The nutrient from the waste has about killed that lake and has caused some problems of algae and water clarity downstream in Oklahoma.

Among other things, secondary treatment doesn't remove from the waste water the nitrogen and phosphorus which are the same thing as fertilizer.

Some of this can be beneficial, but just a little too much can be devastating.

The first noticeable effect is more of a soupy green appearance of an algae bloom and it's not as appealing to swim in as clear water.

In early stages these nutrients provide more food for fish, but as the process grows it changes the capacity of the stream to carry dissolved oxygen.

This then changes the kind of fish that can live in the stream.

The Illinois River is classified as a small-mouth bass stream and smallmouth tops the list of desirable game fish in Oklahoma.

We have just a few rivers left where smallmouth bass can live because of their demand for a high level of oxygen in the water.

Oklahoma's minimum standard for small-mouth streams are six parts per million of dissolved oxygen, but if Arkansas has its way this standard will have to be lowered.

And we can, as they say, raise more fish, but for a fellow who has stalked the feisty smallmouth in clear tumbling waters it's hard to get excited about catching bullheads out of swamp water.

Not only is the quality of the Illinois River in jeopardy, but so is Lake Tenkiller.

The lake could become as dead as Lake Francis and for the same reason—too much nutrient from sewage.

But then it's not only Arkansas which wants to use the Illinois for partly treated sewage.

The Illinois River Conservation Council, a coalition of Oklahoma Conservationists made up of the Izaak Walton League, Scenic Rivers Association, The League of Women Voters, Oklahoma Wildlife Federation, Audubon Society, Sierra Club and others, has raised the alarm over the 3,000 proposed septic tanks to be used in the large Flint Ridge second home development that has started along the Illinois River.

U.S. Sen. Henry Bellmon has shown a sincere interest in the river and has requested the U.S. Bureau of Outdoor Recreation to study the Illinois River for protection under the federal Wild and Scenic Rivers Act.

I'll bet that if he heard from enough folks who are concerned about the Illinois he might also have a word with the U.S. Environmental Protection Agency, which has veto power over the Arkansas plan.

A copy of that letter, and if you feel strongly enough, a donation would be in order to the Illinois River Conservation Council. Such action will play a big part in saving the Illinois as one of Oklahoma's true scenic rivers.

Their addresses are: Illinois River Conservation Council, Mrs. Sherrill Nilson, Chairman, 4214 S. Wheeling, Tulsa, Okla., 74105; Sen. Henry Bellmon, 4203 New Senate Office Bldg., Washington, D.C., 20510.

By Mr. ERVIN (for himself, Mr. GOLDWATER, Mr. KENNEDY, Mr. BAYH, and Mr. MATHIAS):

S. 3633. A bill to protect the constitutional right of privacy of individuals concerning whom identifiable information is recorded by enacting principles of information practices in furtherance of

articles, I, III, IV, IX, X, and XIV of amendment to the U.S. Constitution. Referred to the Committee on the Judiciary.

GOVERNMENT DATA BANK RIGHT TO PRIVACY ACT

Mr. ERVIN. Mr. President, I introduce today on behalf of Senators GOLDWATER, KENNEDY, BAYH, and MATHIAS a bill entitled the "Government Data Bank Right to Privacy Act."

The Judiciary Committee for many years has been concerned with issues of privacy. Going back into the 1950's, both through the Administrative Practice and Procedure Subcommittee under the late Senator Long of Missouri and more recently under Senator KENNEDY, and through the Constitutional Rights Subcommittee, under my chairmanship, the Judiciary Committee members have had many opportunities to become expert in problems of privacy. The Constitutional Rights Subcommittee, especially, has worked on data bank privacy legislation, for years, and presently has before it among other privacy legislation, bipartisan bills to regulate criminal justice data systems. The sponsors of this new bill are, with the exception of Senator GOLDWATER, all members of the Judiciary Committee. Our sponsorship symbolizes the interest of the committee in this legislation, an interest I know is shared by other committee members who have sponsored similar proposals. For that reason I look forward to the joint cooperation between the Judiciary and Government Operations Committees in moving this legislation to the floor in this Congress.

This bill proposes to establish certain fundamental rights for all citizens who are the subjects of files and dossiers maintained by the Government. Among these rights are the right of review and correction, the right of notification, the right of correction and explanation, the right to challenge data banks, and to enforce privacy both through administrative and judicial processes. Among the other provisions of the bill is the requirement that data banks be disclosed to the public as they are established, that they only contain relevant, accurate, and necessary information, that they employ security and confidential devices and rules, that access be explicitly defined and controlled, that dissemination be strictly limited, and that a record be kept of all those examining the files.

Americans by now are fast becoming aware of the danger to their liberties from vast and proliferating data banks which are uncontrolled by law. Like any new invention, the technological and administrative developments of recent years in the field of data collection and use not only promise better conduct of the public's business, but also threaten unforeseen and tremendous dangers to individuality. A society numbered, punched, and filed by Government cannot be free. Clearly it is time to insure that only the good that is promised by these new Government data systems becomes reality, and that the harm feared never comes about.

Next week I hope to be able to release the results of a 4-year study of Federal data banks conducted by the Constitutional Rights Subcommittee. This study

will document the need for many of the provisions of this proposal. It will give concrete evidence to support the warnings that many have issued over the past decade about the need for explicit legislative privacy protections. It is my hope that this data bank study will form the foundation of general privacy legislation that can be enacted this year.

Next week, as has already been publicly announced, an ad hoc privacy subcommittee of the Government Operations Committee and the Constitutional Rights Subcommittee of the Judiciary Committee will open hearings on data bank legislation. Before the subcommittee will be a bill, S. 3418, introduced by Senators MUSKIE, PERCY, and myself, and referred to Government Operations, and a bill by Senator BAYH, S. 2542, and a bill and substitute amendment, S. 2810, introduced by Senator GOLDWATER, referred to the Judiciary Committee. Each of these bills takes a similar approach to privacy, although they differ in detail and in scope.

The bill we introduce today follows the line generally expressed in these bills, and in those introduced in the House by Congressmen KOCH and GOLDWATER. Indeed, each of the Senate bills are variations of the model first prepared by those two gentlemen, and the debt that the Senate bills owe is apparent by a comparison of their texts.

This bill differs from S. 3418, the Ervin-Muskie-Percy bill, in a number of respects:

First, it proposes to apply the regulation to Federal systems, and those State governmental systems supported or funded by the Federal Government, or which are interstate in nature. It does not propose to cover private systems. This alternative is suggested not because there is no need to cover private systems, but because there is some sentiment that a more limited bill might be desirable at this stage. By so limiting its coverage, the sponsors of the bill do not suggest that they will not work for passage this year of comprehensive legislation such as in the other bills. They only wish to present the alternative for formal examination.

Second, the bill provides that it will not apply to any Federal or State data bank system which is subject to another statute affording at least the minimum protections set forth in the model. This is a desirable proposal. It encourages States and the Congress to enact specific legislation designed to meet the peculiar problems of particular data systems. To those who object to uniform model privacy legislation as being too comprehensive and too much an interference in State prerogatives, the answer is simple: "If you think you can protect privacy better than Congress, do so. Enact your laws. We encourage it."

Third, the bill addresses the difficult problem of how to administer privacy legislation. Clearly we cannot rely solely upon the courts. The requirements of the act are not all susceptible to civil suits on behalf of an ordinary citizen. Also, we cannot trust the government agencies to enforce the law against themselves. The data bank study shows how little they have done on their own.

Yet, to establish a Government-wide independent administering board has certain disadvantages. The cosponsors of this bill unite in recognizing the need for performing this function, but have an open mind on the structure to perform it. In the field of criminal data banks, it is rapidly being recognized that an independent board reflecting the many different interests is the best way to proceed. That may well be the result with this general legislation, also. But, again, to focus attention on another possible alternative, this bill suggests that the GAO perform the oversight and registry functions contemplated in the legislation. We offer this suggestion without commitment.

In addition to these major changes, the bill has been reorganized and a statement of findings and purpose has been added. A number of other technical changes have been made. In most other respects, however, it is a refinement of S. 3418.

Along with my other colleagues on this bill, I express the hope that the Judiciary and Government Operations Committees, working through the special expertise on privacy and Government administration reflected in the Constitutional Rights Subcommittee and ad hoc subcommittees, will produce a unified bill that will quickly secure approval in the weeks ahead.

Mr. KENNEDY. Mr. President, I am pleased to join the distinguished Senator from North Carolina and several other colleagues in sponsoring the Government Data Bank Right to Privacy Act. This bill will provide a framework for enacting necessary safeguards to protect American citizens against the compiling of inaccurate or unverified data and the unrestricted use and dissemination of this data.

The past several decades have seen an enormous growth in the volume of unregulated information about American citizens. When an American applies for insurance, purchases a home, seeks employment, applies for a professional license, or in thousands of other everyday situations, he will be evaluated in large part on the basis of information contained in computer data banks. This information is often incomplete, inaccurate, or based upon unverified or hearsay representations. Experience has shown that as the capacity to store and disseminate personal information has increased through the use of computers and other devices, information has been collected to fill this capacity.

The Subcommittee on Administrative Practice and Procedure, which I am privileged to chair, has a long history of involvement in issues concerning the right to privacy, including problems in the use of computer data banks. From 1965 to 1968, the subcommittee under its previous chairman considered legislation and held extended hearings on computer privacy and invasions of privacy by Federal agencies and the private sector.

In recent years, the subcommittee has developed legislation which has passed the Senate to permit greater citizen access to information in Government files, and has held extensive hearings on in-

vasions of privacy through warrantless wiretapping and electronic surveillance. I introduced legislation which was passed last year to provide greater safeguards over the use of criminal data in programs funded by the Law Enforcement Assistance Administration. I recently testified as to the necessity for safeguards in the collection and use of medical information in data banks. And we have been concerned with protecting the rights of American citizens in the dissemination of data through the National Criminal Information Center.

I will work for the enactment into legislation of five basic principles to protect the right to privacy of American citizens. First, all persons who collect, store, use, or disseminate information should be considered to have a duty of due care toward the subjects of that information.

Second, decisions to collect information should be made with a high regard for considerations of personal privacy and of relevance and need. The mere existence of capacity to store information should not justify its collection. In particular, first amendment considerations should play an important role, to insure that there is no "chilling effect" on the exercise of constitutionally protected expression arising from the collection of data.

Third, all systems that collect, store, disseminate, or use data must maintain strict security over the information. There must be limitations on access to the data. The method of information storage should be designed to prevent unauthorized access or intrusion. Protective devices should be installed to safeguard the transmission of data to other users. Stringent standards akin to those required for airline safety should be applied to information safety.

Fourth, the subject of information should have the right of access to his own file to see that the information contained in it is accurate, and to challenge any inaccurate information. Experience has shown that frequently data is collected on the basis of incomplete, unverified, or mistaken representations. Of course, special rules can be developed to protect against violation of privileges or confidences and to protect the identity of informers. But the general principle that the subject of information should have access to it is important.

Fifth, data should be destroyed or expunged when its age or obsolescence suggests that its utility is outweighed by its inaccuracy or by its potential harm to the individual.

These principles are essential to guaranteeing the constitutional right to privacy of American citizens. They were most recently articulated by Prof. Arthur Miller of the Harvard Law School and were endorsed at the Annual Chief Justice Earl Warren Conference on Advocacy of the Roscoe Pound-American Trial Lawyers Foundation in Massachusetts last week. The bill of the distinguished Senator from North Carolina would go a long way toward enacting these principles into law.

During hearings on this bill, several important issues will have to be considered, and particular provisions of the bill

may be improved upon. These issues include whether regulation should apply to both Government and private data collection systems; whether it should apply to both automated and manual systems; the precise nature of the requirement of relevance of data collected; and law enforcement considerations in expunging old data. I am glad to join in seeking to resolve these issues and to enact legislation to ensure that every American can fully exercise his constitutional right to privacy.

By Mr. DOMENICI:

S. 3634. A bill to amend the Public Works and Economic Development Act of 1965 for the purpose of assisting local economies in regions of persistent economic underdevelopment by enabling the Federal cochairmen of designated regional commissions to acquire Federal excess personal property and to dispose of such property to certain recipients. Referred to the Committee on Public Works.

Mr. DOMENICI. Mr. President, I introduce today and submit for appropriate reference a bill which would provide assistance to the economic base of regions of persistent economic underdevelopment by allowing the Federal cochairmen of regional commissions to obtain excess Federal property and to utilize that property for purposes of economic development.

This bill would amend title V of the Public Works Act of 1965—42 U.S.C. and the following. It would add to that act a new section, section 514, creating a regional excess property program.

The Four Corners Regional Commission has had some experience with obtaining and utilizing excess Federal property for the purpose of accomplishing its objectives. I understand that program has been successful and popular.

In fact, during the 2-year period that the program was in operation in the Four Corners Regional Commission, those portions of New Mexico within that region received nearly \$5 million worth of excess property. This amount was greater than the total New Mexico share of congressional appropriations for the Four Corners Regional Commission during that 2-year period. This level of assistance is indeed substantial and represents one of the easiest and least expensive means by which significant economic development can be achieved.

That program was phased out when it appeared a short time ago that EDA was being phased out and because there was some question as to the specific legal authority for the Federal cochairmen of the regional commissions to participate in such programs. My bill would eliminate that legal question by authorizing the Federal cochairmen of designated regional commissions to receive and make disposition of excess Federal property to appropriate entities within the region. The manner of use or disposal of any such property would have to be related to the purpose of the regional commission for the economic development within the region. The use and accounting for such property would be strictly controlled in accordance with provisions of the bill.

It should be noted that an identical bill has been introduced in the House by Congressman LUJAN of New Mexico and six other Congressmen. It is my hope that the appropriate committees will give immediate attention to this bill and that the legislative process will rapidly culminate in its enactment.

I request unanimous consent that the text of this bill be printed in the RECORD at this point.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 3634

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That title V of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3181 et seq.) is amended by adding at the end thereof the following new section:

"REGIONAL EXCESS PROPERTY PROGRAM

"Sec. 514. (a) Notwithstanding any other provision of law, and subject to subsection (b), the Federal cochairmen of each regional commission established under section 502 may acquire excess property, without reimbursement, through the Administrator of General Services and shall dispose of such property, without reimbursement and for the purpose of economic development, by loaning to, or by vesting title in, any of the following recipients located wholly or partially within the economic development region of such Federal cochairman:

"(1) any State or political subdivision thereof;

"(2) any tax-supported organization;

"(3) any Indian tribe, band, group, or pueblo recognized by the Federal Government, and any business owned by any tribe, band, group, or pueblo;

"(4) any tax-supported or nonprofit private hospital; and

"(5) any tax-supported or nonprofit private institution of higher education requiring a high school diploma, or equivalent, as a basis for admission.

Such recipient may have, but need not have, received any other aid under this Act.

"(b) For purposes of subsection (a)—

"(1) each Federal cochairman, in the acquiring of excess property, shall have the same priority as other Federal agencies; and

"(2) the Secretary shall prescribe rules, regulations, and procedures for administering subsection (a) which may be different for each economic development region, except that the Secretary shall consult with the Federal cochairman of a region before prescribing such rules, regulations, and procedures for such region.

"(c) (1) The recipient of any property disposed of by any Federal cochairman under subsection (a) shall pay, to the Administrator of General Services, all costs of care and handling incurred in the acquiring and disposing of such property; and such recipient shall pay all costs which may be incurred regarding such property after such Federal cochairman disposes of it, except that such recipient shall not pay any costs incurred after such property is returned under subsection (e).

"(2) No Federal cochairman may be involved at any time in the receiving or processing of any costs paid by the recipient under paragraph (1).

"(d) Each Federal cochairman, not later than six calendar months after the close of each fiscal year, shall account to the Secretary, as the Secretary shall prescribe, for all property acquired and disposed of, including any property acquired but not disposed of, under subsection (a) during such fiscal year. The Secretary shall have access to all information and related material in the pos-

session of such Federal cochairman regarding such property.

"(e) Any property disposed of by loan under subsection (a) and determined by the Federal cochairman, who disposed of it, to be no longer needed for the purpose of economic development shall be returned by the recipient to the Administrator of General Services for disposition under the Federal Property and Administrative Services Act of 1949.

"(f) The value of any property acquired and disposed of, including any property acquired but not disposed of, under subsection (a) shall not be taken into account in the computation of any appropriation, or any authorization for appropriation, regarding any regional commission established under section 502 or any office of the Federal cochairman of such commission.

"(g) For purposes of this section—

"(1) the term 'care and handling' has the meaning given it by section 3(h) of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 472 (h)); and

"(2) the term 'excess property' has the meaning given it by section 3(e) of such Act (40 U.S.C. 472 (e)), except that such term does not include real property."

By Mr. GRAVEL:

S. 3635. A bill to declare the commercial salmon fishery of the Bristol Bay area of Alaska to be undergoing a commercial fishery failure, to direct the Secretary of Commerce to take certain actions to restore such fishery, and to authorize additional funds for such purposes and for other U.S. fishery failures; and

S. 3636. A bill to compensate U.S. salmon fishing vessel owners and operators, salmon processors, and employees of such owners, operators and processors, for certain losses incurred as a result of salmon fishing by foreign fishing vessels under the terms of the International Convention for the High Seas Fisheries of the North Pacific Ocean. Referred to the Committee on Commerce.

Mr. GRAVEL. Mr. President, the State of Alaska has moved to have the Bristol Bay area declared a national disaster because of the absence of red salmon there. This action is warranted to preserve the meager remnants of what was once the greatest red salmon fishing grounds. Today, I propose legislation to begin the restoration process and to ease the impact of this major crisis on the residents of the area.

The scope of the problem in Bristol Bay is devastating. A scant 4 years ago, the Bristol Bay harvest accounted for 64 percent of the national red salmon production, when the value of this resource to the fishermen exceeded \$27 million. Today in Bristol Bay, there is no production, there is no value to the fishermen, there is no commercial red salmon harvest. Of the 4,400 civilian residents of the area, 2,500 work directly in this industry, as fishermen or cannery workers. Mortgage payments on idle fishing vessels will go unpaid. The income from the fishing season, used to supplement the subsistence existence of an area where the cost of living is 170 percent of Seattle, will be insignificant. There is no other developed economic base, and little hope for the area without our immediate action.

The drastic decline in the Bristol Bay red salmon resource is believed to be due to a combination of factors, some natural, but most manmade. We are powerless, in most instances to adequately avert the natural causes. But the tragedy of this disaster rests with errors of commission and omission by the Federal Government that could avert or control the manmade causes.

The natural phenomena contributing to the decline has produced poor seasons, but never to the present extent, the extremely cold winters of 1970-71 and 1971-72 are contributing factors. The lack of snow cover during these years destroyed millions of recently hatched or smolt salmon. Similarly, the varying water levels have destroyed millions of eggs. But, as I have previously stated, we are powerless to change these weather factors.

The resource realized its first great depletion in the period 1900-40, while Alaska was still a territory. Federal management and enforcement was subservient to the economic interests of canners and fishermen with little regard for the renewability of the resource. There is no hope, or expectation that the salmon can be replenished to these preexploitation levels. Attitudes have changed since that time. State management has tried to do a commendable job to insure maximum sustainable yield for the future.

But where there has been Federal intervention in recent years, it has made matters worse. And where Federal intervention was most needed it has been absent.

In 1972, the Marine Mammal Protection Act was signed into law. It offered, what many thought, to be the necessary instrument to insure the continued existence of marine mammals. Among the mammals safeguarded by moratorium was the Beluga whale. Now we are beginning to realize how ill-conceived this action was in upsetting the balance in nature. It has been demonstrated that Belugas in Bristol Bay consume close to 3 million smolt annually. The Beluga herd proliferates at the expense of the sockeye. Protection of the Beluga cannot be considered separately from proper sockeye management.

By contrast, the lack of Federal intervention has resulted in even more harmful consequences. For years, Alaskans have pleaded with the Federal Government to take unilateral action, exerting pressure on foreign governments engaged in destructive fishery practices. Our pleas have been ignored in favor of the pursuit of fleeting international agreements. Such multilateral action is a commendable goal and in the interest of world peace, but must Alaska's fisheries be the peace offering?

Efforts to resolve the problem at the negotiating table have failed miserably. Representatives from this country attending the International North Pacific Fisheries Commission meeting in Tokyo, came away appalled at the insensitivity of the Japanese to sound conservation practices. Attempts to have the Japanese refrain from high seas salmon fishing, to allow minimum escapement goals for the Bristol Bay sockeye, were merely exercises in futility.

I have raised the question of invocation of the Pelly amendment. Economic retaliation for the gross misuse of the fish resources of the North Pacific is warranted. I am aware of technical violations of multilateral international fishery conservation program; the Coast Guard, which supplied this information, is also aware. It is highly unlikely that National Marine Fisheries Service and the Secretary of Commerce are not aware; in any case the only actions taken have been mollifying letters.

The Japanese high seas fishery for salmon began in 1952. Since that time, it is estimated that this fishery has taken 30 to 50 percent of the allowable annual harvest. In 1973, a conservative estimate by the Alaska Department of Fish and Game placed the Japanese catch at 400,000 to 500,000 salmon. Other estimates for that season run as high as 5 million. These Japanese fishermen indiscriminately harvest immature as well as mature stock. One thing becomes perfectly clear from this—the Japanese are the major beneficiaries of State fish management programs.

Sadly, the diligent efforts of the Alaska Department of Fish and Game have been all but wasted. Earlier this year, they reported to Alaska's Governor Egan their inability to adequately manage the Bristol Bay salmon. Subsequently, with the closure of the commercial salmon fishery in this area, the Governor declared Bristol Bay a State disaster area. This was followed by a request to the President to declare a disaster in order to mobilize certain Federal disaster assistance programs.

Realizing the impact of these actions, I wrote the President in support of the Governor's request. Simultaneously, I asked Dr. Robert M. White, Administrator for NOAA to declare a disaster. Such action on his part would enable the State to avail itself of the commercial fisheries disaster assistance program. Such a program would allow the State to rehabilitate the decimated Bristol Bay sockeye, and utilize the existing manpower of the area in the effort. The answer to my request portends further delay, a situation that I and the residents of Bristol Bay cannot accept. I ask unanimous consent that this reply be printed at this point in the RECORD.

There being no objection, the letter was ordered to be printed in the RECORD, as follows:

U.S. DEPARTMENT OF COMMERCE,
NATIONAL OCEANIC AND ATMOSPHERIC
ADMINISTRATION, NATIONAL MARINE FISHERIES SERVICE,
Washington, D.C., May 30, 1974.

HON. MIKE GRAVEL,
U.S. Senate,
Washington, D.C.

DEAR SENATOR GRAVEL: Dr. White has asked me to respond to your letter of May 10, 1974, with respect to the possibility of making certain funds available to the State of Alaska under the Commercial Fisheries Research and Development Act in order to restore the Bristol Bay sockeye salmon runs. Under Subsection 4(b) of the above-mentioned Act, certain limited funds are authorized for assistance in connection with a commercial fishery failure due to a resource disaster arising

from natural or undetermined causes for any purpose that the Secretary determines is appropriate to restore the fishery affected by such failure or to prevent similar failure in the future. At this time we are unable to determine whether the Bristol Bay disaster qualifies as a commercial fishery failure due to a resource disaster arising from natural or undetermined causes. I have asked the scientists of National Marine Fisheries Service to investigate the matter and determine whether in fact the disaster arose from natural or undetermined causes.

In the event that we are in a position to make a favorable determination under Subsection 4(b) we will then review any request of the State submitted in connection with such determination. It should be pointed out that at this time there are no uncommitted funds available under Subsection 4(b) and, in the event we are favorably disposed toward such request, we would probably have to request a supplemental appropriation.

It is my understanding that the Department of Fish and Game, State of Alaska, is now discussing the entire matter with our Regional Office in Juneau and it expects to be in a position to submit to us certain material required by the Act some time in June.

As soon as we receive and review a determination from our scientists, I will notify you. Furthermore, we will keep you informed as to any developments that occur with regard to this matter.

Sincerely,

JACK W. GEHRINGER,
ROBERT W. SCHONING,
Director.

Mr. GRAVEL. Mr. President, the first measure I am introducing today is designed to pay reparations to the residents of Bristol Bay. It is demonstrable that the policies of the Federal Government are a major cause of this tragedy. The amount to be paid will enable these residents to endure the hardships they are about to suffer. Furthermore, this measure will testify to the responsibility of the Federal Government to preserve the resources of the seas for all Americans.

I ask unanimous consent that the full text of the bill be printed in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 3635

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for the purposes of section 4(b) of the Commercial Fisheries Research and Development Act of 1964 (16 U.S.C. 779(b)) the commercial salmon fishery of the Bristol Bay area of Alaska is determined to be undergoing a commercial fishery failure due to a resource disaster arising from natural or undetermined causes. The Secretary of Commerce shall exercise his authority pursuant to such Act to restore such fishery.

SEC. 2. Section 4(b) of the Commercial Fisheries Research and Development Act of 1964 is amended by striking out "\$1,500,000" and inserting in lieu thereof "\$2,500,000".

Mr. GRAVEL. Mr. President, the dollar amount to be paid is the average value to those affected of the millions of salmon no longer available.

The second measure enables mobilization of the commercial fishery disaster assistance program. The State will then be able to renew the depleted stocks and put the residents to work, if only on a short-term basis. I ask unanimous consent that the full text of the bill be printed in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 3636

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) the Secretary of Commerce shall compensate United States commercial salmon fishing vessel owners and operators and United States salmon processors for losses incurred during the calendar year 1974 as a result of salmon fishing by foreign vessels under the terms of the International Convention for the High Seas Fisheries of the North Pacific Ocean (4 U.S.T. 953). Such losses shall be determined by comparing average annual profits realized during the five-year period beginning with 1967 with profits realized during the calendar year 1974.

(b) The Secretary shall also compensate employees of such owners and operators and processors for any lost wages during the calendar year 1974 as a result of the condition which qualifies the owner, operator, or processor for compensation under subsection (a). In determining such compensation the Secretary shall take into account any amount received by an employee as wages, earnings, and other benefits.

SEC. 2. The Comptroller General of the United States shall conduct an audit of the indemnity program provided for in this Act as soon as practicable after the completion thereof, and shall submit to the Congress the results of such audit together with such comments and recommendations as he deems appropriate.

SEC. 3. The Secretary of Commerce is authorized to issue such regulations as he deems necessary to carry out the purposes of this Act.

SEC. 4. There are authorized to be appropriated not to exceed \$14,500,000 to carry out the provisions of this Act.

Mr. GRAVEL. Mr. President, in closing. I ask my colleagues to act swiftly on these measures. The facts of the situation are before you. Bristol Bay needs our help and it must come while there is still a chance for continued survival of this area.

ADDITIONAL COSPONSORS OF BILLS AND JOINT RESOLUTIONS

S. 1326

At the request of Mr. WILLIAMS, the Senator from New Mexico (Mr. DOMENICI) was added as a cosponsor of S. 1326, the Hemophilia Act of 1973.

S. 3295

At the request of Mr. WILLIAMS, the Senator from Hawaii (Mr. INOUE) was added as a cosponsor of S. 3295, the National Public Employment Relations Act.

S. 3512

At the request of Mr. MONDALE, the Senator from California (Mr. TUNNEY) was added as a cosponsor of S. 3512, a bill to reform the State-Federal unemployment compensation system.

S. 3530

At the request of Mr. STEVENS, the Senator from Washington (Mr. JACKSON) was added as a cosponsor of S. 3530, a bill to authorize the Secretary of the Interior to enroll certain Alaskan Natives for benefits under the Alaska Native Claims Settlement Act.

S. 3542

At the request of Mr. MOSS, the Senator from Alaska (Mr. STEVENS) was

added as a cosponsor of S. 3542, a bill to authorize appropriations to the National Aeronautics and Space Administration for research and development relating to the seventh applications technology satellite, and for other purposes.

SENATE RESOLUTION 339—SUBMISSION OF A RESOLUTION IN COMMENDATION OF SECRETARY OF STATE HENRY KISSINGER

(Referred to the Committee on Foreign Relations.)

Mr. ALLEN (for himself, Mr. SPARKMAN, Mr. THURMOND, Mr. CURTIS, Mr. BAKER, Mr. HANSEN, Mr. JACKSON, Mr. NUNN, Mr. CHILES, Mr. HUDDLESTON, Mr. BIBLE, Mr. BARTLETT, Mr. GRIFFIN, Mr. COTTON, Mr. McCLELLAN, Mr. McCLELLAN, Mr. STEVENS, Mr. STENNIS, Mr. TALMADGE, Mr. TOWER, Mr. ERVIN, Mr. MCINTYRE, Mr. NELSON, Mr. GOLDWATER, Mr. FONG, Mr. GURNEY, Mr. BROCK, Mr. BELLMON, Mr. HRUSKA, Mr. JOHNSTON, Mr. EASTLAND, Mr. DOLE, Mr. BENNETT, Mr. TAFT, Mr. TUNNEY, Mr. HUMPHREY, Mr. FANNIN, Mr. DOMENICI, Mr. COOK, and Mr. MANSFIELD) submitted the following resolution:

S. RES. 339

Whereas, Secretary of State Henry Kissinger has done a masterful job in the cause of peace throughout the world—in the Middle East, with Russia and the People's Republic of China and elsewhere in the world; and

Whereas, a principal factor in the successes he has achieved has been the confidence that the opposing sides in the various areas of negotiation have had in Dr. Kissinger's integrity, sincerity, and veracity; and

Whereas, the entire world is indebted to Dr. Kissinger for his efforts in the cause of world peace; and

Whereas, the people of the United States are grateful to Dr. Kissinger for his brilliant work; Now therefore be it

Resolved by the United States Senate that:
1. Dr. Kissinger be commended on his outstanding contributions to the cause of world peace.

2. Deep gratitude to Dr. Kissinger for his services is hereby expressed by the Senate.

3. That the United States Senate holds in high regard Dr. Kissinger, and regards him as an outstanding member of this administration, as a Patriotic American in whom it has complete confidence, and whose integrity and veracity are above reproach.

4. That the United States Senate wishes for him success in his continuing efforts to achieve a permanent peace in the world.

TEMPORARY INCREASE IN THE PUBLIC DEBT LIMIT—AMENDMENTS

AMENDMENT NO. 1443

(Ordered to be printed and to lie on the table.)

CONSOLIDATED TAX REFORM—TAX CUT AMENDMENT

Mr. HUMPHREY. Mr. President, on behalf of Senators BAYH, CANNON, CLARK, HART, KENNEDY, MONDALE, MUSKIE, NELSON, myself and other Senators, I am today introducing an amendment to H.R. 14832, the debt ceiling act, that combines the tax reform and tax relief amendments previously introduced into one package.

This amendment represents a group effort to put together a realistic and well-balanced tax cut, tax reform proposal for the Senate to consider. In addition to the Senators already mentioned, there are many others who have worked hard to develop parts of the package. Senators MAGNUSON, RIBICOFF and JACKSON have led in the development of the provision to reform the oil depletion allowance. In addition, Senators CRANSTON, CANNON, FULBRIGHT, INOUE, JOHNSTON, LONG and MOSS have helped in the development and support of the tax relief provision.

Although these reforms are being offered in one amendment, I would point out to the Senate that we intend to divide the question so that separate votes will occur on each section of the amendment. We hope that other colleagues will join us on those sections of the amendment they feel they can support.

The combined tax cut and reform amendment would accomplish a revenue gain through tax reform in the amount of about \$4 billion. It would achieve this by repealing the oil depletion allowance, repealing the Domestic International Sales Corporation—DISC—repealing the asset depreciation range—ADR—and strengthening the minimum tax. Further details on these proposed actions can be found in our "dear colleague" letter of May 8, 1974, and also in conjunction with an identical tax reform amendment introduced by Senator BAYH in the CONGRESSIONAL RECORD on May 21, 1974—S8699.

In direct connection with these reforms, this amendment would provide \$6.6 billion in tax relief for millions of taxpayers hard hit by inflation. Further details of this proposed action can be found in conjunction with a tax cut amendment offered by Senators KENNEDY and MONDALE in the CONGRESSIONAL RECORD of May 21, 1974—S8694.

The combined amendment that I am introducing today has the following advantages:

First, this amendment assures that tax reform is the first order of business. Although the beleaguered consumer needs tax relief badly, many people are concerned—as I am—that any tax cuts should be preceded by revenue-raising tax reforms. By passing tax reform first we recoup most of the revenue lost by the tax cut and assure that the cut will not be inflationary. This point of view was validated yesterday by one of the country's top economists, Dr. Walter Heller, at a news conference in the Capitol. I believe, therefore, that Senators who expressed this concern can now support our efforts to pass the amendment introduced today.

Second, this amendment will provide a balanced stimulus to an economy in recession. Professor Heller also emphasized this point. The tax cut will shore up the declining real income and confidence of consumers. We have seen an economy in which business has profited and prospered, while the consumer has consistently had to retrench. This

amendment will move us toward recovery from recession and the creation of a more balanced growth pattern.

I believe these advantages make a compelling case for this amendment. I hope our colleagues will see its value and give it their support. This may be the only opportunity for meaningful tax reform and tax relief in the 93d Congress.

It is our understanding that the Debt Ceiling Act will be reported out by the Finance Committee this week and will be brought to the Senate floor early next week in ample time to debate and to vote on these matters before the expiration of the existing debt ceiling limitation at the end of June.

AMENDMENT NO. 1445

(Ordered to be printed and referred to the Committee on Finance.)

Mr. DOMENICI. Mr. President, this country has experienced a rather difficult period with the fuel crisis and all indications are that unless new sources of energy are found the situation will become even more serious. We have seen the effects of our dependency on foreign oil by rising fuel prices and the across the board shortages of petroleum products.

The President, in reacting to the effects of our reliance on foreign oil, has set a national goal of achieving energy independence by 1980. The Senate has responded to this challenge by actively pursuing several key pieces of legislation geared toward this goal of energy independence.

Throughout these discussions there has been a continual reference to the potential of using solar energy to augment our present energy sources. Recently the Senate passed H.R. 11864 the "Solar Heating and Cooling Demonstration Act of 1974." This bill authorizes a joint effort by both NASA and HUD to sponsor initial testing of various heating and cooling units.

I was very pleased with the passage of this bill, but would hope that my colleagues understood that this represents only the first step in what is needed for an effective solar energy program. It is very important that we determine what will follow this demonstration phase.

As a member of the Aeronautical and Space Science Committee, I have heard numerous testimony regarding the potential of solar energy. The majority of the witnesses testified that present technology for heating units is well ahead of those for combination heating and cooling, but that through more R. & D. the problem could be solved. Present technology standards have placed a cost of \$3,000 to \$8,000 for installing solar heating units on the average size home.

There are many private homeowners who because of the cost factor have been discouraged from installing this equipment. It is my contention that we must further encourage the private homeowner to utilize this new source of energy.

Today, in attempting to meet this need, I am introducing an amendment to H.R. 14832 that would allow a private homeowner to deduct from his capital account over a period of 60 months up to

\$5,000 for the cost of installation and equipment of solar heating and cooling units as prescribed by the Secretary of HUD. The Secretary, as under the provisions of H.R. 11864 or related bills, will have determined the minimum performance criteria for such units. This amendment by allowing a private homeowner to rapidly write off his costs will be a productive stimulant to encourage construction.

There are those who would say, why give a special deduction to these people when other home improvements are not deductible. Let me describe a few facts which I found most interesting.

In the city of Baltimore—far below average sunlight in Southwest—an average 3 bedroom colonial home requires approximately 700 therms or 24 barrels of No. 2 heating oil—\$300—to supply the needed heat for 1 year. If this same home were to install present day solar heating units using a 500-square foot collector, approximately 60 percent of the required heating would be supplied. This would mean that a fuel savings of over 14 barrels of heating oil would be realized.

This new source of energy would benefit the entire country because the demand on heating oil would decrease, thus allowing refineries to switch over to more needed petroleum products. This amendment is not a pay-out, but instead a very realistic approach to encouraging the use of solar energy. I feel that with this type of incentive many people will begin to more seriously consider the benefits of solar heating and cooling.

I am pleased that Senators CRANSTON, HUMPHREY, and MOSS have joined me in sponsoring this amendment. We are all most concerned that substantial incentives be offered to encourage the private homeowner to utilize this new source of energy.

VIETNAM ERA VETERANS READJUSTMENT ASSISTANCE ACT OF 1974—AMENDMENT

AMENDMENT NO. 1444

(Ordered to be printed and to lie on the table.)

Mr. DOLE submitted an amendment intended to be proposed by him to the bill (S. 2784) to amend title 38, United States Code, to increase the vocational rehabilitation subsistence allowance, educational assistance allowances, and the special training allowances paid to eligible veterans and persons under chapter 31, 34, and 35 of such title; to improve and expand the special programs for educationally disadvantaged veterans and servicemen under chapter 34 of such title; to improve and expand the veteran-student services program; to establish a veterans education loan program for veterans eligible for benefits under chapter 34 of such title; to promote the employment of veterans and the wives and widows of certain veterans by improving and expanding the provisions governing the operation of the Veterans Employment Service and by providing for an action plan for the em-

ployment of disabled and Vietnam era veterans; to make improvements in the educational assistance program; to recodify and expand veterans reemployment rights; to make improvements in the administration of educational benefits; and for other purposes.

ADDITIONAL COSPONSORS OF AN AMENDMENT

AMENDMENT NO. 1389

At the request of Mr. MONDALE, the Senator from Massachusetts (Mr. BROOKE), the Senator from Minnesota (Mr. HUMPHREY), the Senator from New York (Mr. JAVITS), the Senator from Wyoming (Mr. MCGEE), and the Senator from South Dakota (Mr. MCGOVERN) were added as cosponsors of Amendment No. 1389, regarding limitation on allowance of foreign tax credit, intended to be proposed to the bill (H.R. 10710), the Trade Reform Act.

NOTICE OF HEARINGS ON GUARANTEED LOANS FOR LIVESTOCK PRODUCERS

Mr. MCGOVERN. Mr. President, I wish to announce that my Subcommittee on Agricultural Credit and Rural Electrification, of the Committee on Agriculture and Forestry, will hold a hearing next week on proposed guaranteed loan programs for livestock producers.

The hearing will begin at 2 p.m. Monday, June 17, in the Committee on Agriculture and Forestry hearing room, 324 Russell Building. The subject of the hearing will cover four bills, introduced to date, S. 3597, S. 3605, S. 3606, and S. 3624, and any other similar legislation which may be introduced and referred to the subcommittee prior to Monday.

Representatives of the U.S. Department of Agriculture and the livestock and credit industries will be invited to testify. Others who desire an opportunity to testify should contact the committee clerk.

Witnesses should be advised that due to the limitations of time, each will be required to limit his or her oral statement to 10 minutes or less to provide ample opportunity for other witnesses and for questions by members of the subcommittee.

Mr. President, I cannot emphasize too strongly the urgency of the legislation which we will consider on Monday. The cattle and hog market has all but collapsed; producers are losing heavily, with many already bankrupt.

It is my hope that we can have some legislation ready to report to the Senate within several days, and that we can get early and favorable action on it.

ADDITIONAL STATEMENT

FAMINE IN INDIA

Mr. HUMPHREY. Mr. President, I wish to call to the attention of my colleagues a June 15 New Republic article,

"India: The Lost Years," by Richard Critchfield.

Mr. Critchfield has been visiting countries facing the threat of famine and living in the rural areas to assess the true conditions.

He points out that deaths in India are now on the increase and particularly among both the old and very young. It is a Malthusian struggle for survival.

The author clearly believes that the policies followed by the Indian Government have not put sufficient stress on agriculture. This is why he states:

India has lost its big historic chance to grow enough food.

Our Government was hardly doing India a favor by, in effect, encouraging them to turn away our technical advisers who were needed to keep up the momentum of the green revolution.

We are deeply affected by the fate of India, and we cannot turn our backs on this nation.

Mr. President, I ask unanimous consent that this informative article be printed in the RECORD.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

INDIA: THE LOST YEARS

(By Richard Critchfield)

NEW DELHI.—India has lost its one big historic chance to grow enough food. Instead the Malthusian scourge has finally caught up with it: the rural death rate is dramatically rising. The poorest Indians are paying a heavy price for political decisions of the past three years: the loss of American cash, credit and, above all, hundreds of agricultural technicians; their replacement by the economically disadvantageous alliance with Russia; and now India's testing of nuclear weapons and, as the world's seventh largest industrial power, its manufacture of sophisticated jets, tanks, satellites and rockets.

India will not have enough food this year or next year or possibly ever again on a planet with just 27 days' reserves for the entire human population. Just to break even with population growth the earth now has to grow 8.8 million tons more grain each year. Most of mankind lives on rice or wheat and while wheat is holding its own, the growth rate of rice production, at one percent a year, is falling behind a two percent population growth.

Over the years a great many dooms have been predicted for India. It would "go Communist," be conquered by China, break into entirely separate linguistic states, parliamentary government would be overthrown by a military coup or by the communal forces of political Hinduism or, more vaguely, India would simply "go down the drain." None, save a Chinese occupation, is impossible. But most, with the passage of time and the emergence of a fairly prosperous urban middle class and northern farming community, perhaps numbering 100 to 150 million people in all, look increasingly unlikely. There are two Indias today and the modernizing minority is probably strong enough to hold the country together.

What is actually happening was largely unpredicted. Infants and old people, vulnerable because of inadequate diet, are beginning to die by the millions in poor, isolated villages. Indian doctors say that while there is some rise in cholera, smallpox and malaria, the big two new killers are plain old upper respiratory infections and gastro-

enteritis. Neither was usually fatal a few years ago.

The sudden, calamitous growth of India's population, once it was freed by the spread of medical science, has mostly taken place this century; it has risen by almost 200 million since I first visited India in the late 1950s. Then the rate of natural increases was 1.3 percent; by last year it was 2.5 percent.

Demographers say India will be pressing 700 million by the end of the 1970s and that yearly gains could rise from a present 13 million to 70 million within 26 years. It is now officially admitted that the 1971 census count of 542 million was nine million short; this means India will pass the 600 million mark sometime in early September. Despite 10 years of fairly vigorously family planning—\$80 million is being spent this year—nothing has changed the traditional pattern of rural fertility or pronatalist views shaped by 10,000 years of clinging to a bare existence. By the time the average Indian woman reaches 46 she will have had 5.6 children. By 1989 there will be twice as many childbearing women so that, if mass famine is averted, the geometrical progression of India's population will continue.

Statistics indicate mass famine may quietly be well underway. Rural India's crude death rate first began to rise five years ago, climbing from 14 to 15.7 per 1000 persons by 1970 and 16.9 by 1972, the latest year with overall official data available. But preliminary sample surveys published by the Indian Office of the Registrar General show the death rate in parts of Uttar Pradesh state reached 27.1 per 1000 last year. With the overall rural crude birth rate down to 36.6—though still up in the mid-40s in the poorest areas—India's rate of natural increase is now actually declining, possibly by as much as from 2.5 to 2.1 percent. Some Indians claim this is because of the success of family planning; it is not. It is because more and more Indians are being born, not getting enough to eat and are catching bad colds or stomach aches and dying.

India's famous propaganda slogans of "a small family is a happy family" and "Do ya teen bas!" ("Two or three, finish!") have never been convincing in a village world where more sons mean more rupees coming in to the landless and mean security not only in old age but here and now in violence-ridden countryside. For the poor Indian it remains eminently rational to have many children. It is only the urban middle class and the prosperous farmers of the northern plains who have taken to intrauterine devices and even they have shunned the pill since it causes irregular bleeding (a menstruating Hindu woman cannot cook or go to the temple since she is considered unclean). Indian experience, as well as elsewhere, has been that agricultural advance, and the change in village social values it brings, is the prerequisite for population control.

Indira Gandhi's tragedy of the past three or four years, of which the May nuclear explosion and a Soviet-advised rocket program are just the most alarming parts, is that the orientation of the leftist Kashmiri Brahmins who mostly advise her is so overwhelmingly political. There does not seem to be an a political technocrat or sound economist in the lot. It is a milieu more concerned with the superpowers, détente and grand imperial strategy; a court that looks not to the south, to the Gangetic Plain, the Deccan Plateau and the steamy tropical coasts where most of the 600 million live, but northward to massed Russian and Chinese armies between the Urals and Lake Baikal, to Pakistan where Baluchi and Pathan tribals are in revolt against Prime Minister Zulfikar Ali Bhutto's pro-Chinese government, to Afghanistan, now run by pro-Russian military men and to Iran and the shah with his growing ties with Delhi and Kabul and no longer so certain of

saving Pakistan from any threat of disintegration or invasion by the Indian Army. It is all the Great Game and Henry Kissinger's expected visit this month the next move; its politics are ready but have little to do with India's 500,000 villages. There, people are starving.

Take for example D. P. Dhar, chairman of India's Planning Commission, former ambassador to Moscow, and a fellow Kashmiri Hindu Brahmin who is perhaps Mrs. Gandhi's most trusted adviser and troubleshooter. Dhar was Mrs. Gandhi's chief strategist on the break-up of Pakistan and the security treaty with Russia as well as a two-way one billion-dollar trade package this year with the Soviet bloc that gives India a lot of paper credits, some obsolete technology and shoddy machine tools, and quite a lot of arms and political support in exchange for transferring many more valuable resources up north than are flowing back. The Soviet Union has supplied two million tons of wheat, one million of which is now being offloaded in Calcutta, and may give India two million more; but this year's Russian wheat crop is expected to be poor, with sowing delayed two weeks by frost, and Russia cannot supply India with the fuel, fertilizer and technical assistance it needs. Dhar, who has also negotiated deferred payment oil deals and mineral development with Iran, Iraq and Saudi Arabia, represents the kind of Russian-minded development thinking that pushes rapid industrialization without first putting agriculture on a sound basis.

Mrs. Gandhi's greatest chance to feed India's people and create economic conditions where family planning might take hold came with the great American scientific breakthrough in tropical agriculture in 1967: the widespread introduction of new high-yielding strains of dwarf wheat and rice. The so-called green revolution, which really took hold during Mrs. Gandhi's second year in office in 1968, doubled wheat yields on the California-like, highly irrigated Punjab plain and brought India virtual self-sufficiency in food by 1971. This bonanza, which ensured Mrs. Gandhi's popularity during her early years, fell in her lap. The first seed plots of the new wheat were planted in India in 1964 just before her father Jawaharlal Nehru died. This burst of agricultural abundance covered up a great deal of economic mismanagement in the late 1960s and early 1970s and allowed Mrs. Gandhi to steer India on its present pro-Soviet course and invest heavily in an armaments industry and nuclear race whose grim domestic harvest will be increasingly evident late this year and early next.

A great many people have misunderstood the nature of the green revolution; Mrs. Gandhi and her advisers seem to have been among them. It is no one-shot thing; it is a long-term continuous process of transferring American farm technology and this requires the continuous presence of American technicians—especially plant breeders, geneticists and agronomists—to find scientific answers to problems of environmental adjustment and ecological backlash as they crop up. What we call the green revolution is essentially the geographical transfer of new high-yielding seeds, irrigation, mechanization and the massive application of chemical fertilizer and most important the knowledge that goes with this. In countries like India in the late 1960s it came so fast that when the first spectacular results diminished, palpably absurd and trendy articles began appearing that the green revolution had "withered" or "failed" or whatever. But the green revolution is not an event but a process that will just go on, transforming for good and bad rural societies all over the earth.

Since the suspension of U.S. assistance and the souring of relations after the 1971 Bangladesh war, literally hundreds of American farm technicians, sponsored by the Agency

for International Development and the Ford and Rockefeller Foundations, have quit India and gone home. The U.S. aid program, up to a peak of \$877 million and 236 highly skilled professionals in 1966, most of them involved with agriculture, is now down to a \$50 million a year infant and pregnant mother feeding scheme and nine Americans, almost all of them purely administrators. The Rockefeller Foundation, which focused entirely in India on agriculture research, mostly developing constantly newer, high-yielding varieties, gave up and pulled out of India two years ago. Ford, which focused on the practical application of technology and had a large group of farm experts working closely with the Indian Agriculture Ministry, is down to a skeleton crew of non-technicians.

Mrs. Gandhi and her people do not seem to grasp what a monumental misjudgment they made in allowing a state of affairs where most of the American farm experts have pulled out. You cannot continue to transfer American farm technology without them. M. G. Kaul, one of Mrs. Gandhi's key economic advisers, told me that old government-to-government technical assistance programs brought mostly "second-raters" to India, since they were the only ones willing to stay three or four years. "If you want top people," he said, "you have to pay for them and they'll only stay four or five months." He cited some Canadian copper miners as an example. Kaul's observation may be valid for industry but not agriculture. The green revolution is the product of the land grant colleges and US agricultural service and the vast amount of expertise gathered in the past 80 years; almost all these men, directly or indirectly, are financed by the government. As one of the few Western agricultural experts left in Delhi said, throwing up his hands in exasperation, "I don't know where Mrs. Gandhi's people are, Mars or somewhere; they're certainly not in India!"

This is brought home to you up on the fertile Punjab plain, which produces India's main marketable food surplus; it has been the main setting of the green revolution and, after 1967, the spectacular transformation from subsistence agriculture to modern commercial farming. Its hardy Moslem, Sikh and Hindu Jat Punjabi farmers, acre for acre, have been producing the highest wheat yields on earth. This is the region primarily responsible for the rapid rise in the use of scientific inputs in Indian agriculture. Since 1961 fertilizer consumption has risen from 300,000 tons to 3.1 million tons with a present estimated demand of five million tons; electric and diesel pumps from 420,000 to 2.1 million; tubewells from 19,000 to 178,000; tractors from 31,000 to 173,000 and the number of acres planted in new high-yielding varieties from two to 23 million hectares.

I spent 10 days touring villages here—unhappily being caught in one when the reportedly none-too-clean plutonium explosion went off May 18 on the Rajasthan desert some 300 miles to the west of us—and expected to find water and power shortages and diesel fuel and fertilizer available only at black market prices. They were, but this was not the main trouble. The farmers' chief complaint was "there is no good new seed." They said the first three new wheat varieties introduced in the late 1960s—Khalyan Sona, PV-18 and 308—were the only good ones and that those put out by Indian research institutions since 1971 had been fiascos, either rust-prone, subject to insects, just plain low-yielding or with serious environmental problems. Others said heavy dosages of nitrogen since 1967 had left the soil deficient in potash and other minerals but that no one was supplying the technical assistance to remedy this.

Per acre yields that were two or 1.8 tons four years ago are down to 1.4 to 1.3 tons even in Punjab's richest district of Lud-

hiana. Mrs. Gandhi's economists talk about procuring seven million tons to keep the urban public food distribution system going. They will be lucky to get four or five million. The wheat harvest just threshed, hoped to be 30 million tons, may reach less than 23 million tons. Although Mrs. Gandhi has raised the procurement price per 100 kilos from \$9.88 to \$13.65, farmers angrily say this is still too high to offset high fuel and fertilizer costs; they demand "parity." Many are hoarding their wheat at home for the first time. Food is politics in India and if Delhi, Bombay, Madras and Calcutta and such deficient states as Kerala cannot get enough to avoid shortages and runaway prices, Mrs. Gandhi will be in real trouble by September. And needlessly.

A few days before the nuclear blast Dr. M. S. Swaminathan, director of the Indian Council of Agricultural Research and perhaps the leading farming authority in India, told me India could raise food production from the present 105 million tons to 220 million tons within 15 years provided it had the water, power, cash, credit and technical assistance. Swaminathan, an old-fashioned technocrat, said he was looking forward to the World Food Conference in Rome this fall; he wistfully recalled President Kennedy's 1961 prediction that America not only had the means to set foot on the moon but the technology to totally eradicate hunger from the earth. Swaminathan was full of schemes to triple fertilizer production, irrigate the vast Gangetic plain and ensure water control with cheap \$3.10 bamboo tubewells, introduce special new grain varieties for the three-fourths of India's total acreage that is not irrigated and so on. Implicit in what he said was a return of American aid and technology.

The inflation rate of the past 12 months is somewhere between 22 and 29 percent; a kilo of rice can be bought for 13 cents at government fair price shops in the cities but out in the villages costs up to 26 cents. Mazdoors or landless laborers make 26, 39 or 52 cents a day when they can get work—power shortages and loss of water has dried up crops in parts of once irrigated areas. The arithmetic is such that landless laborers with the national average of 5.6 children cannot possibly feed their families. One can visit starving villages two or three hours from Delhi.

Nutritionists say an average Indian adult consumes 170 kilos of grain a year, a Southeast Asian 182, a Chinese 200 and an American 1000. When an Indian laborer with a family of eight has to feed them on 70 ounces a day, this is slow starvation.

Besides the Russian wheat, India has bought about one million tons abroad so far, 200,000 tons from the US. But it cannot buy much more. India faces a \$2.4 billion balance of payments deficit this year and the World Bank-sponsored Aid India Consortium, even before Japan and other countries threatened to cut off aid after the nuclear blast, had seen only \$1.3 million in aid and a 50 percent debt rescheduling as the maximum achievable target. And \$200 to \$300 million of this was hoped to come from Congress replenishing the International Development Association (IDA), the World Bank's soft loan arm. Congress has yet to act. Meanwhile, India has drawn a few hundred million from the International Monetary Fund (IMF), but not on concessional terms and while it won \$200 million in immediate relief on oil payments to Iran, the money still has to be paid with interest, within five years. With exports doubling to five billion dollars since 1972, imports expected to make no more than \$3.2 billion and only \$1.4 billion in foreign exchange reserves, India badly needs more liquidity to import spare parts, fertilizer, fuel and food. It probably won't

get it since the nuclear explosion gave the West and Japan the justification needed to turn their backs.

Yet if India loses, so does everybody. American grocery prices will keep on going up as long as world food grain prices do, and it will be hard to avoid a global recession if the world's seventh biggest industrial power collapses.

Somehow Mrs. Gandhi has got to realize that the transfer of American farm technology to India must take precedence above all else. To allow her advisers to convince her otherwise, at a time the Russians are eagerly seeking American industrial technology themselves, is tragic. Three years have been lost already.

INFLATION CLAIMS ANOTHER JUDGE

Mr. HUGH SCOTT. Mr. President, an editorial in today's Philadelphia Inquirer entitled, "Inflation Claims Another Judge" cites the fact that many Federal judges are finding they simply cannot afford to continue on the bench. In the last 5 years the salaries of Federal judges have not been increased, yet during this same time period inflation has risen by 30 percent. I bring this problem to the attention of my colleagues and ask unanimous consent that the editorial be printed in the Record.

There being no objection, the editorial was ordered to be printed in the Record, as follows:

INFLATION CLAIMS ANOTHER JUDGE

Another Federal judge, Arnold Bauman of the prestigious Southern District of New York, has resigned "because it is economically impossible for me to stay."

That makes him the third in the last year to leave the bench for financial reasons. And still a fourth, Judge Frederick Lacey of New Jersey, says he will leave for private practice at the end of this year "if no salary increase is then in prospect."

As Cyrus R. Vance, president of the Association of the Bar of the City of New York, points out, this "underscores the need for prompt action by the Congress."

It has been more than five years since the salaries of Federal judges were increased. Meanwhile, the cost of living has increased some 30 percent.

In Judge Bauman's case, the New York Times reports that when he leaves his \$40,000-a-year Federal post he is expected to join a large corporate law firm where "experienced partners . . . frequently earn \$150,000 or more a year."

The Federal government cannot be expected to match that, of course, nor do the judges expect it to do so. But it is unfair to expect the judges, many of whom made substantial financial sacrifices in going on the bench in the first place, to go through what Judge Bauman calls "precipitous inflation" with no adjustment in their salaries.

Congress made a serious mistake in killing a proposed increase for the judiciary earlier this year. How many more judges will have to leave the bench before it is corrected?

HOUSE, SENATE AGRICULTURE COMMITTEE CHAIRMEN SEE BANKRUPTCIES IN THE MEAT INDUSTRY, LEADING TO CONSUMER SHORTAGES

Mr. TALMADGE. Mr. President, today Congressman W. R. "BOB POAGE of Texas, chairman of the House Agriculture Committee, and I, as chairman of the Senate

Committee on Agriculture and Forestry, issued a joint statement concerning the current crisis in the meat industry.

I ask unanimous consent that this statement be printed in the Record.

There being no objection, the statement was ordered to be printed in the Record, as follows:

JOINT STATEMENT

In this time of runaway inflation, exorbitant interest rates, and shortages of some materials, many small businessmen are experiencing hard times. However, the livestock producer in the United States in experiencing an economic squeeze that is without parallel since the great depression.

In the past six months, the price of fed cattle has dropped over 20 percent—falling from \$47 a hundredweight in January to around \$36 this week. Hog prices have fallen even more—from about \$40 a hundredweight to under \$22, a drop of 45 percent.

Cattle feeders are losing from \$100 to \$200 a head. Hog producers are being forced to liquidate their herds.

Livestock producers are caught in the inexorable squeeze between high production costs and lower prices for their product. Clearly the smaller cattle and hog producers cannot continue to sustain such losses.

Already there have been a number of bankruptcies in the livestock industry. If this trend continues, we will see wholesale bankruptcies in the livestock producing areas of this nation. When these bankruptcies occur, the economy of rural communities and entire States will suffer.

Moreover, this damage will not be temporary. It will have a lasting and detrimental impact on the structure of our farm economy. While there are currently many big livestock producers who have the financial resources to withstand such situations, there are thousands and thousands of smaller producers—family farmers—who do not have the capital and resources to withstand the economic crisis which is currently upon them.

When they are forced to the wall, their assets will be sold, at fire sale prices.

We don't believe that the concentration of hog and cattle production in the hands of a few large corporations will mean lower prices for consumers in the long run.

Moreover, the cost-price squeeze currently being experienced by cattle and hog producers has also spread into the poultry and egg industry. Turkeys were selling for 24 percent less this May than a year ago, broilers were 13 percent less, and eggs at about 37 percent less than in January of this year.

If price declines for livestock on the farm level were reflected in lower meat prices, we might take some comfort from the situation. But it is clear that consumers are not getting the full benefit of the break in livestock prices.

Of course, it is the responsibility and the desire of the Committees in Congress which represent agricultural producers, and which write farm legislation, to do whatever is possible to alleviate the current crisis.

To their credit, livestock producers are a fiercely independent breed. They have never wanted government assistance or government controls. However, we are currently receiving thousands of complaints from livestock producers who can no longer cope with the economic catastrophe which has befallen them.

Several bills have been introduced and referred to the House and Senate Committees which would provide emergency relief for livestock producers.

It is the desire of our Committees to do anything within our power to assist our livestock producers. However, if we are to move quickly and if we are to achieve a solution that will be helpful to the livestock producers and to the nation, we will need the support

and the solidarity of the national organizations representing these producers.

Therefore, we call on farm organizations and their leaders to unite in a common effort to suggest the legislative relief which might be necessary.

When this is done, we, the Committees responsible for agricultural legislation, will do everything we can to secure prompt passage of emergency legislation.

In addition, we call on the food retailers of the nation to cut meat prices and once again feature meat as weekend specials. We feel that when the consumer is given the full price break that the drop in farm livestock prices justifies, he will purchase more meat.

Further, we call on the Secretary of Agriculture to assert the leadership of his office and to marshal his farm experts to come forward to the Committees on Agriculture with positive solutions which will alleviate the current prices.

We do not have any pat solutions to the current crisis. We are looking for answers. Therefore, it behooves all of us, the leaders of the livestock industry, food retailers, the Secretary of Agriculture and the Congress to work together toward positive solutions which will prevent the liquidation of the livestock industry as we know it.

VIETNAM VETERANS

Mr. BIDEN. Mr. President, about the time I became a Senator in January 1973, America's longest war, which had required the military services of millions of men and women, came to a close.

The succeeding months, however, has borne little fruit in terms of successfully reuniting Vietnam war veterans with American society. No sooner had the last American troops—prisoners of war—been flown home than the Federal Office of Management and Budget sought unsuccessfully to save \$160 million, by revising the disability rating system so as to exclude recently wounded amputees from the benefits granted by a grateful nation to purple heart victims of previous wars.

Mr. President, this episode is illustrative of the official public neglect of Vietnam veterans. It seems, as someone has commented, as if the victims of war have come home from harm's way only to surrender as prisoners of peace.

In 1972, the veterans' unemployment rate peaked out at 11 percent. The administration announced formation of a Jobs-for-Veterans program. A year after its inception, Jobs-for-Veterans did for veterans joblessness what three Presidents had failed to accomplish in Vietnam. On January 29 of this year, the Labor Department, citing the program as a great success, declared victory over the unemployment problem, and withdrew by abolishing the Jobs-for-Veterans project.

This must have been especially heartening to 288,000 veterans for whom shoe-leather pounding the pavements in search of work was the only alternative to the dole. The number of idle veterans between 20 and 24 still exceeds 10 percent of the number of able-bodied candidates.

The last 6 months has also seen the virtual collapse of the Veterans' Administration Department of Medicine and Surgery, a \$3 billion, 171-hospital program responsible for the health and well-

being of the Nation's 29.1 million retired servicemen and women.

The President refused to spend the facilities and staff of the independent VA hospital system.

Concerned person, including our distinguished colleague, Senator CRANSTON, chairman of the Veterans' Affairs Subcommittee on Health and Hospitals, protested the Veterans' Administration's negativism in the administration of the agency's health care system. In early April, the then Chief Medical Director of the Veterans' Administration, Dr. Marc Musser, and his deputy, resigned, claiming that Administrator Donald Johnson, who has since resigned, "had undermined his effectiveness," through a series of unpleasant circumstances.

The departure of Dr. Musser symbolizes the leaderless existence of the VA, which, as presently constituted, holds little hope for effective response to the VA's mandate, cast in bronze above its building's main entrance, "To Care For Him Who Shall Have Borne the Battle, and His Widow and His Orphan."

There are 193,570 persons employed by the VA, constituting the Federal bureaucracy's second largest. Its annual budget is in excess of \$14 billion. There are presently, or have been in the past year, at least 13 former members of the Committee To Re-Elect the President placed in positions of responsibility at the VA. Most of them lacked any experience in the field. Some replaced dedicated career employees in what columnists Rowland Evans and Robert Novak described on April 8 as "a radical effort to give the White House total control of all major bureaus and departments, whose outcome at the VA is utter disaster."

Representative OLIN TEAGUE of Texas, a highly decorated combat infantryman who retired last year as chairman of the House Veterans' Affairs Committee after 16 years' tenure, said in an address on the House floor last month:

In the 25 years I have served on the Veterans' Affairs Committee, I have never seen morale in the Veterans' Administration at a lower state. This is the direct result of political manipulations by the Administrator, and is the root cause of most of the Agency's problems.

The VA benefits are currently at a level so low that only 1 veteran in 5 has been able to attend an institution of higher learning. This is unfortunate. After all, the original "GI Bill of Rights" enacted to benefit veterans of World War II, is one of the most productive pieces of legislation ever enacted by the Congress. The beneficiaries—18 million veterans who increased their skills and earning power through federally assisted postservice training—have, through increased tax revenues and contributed services, returned to the Federal Government \$6 for every \$1 invested in them. For this reason I applaud a reform of the existing Vietnam veterans benefit program, which Senator HARTKE and his able Committee on Veterans' Affairs, has ordered reported favorably. Let us hope the climate has changed for the benefit of Vietnam veterans.

In late May, two articles about the in-

adequacies of the VA were published in the Washington Post. The writer was Tim O'Brien. The headlines themselves placed over the two articles illustrated the problems—"VA Hobbled by Its Massive Size" and "Veterans: A Waiting Game."

I ask unanimous consent that these articles be printed in the RECORD.

There being no objection, the articles were ordered to be printed in the RECORD, as follows:

VA HOBLED BY ITS MASSIVE SIZE

(By Tim O'Brien)

"The simple, obvious fact about the Veterans' Administration is its size," says a VA staffer. "It is a giant, and it's a giant in almost every conceivable way. For all the specific analysis you can give the place, the single most telling point is raw size."

The VA's downtown Washington headquarters tells a visual tale: massive, gray, tons of cement and granite, labyrinthine, put together with the architectural imagination of a World War II pillbox.

All the numbers are big. The VA is the federal government's second largest employer—some 184,000 people. Its budget is the government's third largest—more than \$13 billion this year. Its constituency, after five full-fledged wars since 1898, exceeds that of most national governments—nearly 99 million veterans, dependents, widows and orphans.

The VA's job, inscribed as a motto near its front door, is to care for all those people: "To care for him who shall have borne the battle, and for his widow and his orphan."

This broad mandate, as weighty and amorphous as the building itself, has created a menu of VA programs and functions that runs 48 pages in a booklet designed to compress and summarize them. Caring means running the nation's largest health care and educational scholarship programs, an \$87 billion home loan program, a \$5.8 billion-a-year pension and compensation program, and two life insurance programs valued at \$83 billion. Caring means everything from drug addiction treatment to burial to clothing allowances to job counseling. It means, as a recent Ralph Nader study puts it, "the most highly elaborate form the welfare state has taken in America."

"You can't really run this place," the VA staffer said. "You can try to ride it a while."

Running it or riding it, Administrator Donald E. Johnson has headed the VA since 1969. A one-time seed and fertilizer dealer from West Branch, Iowa, Johnson came to the agency as a former national commander of the American Legion and as a losing Republican candidate for the governorship of his native state.

Last month the massive edifice caved in on him. Simultaneous criticism came from young veterans, powerful congressmen, the press and even some VA insiders, charging Johnson and his agency with a spate of administrative and political shortcomings: indifference to the plight of young Vietnam veterans, bureaucratic rigidity and ingrowth, politicization of a once-independent agency, budget-cutting at the expense of VA hospitals and education programs, inept leadership, misuse of taxpayers' dollars . . .

After a brief defense, Johnson resigned. Though he will stay on until June to become eligible for a government pension, the search is on for his successor.

But in the bustle of lobbying and jockeying for Johnson's replacement, some VA observers and staffers wonder whether it will make much difference who ultimately is chosen to head the agency.

What Johnson's departure means, more than anything, is to "give a focus for asking

hard questions about the VA as an institution," says a VA observer. "All the agency's problems can't be attributed to one man, any more than a creaking rusty old ship can be entirely blamed on its captain."

Sen. Vance Hartke (D-Ind.), chairman of the Senate Veterans' Affairs Committee, says, "We are not interested in a change of personnel alone. We want a change of policy. . . .

If leadership means anything in an agency as entrenched and massive as the VA, it probably bears most on the ambience, motivation and spirit of the place.

"What new leadership can do is change the dominant attitude downtown, which is a combination of familiar, comfortable routines, an unwillingness to fight the OMB (President's Office of Management and Budget) for proper funding, and an atmosphere of fear and parochial defenses," says a Senate staff worker.

The VA's critics cite numerous examples of what they see as a "don't-rock-the-boat" attitude.

Most frequently, they point to the agency's unwillingness to battle OMB and the White House in behalf of increased veterans' benefits. While claiming credit for recent increases in GI Bill payments to veterans attending school, Johnson and the VA have never in the past five years supported congressional efforts to substantially beef up funding.

A recent report by the prestigious Educational Testing Service of Princeton, N.J., concludes that the "real value" of educational benefits for Vietnam vets is less than that available to veterans of World War II.

But while the study was commissioned by the VA itself, the agency immediately disclaimed it, refusing to use the findings as a lever to try to pry increased benefits out of Congress and the OMB. This prompted James Mayer, president of the National Association of Concerned Veterans, to declare that "the VA is no longer the advocate for adequate veterans benefits."

A recent House Appropriations Committee report found the same budget-conscious attitude with respect to the VA's hospital program. In general, the report buttresses the popular theory that the OMB and White House, more than the VA itself, are responsible for the agency's deficiencies, and that Donald Johnson's culpability is one of weak-kneed acquiescence and uninspired leadership. The report says:

"There are strong indications that the average daily patient census (in VA hospitals) is being controlled through Veterans' Administration central office channels as a result of OMB guidelines, and are not based on the actual needs of qualified veterans requiring hospital care."

The report charges that \$54.6 million appropriated for the VA in 1973 to add 3,725 more hospital employees "was not allotted to the VA by the Office of Management and Budget," and that the extra staffers were not hired. "It appears that arbitrary patient census limitations (expected patient loads set in advance) imposed by VA and OMB play a large role in determining admission of patients rather than medical facts of the case."

The OMB-budget-cutting theory is also applied by critics to explain a failure by the Department of Labor to hire an extra 68 officials to oversee a job preference system for veterans. The following exchange between Sen. Hartke and William H. Kolberg, assistant secretary of labor for manpower, illustrates:

Hartke: When you were first faced with this, did you go to the OMB and ask for additional funds to employ these people?

Kolberg: Yes, we did.

Hartke: What did they say?

Kolberg: They did not give us additional funds.

Hartke: Did they answer you at all?

Kolberg: They told us to go ahead within our current ceilings, both in personnel and money . . . I think what they were saying to us [was] within your current resources carry out the law. And then it was put back on my shoulders to figure out how we could best do that under the circumstances we found ourselves in. I understand, Mr. Chairman, this is not an adequate explanation. We were slow, very slow, in carrying out the law.

The OMB-budget-cutting theory has two contrary interpretations: one is that no federal agency can do a proper job under such pressure, so why pick on the VA? The other is that Johnson's leadership was inadequate, that he buckled too quickly and too easily under the pressure.

Advocates of the second interpretation point to a gathering of VA hospital administrators and regional directors in early 1973, at which Johnson said budgetary loyalty was the byword and that, "I expect each and every official in the VA to actively support our budget as requested." He said he didn't "want to find any surprises" on questionnaires the officials were to fill out for congressional committees. And his general counsel, John J. Corcoran, told the gathering:

"The presentation of a bootleg program is the height of irresponsibility. It is advocated by people who do not want to be on the team—who place their judgments above the administrator's and the President's [and] who subordinate the President's decisions to their parochial interests." Corcoran warned of "the possibilities" awaiting employees who might go public with their criticism.

A congressional source says such heavy-handed warnings are symptomatic of a more pervasive "fear inside that agency. People are afraid to talk. People who let information get cut canned or shipped off to the hinterlands."

Johnson, however, has his defenders inside and outside the agency, and they portray a man surrounded by a staff more loyal to their own interests and powerful figures on Capitol Hill than to their own administrator.

Dr. Robert Stephens, who spent a year at the VA as an educational consultant and director of several related organizational studies, recalls giving Johnson a controversial proposal to audit the network of state agencies that approve courses for VA educational accreditation.

"We funded the agencies to the tune of some \$11 million a year, but we had no control over them," Stephens says. "Well, I put the study proposal on Don's desk and almost immediately—a few days maybe—he got a letter from Rep. Olin E. Teague (D-Tex.) saying keep that damn Stephens away from the state approving agencies."

Stephens speculates that one of Johnson's own staff members leaked the proposal to Teague, former chairman of the House Veterans affairs.

Stephens says he "can't imagine Johnson pulling such strong-arm activities . . . I don't know about all of it, of course, but he's not that kind at all."

An effort to interview Johnson for these articles was unsuccessful. A VA press spokesman said Johnson is "keeping a low profile on things like interviews" in the waning days of his administration.

But in an interview with U.S. News & World Report last month, Johnson defended the administration's record in support of adequate veterans benefits.

"I want to point out that President Nixon has initiated on two occasions increases in the GI Bill allowance, totaling about 70 per cent. He's also asked for a third increase which we hope Congress will enact relatively soon," he said.

On medical care, Johnson said, "We operate the largest medical care system in the free world . . . The quality of care in our hos-

pitals is very high. For example, 90 medical schools are affiliated with the Veterans Administration. Their job, primarily, is to professionally staff our hospitals . . . We have increased the staffing ratios rather dramatically—some 31 per cent in the last five years."

The official VA defense for its position on educational and health care spending is that it is rational and altogether just. Daniel Rosen, director of reports and statistics in the medical division, says congressional charges that the VA has held down hospital spending ignores that increasing emphasis on outpatient treatment.

"The average length of hospital stays has been decreasing by about a day a year for about the last seven years," Rosen says. "We've been moving to a more orderly, rational mode of treatment, which is in tune with changing health delivery systems and technology. It's more efficient . . . VA health care is among the best in the country . . ."

While Rosen acknowledges that there is "some truth" to a House Appropriations Committee charge that an average of 45 per cent of veterans applying for hospital care are rejected, he says that "it is not a simple yes or no rejection. We refer a lot of people to community facilities (which are not free of charge as are VA hospitals) and there are many other aid programs they are eligible for."

The agency defends its educational benefit program in similar terms, arguing that more than 50 per cent of the Vietnam-era veterans have used the GI Bill for education and training and that the benefits, therefore, cannot be as bad as critics allege. More persons have been trained at the college level than under either the World War II or Korean War GI bills, and the \$220 monthly payment to the Vietnam veteran is at least as good as that available to his World War II counterpart, the VA argues.

But critics say these justifications gloss over deeper inequities in the modern GI Bill. For example, the agency keeps no statistics on the length of time a veteran uses his benefits. If a veteran went to school one month under the GI Bill and then dropped out because of inadequate funds, the VA treats this as a statistic of success—the person used the GI Bill.

"We don't need such data," says a VA spokesman. "We don't need it to run our program."

"How can they gauge the effectiveness of their program without that kind of information?" asks a Senate staffer.

Other critics, among them Forrest Lindley, a former Green Beret who runs the Vietnam Veterans Center, complain that the VA also glosses over the GI Bill's inadequacy for the married veteran. Based on the current buying power of the dollar, Lindley says, the VA's own data indicate that a married veteran today gets almost \$2,000 a year less than his World War II counterpart. "The VA doesn't mention that on Capitol Hill," Lindley says.

The usual explanation for what critics see as a miserly VA attitude is that the White House and OMB simply dominate the agency, and that Administrator Johnson did not exert the leadership to fight back.

But former VA consultant Robert Stephens thinks the cause goes deeper.

"In the first place, the agency takes an incremental view of its job. A little here, a little there. They aren't equipped to identify their information needs because they don't really know the nature of the problem."

"For example, I asked why participation rates must be the main standard of the GI Bill's adequacy. It's one standard, yes, but there's so much it doesn't say about the basic philosophy of the GI Bill—readjustment to civilian life."

"The agency should look at the bill in relation to the disadvantaged, the minority

groups, the married veterans, the educationally disadvantaged. Why don't they get the statistics on dropouts, on how many vets spend less than a year in training? I don't know... it's just gross inefficiency, old routines and justifications."

In addition, Stephens argues, it is a matter of "the attitude permeating the VA," which is "basically that they view themselves as a dispenser of benefits, pure and simple."

"The attitude is this: they strictly construe every legislative proposal or mandate. They generally—not always, but generally—tie up with all sorts of constraints the language and intent of legislative packages; then, with implementation, they further reduce Congress' intent."

"They seem to say 'our job is to dispense benefits and not to make social policy.' This explains, I think, some of the strange behavior. It's a rigidity. They don't view themselves as advocates of social improvement but as machines to churn out checks. They're concerned with stopping fraudulent practices, overpaying and so on, much more than with conscious policy to assist the Vietnam veteran."

"Leadership is important," he says, "but there's also got to be a way to control the bureaucracy."

VETERANS—A WAITING GAME

(By Tim O'Brien)

James Milton talks about the day he walked into the Veterans Administration office here to apply for some benefits.

"I was thinking about my career—perhaps changing jobs or exploring something new. I wanted to take aptitude tests to help me figure out some career goals. That was about six weeks ago."

"So I filled out the application forms and then I waited. When nothing happened, I called back. The guy said, 'Well, it takes four to six weeks to process it all.'"

"So I waited some more. Then, a week ago, I checked again. A girl said, my military records hadn't arrived from St. Louis. So I kept waiting."

"Well, this morning the girl called me and said the file was still in St. Louis. And on top of it they'd lost my original application. I'm back where I was six weeks ago."

The stories are legion. A Senate staffer recalls a spectacular one. "Back in October of 1973 Congress authorized a system for the advance payment of educational allowance checks, to get vets started in school."

"Well, it wasn't until two days before they were supposed to start processing applications that the VA finally sent out instructions to regional offices... And then, believe it or not, some examples they provided on how to fill out the applications were wrong. I mean, if you filled out the application by following the examples, the computer would just spit it out at you. And we gave them nine months to get it all ready."

In another case involving advance payments, he tells of a batch of benefit checks mailed without properly coordinated envelope windows and addresses. The result was a flood of return-to-senders.

A sampling of other complaints:

Phones aren't answered. One story, told by a Senate staffer, involves a hot-line phone in a VA regional office that nobody answered. It was finally found in a closet.

Late and lost benefit checks. Said a congressional study: "There have been reports of checks sent out without names; checks sent out with only part of the names; bundles of checks for veterans sent to the wrong school... Once the veteran fails to receive his advance pay check on time, it was proven almost impossible in many cases to get his checks back in sequence."

Slothful, insensitive outlying VA offices. Said the California Institute of Technology at Pasadena: "It used to be exceedingly dif-

ficult to get answers by the telephone; this year it is impossible because they are not even answering the phone. If we write letters, it requires 1.5 to 2 months to get a reply, or to get some needed forms. Our veterans tell us that they feel they get a run-around when they have to go to the VA office, being shuffled from one person to another."

A congressional report showed nearly identical complaints coming from 14 other schools scattered across the country.

Talking to veterans leaves the impression that the VA commits more than its share of bureaucratic snafus. Certainly for VA Administrator Donald E. Johnson, recently pressured out of his job after the widespread delays in advance payment checks, the fumbles were one too many.

"Stories of bureaucratic foul-ups are always titillating and, as we've seen now, can create real headaches for an agency head," says a Washington observer of veterans' affairs. "But they are necessarily just the tip of an iceberg, symptoms or illustrations. What's interesting is what lies in the cold down below."

Down below are about 184,000 employees, the second largest bureaucracy in the federal government. The VA bureaucrats run programs ranging from health care to scholarships to home loans to life insurance—on a \$13 billion budget this year, third biggest in the federal government.

The VA's career employees' average length of agency service, as of 1972, was 13.3 years.

The VA's top career employees are sometimes called the "class of '46"—a year when many World War II vets first went to work there. The phrase can mean rigidity, parochialism and insensitivity to changing times. But older employees may think it carries a sense of wisdom, experience, professionalism and strength.

At any rate, of 44,276 career employees in 1972, 11.1 per cent were eligible for retirement between 1973 and 1977. In certain key fields, the figure was considerably higher. The adjudication branch, which passes on applications for VA benefits and which is subject to some criticism for an allegedly plodding attitude toward the job, had 19 per cent of its career workers soon ready to retire.

In the agency's central office in 1972, almost 38 per cent of the career bureaucrats were 55 years of age or older.

As the VA notes, these figures mean little more than that a good number of the career bureaucrats are getting old and that they've been with the VA a long time. "An older guy can be a young thinker," says a VA spokesman.

But VA's critics say "young thinking" is often not the case; that long tenure has tied top-level career men to parochial internal interests, to static policies, to established and sometimes outmoded routines, and even to outside interests such as the House Veterans' Affairs Committee.

"What is desperately needed at the VA, more than just about anything, is an independent staff in the administrator's office, fresh and untied to any special interest, internal or external," says Dr. Robert Stephens, who spent a year at the agency as an educational and organizational consultant.

"The staff should be professional and competent—an economist, a planner, an operations-research man. They should have two loyalties—one, to the administrator and, two to the VA's mission to serve veterans."

Stephens recalls examples of bureaucratic in-fighting aimed, he charges, at obstructing fresh thinking and new directions. One story involves an internal effort to block a symposium on education and the Vietnam-era veteran. "The idea was to have new thinking and ideas, and we lined up papers to be presented by both non-VA people and some VA people," he recalls.

"Well, it was like the world had come to

an end. I was fought by nearly everyone in the agency. 'It'll give a platform to everybody in the country to beef,' they said. I said 'you're damn right, that's the idea, new thinking'."

Stephens says Administrator Johnson, who came under bitter attack for allegedly encouraging a don't-rock-the-boat attitude, "Actually fought tooth-and-nail to protect the symposium idea, and he supported me the whole way against the rest of the agency. That's not the only time he stood up."

While Stephens' analysis cannot be tested against anything other than contrary opinions and recollections, it is often argued in the bureaucracy's defense that the maintenance of jurisdictional interests is not only inevitable but positively essential in the internal tug-of-war for funds and attention.

And an often critical report prepared for the VA by the Educational Testing Service of Princeton, N.J., concludes that, "In general, the Veterans Administration has administered the educational benefits programs effectively and responsibly over the three conflict periods"—World War II, Korea and Vietnam.

The VA's \$3 billion-a-year, 170-hospital health care program—largest in the nation—is another frequent target for those who see an aging, backward-looking agency. A report by Ralph Nader's Center for Study of Responsive Law says the VA is "utterly incapable" of delivering services to Vietnam-era veterans because the system is mainly aimed at caring for chronically ill old men, not the war-wounded or psychologically scarred veterans of Vietnam.

As for the Vietnam veteran's drug problem, the Nader study says, "The VA did not move rapidly against drug abuse, and when it finally moved, it had to be pushed. It was not until 1971 that the agency developed any programs specifically for drug patients."

Coupled with such outside criticism was a recent blast directed against Administrator Johnson by Dr. Maro Musser, chief of the VA's medical division. Musser quit in a huff last month, saying he was "forced by a variety of unpleasant circumstances to conclude that my effectiveness... had been sufficiently compromised and undermined as to make untenable any consideration of acceptance of a reappointment."

He said Johnson had become "an antagonistic and uncooperative administrator" and that "imposition of tighter and tighter management controls and surveillance have deprived the Department (of Medicine and Surgery) of the flexibility it once had, thereby seriously limiting its ability to deal quickly with new and unexpected needs and problems."

Sen. Alan Cranston (D-Calif.) and Rep. Olin Teague (D-Tex.) joined in heaping blame on Johnson.

Teague said Johnson's "incompetence" brought morale in the VA "to the lowest point that I have seen it in 25 years."

Others, however, argue that Johnson's own position was undermined by men like Musser. "The people surrounding Johnson often ran to the Hill, especially to Teague, with everything they had," says a former VA official.

Teague, a Medal of Honor winner and stalwart of the House Veterans Affairs Committee for decades, is known in the agency itself as "Mr. VA." Having stepped down from the committee chairmanship, he remains its most powerful member.

"There's very little that goes through the VA that's not tested, reviewed, critiqued by the House Veterans Committee and Rep. Teague," says former VA consultant Robert Stephens.

"And since Teague has been around so long—and of course because he's so knowledgeable about VA affairs—he has a lot of friends in the agency," Stephens says.

The VA and the House committee seem to view the Senate Veterans Affairs Com-

mittee chaired by Sen. Vance Hartke (D-Ind.) as spendthrifts and Johnnycome-lates to veterans affairs. Many in the Senate, in turn, see Teague and his powerful staff director, Oliver Meadows, as knowledgeable but autocratic and somewhat behind the times.

In a harrowing experience for the VA back in the 1950s, Teague uncovered a national scandal, and its implications continue to influence the VA bureaucracy. What Teague found was a lot of schools and colleges getting rich on VA tuition payments, jacking up tuition rates to collect more from the federal treasury.

That has helped contribute to the VA's continuing fear of fraud and overpayment. It may help explain, also, the cautious procedures for adjudicating benefit applications and the agency's elaborate system of computer "bars" to stop benefit payments unless each procedure is properly completed.

"We don't want to see overpayments either," said a Senate staffer, "but it's worth a few risks, we think, to make sure that payments get made in time and vets aren't made to suffer."

More than mere caution, however, the old scandal may have contributed to what Robert Stephens sees as a bureaucratic tendency to "strictly construe every legislative proposal or mandate . . . (to) tie up with all sorts of constraints the language and intent of legislative packages, then, with implementation, they further reduce Congress' intent."

Teague, too, remembers the scandal and does not shy from dredging it up to keep the VA or maverick members of the other house in line. He has used it as a primary argument in opposition to a proposal by Sen. George McGovern (D-S.D.) to federally finance direct tuition payments, up to \$1,000, for veterans attending certain higher-cost schools.

At a hearing a few months ago, when the direct tuition scheme was mentioned, Teague held aloft a volume of hearings from the old investigation. "It's all right here," he said.

But 24 years after Teague's reputation-making inquiry, another investigation is now in progress, ordered by President Nixon in the wake of a flood of complaints from young veterans. The target of the investigation by a "crack management team" is at least in part, the VA bureaucracy itself—its procedures, efficiency and performance. Simultaneously, a Twentieth Century Fund task force has been detailed to examine the effectiveness of programs for veterans.

Blake E. Turner, deputy chief benefits director in the VA, said the "crack management team" has already come up with some answers. Where computers previously stopped payments to a veteran whose school failed to file certificates of enrollment, the procedure will now let the checks continue while informing the school that the certificate must be filed.

Turner said benefit application forms are being simplified and that special "hardship payments" will be authorized for veterans whose paperwork is not in perfect order. In addition, he said, advance payments will become automatic, provided applications are filed in time.

The "crack management team" is staffed by VA and OMB officials, including Turner. Critics say this is another example of an agency investigating itself.

"Perhaps what the place needs is new blood, top to bottom. With those huge medical and scholarship programs, there is no reason the VA shouldn't become a real innovator, making . . . breakthroughs in social policy," says a veterans' lobbyist.

"As it is now," says a Senate staffer, "the VA is just not a glamorous institution in the great constellation of federal agencies. Therefore it doesn't attract new, fresh young

talent. And that makes the place all the more unglamorous, and the cycle continues, spinning faster."

KANSAN TO HEAD MEDICAL SOCIETY

Mr. PEARSON. Mr. President, I am proud to call attention to the fact that one of my constituents, John P. Smith, of Wichita, Kans., will be installed as president of the American Society for Medical Technology (ASMT) at the close of its 1974 annual meeting in New Orleans, La.

Currently the society's president-elect, Mr. Smith, has been extremely active during the many years he has served his profession. He has held positions in the society's board of directors, the research committee, and various task forces. He has also chaired the ad hoc committee on the immunology section, the nominations committee of the microbiology section of the society's scientific assembly. He has been a prominent and active member of the Kansas Society for Medical Technology.

Besides being supervisor of the laboratory's microbiology section and education coordinator of the schools of laboratory science at Wesley Medical Center, Wichita, Kans., Mr. Smith has been an active participant in numerous medical technology workshops, seminars, and conferences and has had papers published in many medical and scientific journals.

He is a certified microbiologist and received his A.B. degree in 1962 from Kansas State Teachers College, Emporia, and his MT (ASCP) certification that same year. Smith holds a commission in the Naval Reserve Medical Service Corp.; is a member of the Naval Air Reserve Division at Olathe, Kans.; and is committee chairman and position adviser for the Explorer Scouts.

RAILCAR SHORTAGES

Mr. HUMPHREY. Mr. President, I would like to point out a very timely article, "Rail-Car Shortage Clogs Canadian Wheat," in the June 6 edition of the Christian Science Monitor.

We need to note these Canadian transportation problems because we are likely to be affected by them. Wheat shipments in Canada have been seriously delayed as a result of the boxcar shortages.

This article also reminds us of our own railcar shortage. On March 14, I wrote to the Chairman of the Interstate Commerce Commission, Mr. George Stafford, urging him to supply an additional 4,000 railcars to assure that fertilizer was delivered to farmers in time to be used in the spring planting. An additional 1,100 railcars were actually provided.

Mr. President, this situation again points up the very serious need to take steps to arrest the deterioration of our rail system. Last year we had severe bottlenecks affecting our own wheat shipments which could very well be worse this year.

Mr. President, I ask unanimous consent that the article be printed in the RECORD.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

RAILCAR SHORTAGE CLOGS CANADIAN WHEAT

TORONTO.—A chronic shortage of rail cars in Canada has drastically slowed movement of wheat to ports for export.

Canada is the world's second biggest exporter of wheat, after the United States, and its supplies are regarded as essential to world markets this year, with world wheat reserves already down to about four weeks' supply and considered likely to run downhill still further.

The number of rail cars available to carry wheat in Canada has been steadily decreasing, mainly because railways do not find transporting wheat economical at freight rates kept low and controlled by the government.

The railways have not been buying enough new cars, nor repairing older cars to keep pace with demand, and they now have only half the number of cars, strictly for carrying wheat, they had 10 years ago.

READY TO MOVE

The shortage hit particularly hard this spring, when it was discovered that Canada had shipped only 190 million bushels of wheat overseas since the crop year ended in August, compared with 340 million bushels in the same period a year earlier. The year's crop was 629 million bushels.

By April, when the ice breaks and shipping resumes on Canada's Great Lakes, about 22 million bushels of wheat is normally already loaded on ships which have wintered there, ready to move. But this year most of the wheat carriers were still empty, because wheat had not yet reached the Lakehead ports.

The position was almost as bad on Canada's West Coast, where ports are open year round. Deliveries were running 8 million bushels behind the capacity of waiting vessels, wasting valuable time and running up costly port bills.

And on the prairies, where the wheat is grown, every available elevator and barn is jammed with grain, waiting mostly to be carried to the ports for export.

The Canadian Wheat Board, which organizes wheat exporting for the farmers and the government, says that by the time the next crop of wheat starts being harvested in August, Canada could have 300 million bushels of the previous year's crop still sitting in elevators or on farms.

REPUTATION THREATENED

The situation is so critical that Canada's reputation as a wheat exporter is threatened, the Wheat Board says. Farmers also stand to lose if they fail to get wheat to market, and to lose at particularly high prices—wheat is now selling at around five dollars a bushel.

But the situation is much more serious for the many countries which rely on wheat from Canada. Canada has been a major supplier of wheat to Britain and parts of Africa and Asia, including the Soviet Union. The United States has overexported its own wheat and is looking for supplies this year from Canada, which it may not get.

Brazil and Poland are among those who placed major new orders from Canada this year. Japan, which normally buys on a week-to-week basis, has become worried about prospective tighter world wheat supplies and international currency uncertainties, and has already placed an order for 36 million bushels of wheat from Canada to be delivered between May and September, to cover itself until autumn.

VIRGINIA UNIVERSITY PRESIDENT RETIRING

Mr. HUGH SCOTT. Mr. President, a perceptive and penetrating article on the University of Virginia's retiring President, Edgar F. Shannon, appeared in Sunday's Washington Post. Not only does it highlight the recent growth of the University under Dr. Shannon's leadership and guidance, but details the academic philosophy which he has bequeathed to the school. I ask unanimous consent that this excellent article be printed in the RECORD.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

UNIVERSITY OF VIRGINIA HEAD IS RETIRING (By Helen Dewar)

CHARLOTTESVILLE, Va., June 8.—It is no longer quaintly referred to as the "country club of the South," a comfortable haven where sons of the wealthy and prominent pursued pleasure and the "gentleman's C" in the manner of young Virginia squires.

The University of Virginia is bigger, tougher and better regarded now than it was then—a serious academic institution, some say, that is finally approaching the goals set a century-and-a-half ago by its founder, Thomas Jefferson.

One chief reason for the advance is Edgar Finley Shannon Jr., a relatively obscure young Tennyson scholar when he was plucked from the English faculty in 1959 to spearhead the university's academic resurgence.

Now Shannon, at 56, is retiring as president to return to the classroom, to 19th century literature. While few speak of Charlottesville and Cambridge in the same breath, he leaves behind a record that many of his colleagues say is unprecedented in the university's long history.

Shannon will be succeeded in August by Frank L. Hereford Jr., 50, a physics professor and former provost at the university, who, with some modifications dictated by changing circumstances and differing styles, is expected to continue Shannon's emphasis on academic excellence.

Said a student leader: "The prognosis is good."

A casual visitor to the handsome "academic village" that Jefferson laid out might conclude that little has changed over the years, outside of the new buildings that decorate every college campus in the country.

There are still the long shadows cast by the Blue Ridge, the towering magnolias and the legacy of "Mr. Jefferson" himself. It is still "The University," spoken often with a slight bow of the head. And a brown bag filled with empty beer cans, left by a departing student, could even be found last month outside a room on Mr. Jefferson's "lawn."

The difference can be felt but not seen, faculty and students say.

"He (Shannon) brought a better faculty and a better faculty brought better students," said Larry Sabato, the 1973-74 student body president.

"He set exceedingly high sights for the university; like Jefferson he wanted it to be a national university," said Frank Berkeley, university archivist for 26 years and Shannon's executive assistant.

Set off from the great metropolitan centers, dominated by Jefferson's spirit and dedicated to its own somewhat eccentric ways, the University of Virginia has long been proud to be different.

A state university, it has fiercely resisted what it derisively calls "state-U-ism." It is the quintessence of Virginia and yet has aspired from the start to be a national university; its alumni includes Sens. Harry F.

Byrd Jr. (Ind.-Va.) and Edward M. Kennedy (D-Mass.).

With campus dress shifting from the traditional coats and ties to combat fatigues in a matter of months, the unrest of the late '60s came late but dramatically to Charlottesville. Yet the university survived with less upheaval than most colleges and its soft-spoken, conservative-appearing president emerged as one of the era's few establishment campus heroes.

"A certain calmness has returned," said William Fishback, the university public information officer, "but it isn't returning to a sleepy Southern college."

During Shannon's 15 years as president, enrollment jumped from less than 5,000 to nearly 14,000 and about \$100 million in public and private funds have been invested in, or earmarked for, physical expansion.

The university became fully coeducational in 1970 and women now constitute 35 per cent of its student body. Blacks still comprise less than 4 per cent of the enrollment, but the total number has risen from a handful to nearly 500, partly because of a university-sponsored recruitment program.

But neither faculty nor students cite physical expansion as the hallmark of Shannon's presidency, saying that this was largely attributed to the groundwork laid by his predecessor, former Gov. Colgate W. Darden.

"In a very real sense, Darden and Shannon complemented each other," said Weldon Cooper, retired director of the university's Institute of Government, who served in both teaching and administrative capacities during the Darden-Shannon years.

"By the time Shannon took over, the university was a going concern, with buildings in hand or in sight and a growing faculty and student body," Cooper said. "Shannon's contribution was to grasp the opportunity and go and get good people."

"I had a sound foundation from which to build," Shannon observed recently. "You could say that he (Darden) built a platform from which I could take off."

By "taking off," Shannon meant attracting the kind of faculty that in turn, would attract the kind of students who would respond to an increasingly challenging academic program.

Under Shannon, faculty salaries rose to the point where they are now competitive with most top-flight universities in the country. Programs were established to augment salaries through specially endowed positions; other programs provided supplemental research opportunities.

He did much of the faculty recruiting himself, appealing to prospective recruits as one scholar to another.

"Let's face it, he got some good people through out-and-out raids, said a university colleague.

Cooper recalls that Shannon got a top Edgar Allan Poe scholar by offering him a specially endowed Edgar Allan Poe chair, a game of academic one-up-manship that the other college president couldn't match.

Meanwhile, college board scores of entering freshmen rose dramatically, and now roughly 80 per cent of them are in the top fifth of their high school graduating class, more than 5 per cent from the top tenth. The number of top students nearly doubled in 10 years.

By 1972, 45 percent of undergraduates were on the deans list for top students and the figure now exceeds 50 per cent. "Ten years ago, you probably couldn't find 45 per cent of the students who knew what the deans list was, a 1963 graduate wrote in the university's Alumni News last year.

At a time when college applications are declining nationally, the University of Virginia's continuing to rise—up 1 per cent this year as opposed to a national decline of 9 per cent, according to officials.

One reason for the university's mounting

popularity, they concede, is its dwindling, relatively, tuition—near the top for major state universities when Shannon took over, only slightly above average now. But this has also been a major factor in attracting a broader cross-section of students and breaking down the old country-club image, a Darden goal that was also pursued by Shannon.

While the university used to ride on the reputation of its law school, four of the university's other graduate programs received the highest rating given in a 1969 national survey by the American Council on Education and 14 others were ranked as average or better. This was double the university's ranking five years before, but, as Shannon has noted, other universities still did better, among them the University of North Carolina.

"What he did was draw a nationally prominent faculty," said student body president Sabato. "You could really feel the impact. You were studying somebody's book and then suddenly he would be there teaching."

While Shannon is a man of reserve and formal bearing, Sabato says he had an extraordinary degree of student trust and rapport.

"Everyone could trust Mr. Shannon, and you can't say this about everyone these days," said Sabato.

According to Sabato's elders, it is a trust developed slowly over the years but forged in 1970, when the Cambodia invasion and Kent State deaths brought intense ferment even to the normally placid "coat and tie" Charlottesville campus.

A number of students boycotted classes, occupied an ROTC building, set fires, blocked town traffic in a "honk for peace" and were carted off in a moving van to jail—stopping just short of creating the kind of situation that forced closure of many other major universities in the country.

Deeply troubled by the Cambodia invasion as well as the unrest, Shannon chose to address the student body on the Jefferson lawn. The jeering of previous days turned to cheering as Shannon—who is normally no great orator—denounced the war and led the students in signing a telegram of protest to Virginia's United States senators.

There were cries of outrage from alumni, newspaper editors and politicians, and for a time it seemed that the university's board of visitors might seek to fire him.

But Shannon's action had defused the situation and the seething campus subsided. Less than a month later, "We had one of the most unifying and gratifying graduation exercises we've ever had," Shannon recalls.

In less dramatic fashion, Shannon has continued teaching an English literature course, which students say is highly regarded, and has involved students on all major university committees, including those that help choose professors and administrators. He wasn't more than a telephone call away from any student leader, Sabato recalls.

Shannon—son of an English professor and Chaucer scholar and himself a former Rhodes scholar—says he is looking forward to returning to the classroom, although some associates say he seems to have mixed feelings about leaving the president's office.

He has a wife and five daughters to think about, he says, and besides there is work in his specialty, abandoned 15 years ago, still to be done.

"I feel it's important not to stay too long in any undertaking," he explained, "and I wanted to make sure I stopped while I was strong and the university was strong."

DISCRIMINATION OF THE HANDICAPPED

Mr. BENTSEN. Mr. President, it has recently come to my attention that over the course of the past few years certain

U.S. airlines have on occasion treated the handicapped as second-class citizens by refusing them passage because of their disability. Under existing Federal Aviation Administration and Civil Aeronautics Board regulations, airline passenger carriers may restrict or prohibit the travel of handicapped persons on their flights for reasons of safety.

Mr. President, certainly there are valid safety requirements that must be taken into consideration to ensure the welfare not only of the handicapped but also of other passengers. However, I think it is important that those with physical afflictions should be permitted, assisted, and encouraged to reach their full potential as useful, productive citizens. This concept is not consistent with a restrictive, patronizing attitude that unjustifiedly excludes the handicapped from using air travel for recreational as well as professional reasons.

The handicapped themselves have received training in methods of caring for themselves as part of their rehabilitation. In fact, a recent study reported that evacuation of handicapped passengers required at most 7 seconds more than evacuation of a nonhandicapped person.

The handicapped have made extensive efforts on their own and are proud of their accomplishments, as well they should be. I suggest that we not allow those efforts to be frustrated to the point that these citizens are prevented from leading the fullest and most productive of lives.

I am encouraged by the review now underway by the FAA to consider changes in its regulations regarding this matter. I urge expeditious action by this Agency to assure the same rights for the handicapped to which all our citizens are entitled.

GENOCIDE CONVENTION AND PROBLEM OF CONCURRENT JURISDICTION OVER ACCUSED PERSONS

Mr. PROXMIRE. Mr. President, article VI of the Genocide Convention deals with the trial of persons accused of the crime of genocide. It allows for the trial of persons charged with genocide or any of the other acts enumerated in article III in the territory where the act was committed or by any international tribunal which may have jurisdiction with respect to those contracting parties which shall have accepted its jurisdiction. The Foreign Relations Committee has recommended to the Senate that the treaty be adopted with an understanding that will put the United States on record as willing to exercise the right to try its own citizens for alleged acts of genocide that occur in other countries.

Some critics of the treaty, Mr. President, have expressed doubts that the other nations of the world will respect this understanding. However, it should be obvious that these understandings will be respected since other nations have the same understanding of article VI. In fact, in December 1948, the Legal Committee of the United Nations General Assembly enacted the following resolution:

The first part of article VI contemplates the obligation of the State in whose territory acts of genocide have been committed. Thus, in particular, it does not affect the right of any State to bring to trial before its own tribunals any of its nationals for acts committed outside the State.

Thus, Mr. President, the problem of concurrent jurisdiction with respect to the crimes defined by the Genocide Convention is really not a problem and I call upon the Senate to ratify the treaty as soon as possible.

LEGISLATIVE INFORMATION RETRIEVAL SYSTEM

Mr. BIDEN. Mr. President, the duties of today's State legislators is a far cry from those of legislators in the early 1800's. Those men only had to concern themselves with a few major issues each session. Then came the trip back to their homes in time for the plowing season, so to speak.

Today, this situation no longer governs.

I would like to bring to the attention of my colleagues an informative article concerning ways to achieve more efficient State legislatures. The article was published in Government Executive magazine, and written by Robert L. Chartand, specialist information sciences with the Congressional Research Services, Library of Congress.

I refer specifically to information retrieval systems—"information banks" that promptly provide information which becomes the basis for policy judgment. Legislators would have at their fingertips relevant and current information on a specific topic. This information would include facts, data, and analytical commentary. As a result of this, legislative decisions would bound to be more soundly made.

Several State governments have set up systems. New York has created a legislative data processing system. The Commonwealth of Massachusetts has established a special commission on legislative procedures which makes recommendations for legislative efficiency. In Pennsylvania, too, a commission has been established for legislative modernization.

Mr. President, I ask unanimous consent to have the entire article printed in the Record.

There being no objection, the article was ordered to be printed in the Record, as follows:

LEGISLATIVE INFORMATION RETRIEVAL SYSTEM

The state legislatures in the U.S. today are faced with unprecedented problems and opportunities. Created at a time when stress was placed on insuring individual flexibility and freedom, while still rendering a few critical collective services, the legislatures traditionally met for relatively brief sessions, concerning themselves with but a handful of lawmaking and overseer problems.

The situation in the 1970 decade is quite different. Members must be knowledgeable about dozens of issues, some quite complex, of regional, statewide and local significance. The crux of the problem is seen increasingly as one of information—relevant, accurate, current—and the time on the part of legislative members and staff to absorb and assess that information.

The pressures of modern times are causing legislative bodies to explore every possible means of effecting legislative revitalization. The search goes on with a full cognizance that some problems inherent to the structure and functioning of the legislature will remain:

Brevity of legislative sessions (in many states) when compared to legislative load.

Too many committee and subcommittee assignments for each legislator.

Turnover among members, resulting in one-third to one-half "freshmen" every two years.

Strong pressures to tend first to local or individual matters, rather than statewide concerns.

And finally, limited library and research support for Members and committees.

When considering those legislative services which must provide requisite information, it must be remembered that three distinct elements within the legislature require support: the legislative leadership, standing and *ad hoc* committees, and the individual legislators.

Over the years, the various states have established Legislative Reference Bureaus, Legislative Councils, and state libraries to meet the needs of the legislature for better information and analytical services.

More recently, commencing in the early 1960s, the states' leaders began investigating the ways in which modern technology might support selected legislative functions. In particular, careful consideration was given to the potential of automatic data processing (ADP), microfilm, and systems analysis tools and techniques. Oftentimes, it has been possible to adapt the new devices and man-machine techniques developed by private industry.

RECENT TREND

Concomitant with the focus on the role of computer technology and systems methodology has been a movement within the states to improve their planning operations. While fiscal and budgetary planning have received an understandable top priority, a more systematic approach also has been used in delineating information systems' development.

As the states, one-by-one, took the initiative in introducing mechanization into the areas of drafting and amending bills and statutes, performing statutory retrieval, indexing pending legislation (by sponsor, bill number, subject), legislative printing, and fiscal-budgetary data handling, several key decision points emerged which had to be dealt with by every state:

Should the data processing facility supporting the legislature be within the legislative branch, with all of the advantages of having a "dedicated" capability?

If the legislature should choose to rely upon the executive branch facility, could acceptable priorities be established and a satisfactory level of responsible service be realized?

Could the security of legislative information, often of critical importance to the leadership or committees, be guaranteed by the custodians of the data processing facility?

Would it be desirable to contract with outside firms to perform certain tasks (e.g., legislative printing) in order to insure timely service and forego the necessity of maintaining a large, expensive in-house staff?

Could it be determined *objectively* whether legislators' information needs justified having a quick-access ("on-line") system, or if a less costly service with a longer turn around time would suffice?

Although many of the studies conducted by and for the states have not faced these critical matters directly, the necessity for making these decisions has arisen inexorably.

There is a trend recently toward preparing

long-range plans; Wyoming, Montana and Idaho reportedly are developing five-year plans. Other states have established advisory agencies to look ahead, coordinate activities, establish standards for information support, and generally serve as a point of contact for those societal groups interested in the more effective functioning of the legislatures.

While state development of computer supported information systems has been somewhat haphazard, there have been attempts to exchange information about these experiences.

In addition to the state-to-state contacts, the use of ADP has been monitored through the use of questionnaires and direct (visit or telephone) contacts with key state personnel by such organizations as The Council of State Governments, the University of Georgia (Institute of Government), the Special Subcommittee on the Utilization of Scientific Manpower of the Senate Committee on Labor and Public Welfare (U.S. Congress), and the Congressional Research Service of the Library of Congress.

The findings from these and related studies of state legislative informative systems are contained in a report entitled "Modern Information Technology in the State Legislatures" prepared in 1972 for the Joint Committee on Congressional Operations.

In considering the diverse applications of computer technology to the activities of the State legislature, it should be recalled that all such bodies share a need:

To have salient facts assembled, such data being accurate, as complete as possible, of maximum currency, and above all, relevant.

For assistance on policy problems which may range from major issues to those of relative triviality, but each requiring certain factual and analytical information and counsel.

And to conduct an effective review of governmental operations, based on access to and an understanding of requisite planning, budgeting and program performance data.

From the early days when the various legislative services were being developed—Wisconsin, for example, is credited with establishing the first Legislative Reference Bureau in 1901, and Kansas created the initial Legislative Council in 1933—members and administrators of the legislative branch activities have sought to better understand the role of such "services."

OVERSIGHT GROUPS

For the most part, State legislatures in adapting computer technology to their needs broke with the traditional pattern found in industry and the state executive branches of first automating such functions as payroll and inventory control.

In exhibiting a willingness to undertake the development of more complex capabilities, a score of states have created computer-supported statutory retrieval systems, 25 operate bill status reporting systems (which sometime include providing the digests of and indexes to pending legislation), and a dozen boast bill drafting and statutory revision systems.

In their search for enhanced services, some legislatures followed a course of action featuring the creation of an innovative in-house staff, which performed virtually every aspect of systems' improvement. Others preferred to hire consulting firms which could deliver a one-time product or continuing service responsive to the needs of a legislative chamber or committee.

Yet another alternative approach was to obtain analytical and systems design support from the executive branch ADP element, and depend upon the computer facility situated outside the legislative branch.

Over the past decade, regardless of the type of systems development effort undertaken, 10 major legislative applications have

emerged that now receive the bulk of computer support activity:

- Bill drafting and statutory revision.
- Statutory retrieval.
- Status of pending legislation.
- Legislative histories.
- Index of pending legislation.
- Digest of bill contents.
- Fiscal-budgetary information.
- Legislative printing.
- Reapportionment and redistricting.
- Electro-magnetic voting.

In addition, ADP equipment and techniques are being used in the handling of such sundry administrative data as personnel and pay records. Interestingly, member biographical data was mechanized as early as 1938!

At present, statistics reflecting the computerization of State legislature applications now operating, under development, or planned, show:

Several types of oversight mechanisms within State Legislatures have been established so that an orderly development and subsequent efficient management of ADP-centered information systems could occur.

In Florida, for example, a Joint Legislative Management Committee was formed in 1964; comprised of three Senate and three House members, it meets about four times a year to oversee and direct all computerized activities.

The State of New York has created a Legislative Data Processing Committee including key leadership from the Senate and Assembly, seven members in all.

Other oversight groups charged with the responsibility for developing legislative information systems:

The State of Washington has placed its legislative information system under the aegis of the Permanent Statute Law Committee.

In Massachusetts, the legislature established in 1965 a Special Commission on Legislative Procedures which in turn commissioned the Massachusetts Taxpayers Foundation to recommend steps for improving legislative procedures, with emphasis on the use of information processing techniques.

In Pennsylvania, a Commission for Legislative Modernization, made up of private sector representatives, undertook a study resulting in the publication of recommendations "designed to make the individual legislator more effective and to improve the operation of [the] General Assembly."

The placement of the responsibility for and direct control of data processing services varies from state to state, with the final determination usually based on nontechnical factors.

The State of Georgia, for instance, established a State Computer Service Center in 1966 with "the mission and objective of service outreach to smaller state agencies and commissions which, because of their relative size, are not able to justify economically . . . a data processing facility for themselves."

Another price responsibility of the Center is the design and development of a legislative information system.

In Massachusetts, ADP support is furnished by the State Comptroller while in Florida the legislature, until recently, has shared with eight other users a "third generation" computer located in the State capital.

Pennsylvania is noteworthy because it pioneered the concept of having a separate computer for its legislature (in 1967).

It should be noted that not all states have acted to establish a computer-supported legislative information system. Some, like Oregon, developed comprehensive plans and demonstrated the potential of ADP to the members, but then were constrained by budgetary limitations. Others, such as South Dakota, have had implementing legislation vetoed or otherwise stalled.

STATE SPENDING

And there is a group of states where the need simply could not be justified—as in Alabama, Arkansas and Alaska—or only preliminary studies have been authorized. In short, the experience of the State legislatures over the last 10 years has been that the new tools and techniques are welcomed and adopted when the needs of the members forces positive action.

Security of information in legislative files is a matter of unflagging concern on the part of the members. Traditional controls over information requisite to the fulfillment of leadership committee, or individual office duties may well be affected by the computerization of both narrative and statistical data.

Many questions have been raised by committees, looking into the potential of computers for upgrading legislative performance, concerning controls which may be imposed on accessing legislative files. Privileged information in machineable form may be susceptible to unauthorized exposure under three conditions:

First, if the magnetic tape belonging to a committee (or member) is not securely stored, whether in an office safe or in the central ADP facility repository.

Secondly, if unauthorized personnel acquire the "address" (a unique set of numbers and/or letters) allowing exploitation via a computer terminal of certain files.

And thirdly, if unauthorized personnel gain access to the computer room and actually obtain key data by mounting the tapes or retrieving data from the disk or drum on-line storage units.

Unintentional disclosure can take place, of course, as the result of operator error or a mistake in a computer program. In the end, it is the management acumen and discipline of the system which will in large part determine its security and under what conditions the various users can gain access to privileged information.

Early in any exploration of the potential of ADP this question is raised: "How much will it cost?"

Those experienced in building advanced information systems are cautious about stressing the savings to be achieved, usually concentrating on the higher level of service which may be rendered.

There have been times when the mere availability of ADP support has allowed a change in handling procedures which led to significant savings.

In the State of New York, Secretary of the Senate Albert J. Abrams reported that under a new set of procedures, and based on the use of the computer in storing, modifying and retrieving key data on pending legislation, 4,050 bills were carried over from the 1969 to the 1970 session, resulting in a saving of nearly \$1 million (at \$12.83 per page) in printing costs alone.

Ascertaining exactly how much a state is spending to provide computerized support for its legislature often is quite difficult. Figures available sometimes do not include the rental of computers (elsewhere in government or in industry), the cost of operating personnel, consultants' fees, printing rates, or the cost of research and development.

Both initial developmental and annual operating costs must be considered by those who determine whether ADP services are to be undertaken, expanded or retained. Obviously the length of legislative sessions will affect the cost, when this is related to the variety and frequency of services performed.

Illustrative of reported state costs:

Connecticut. \$95,000 paid to the IBM Corporation for the development of an automated capability to produce calendars, bulletins, journals, indexes, and other output.

Mississippi. \$746,750 for the Lawyers Cooperative Publishing Company to update and recodify the State's 30-year-old statute sys-

tem, to result in an ADP-supported capability allowing selective retrieval of statutes, court decisions, and other legal material, ease bill drafting, and expedite legislative printing.

There is a role for computer technology to play within the legislative scenario, but its scope and substance must be determined by the legislators themselves.

NUCLEAR TESTING—TIME FOR A HALT

Mr. CRANSTON. Mr. President, our distinguished colleague from Massachusetts, Senator KENNEDY, has presented a convincing case on an issue soon to come before the Senate: The need for a total ban on nuclear testing.

In an article published in the May issue of *Arms Control Today*, Senator KENNEDY argues persuasively that the timing of a comprehensive test-ban treaty—CTB—is particularly appropriate now.

He points out that a CTB would complement the SALT I agreements by making major, qualitative improvements in nuclear weaponry more difficult. It would demonstrate that both the United States and the U.S.S.R. are committed to meaningful arms limitations.

Furthermore, a CTB would reinforce the nuclear nonproliferation treaty, which is to be reviewed next year. Many nonnuclear countries now feel that it is unfair for them to give up nuclear weapons while the superpowers forge ahead.

Finally, of course, a CTB would both save money and reduce environmental damage.

Mr. President, I urge all Senators to read Senator KENNEDY's thoughtful article before making up their minds on this important issue.

I ask unanimous consent that Senator KENNEDY's article be printed in the RECORD.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

NUCLEAR TESTING: TIME FOR A HALT

(By Senator EDWARD M. KENNEDY)

On May 17, India exploded a nuclear device, the sixth country to do so. And even if India does not make a true bomb—as it has promised not to do—we must now face with greater urgency the critical issue of a "world of many nuclear powers." For that reason among others, I strongly support the negotiation now of a comprehensive ban on all nuclear testing.

The Partial Test Ban Treaty of 1963 is now almost 11 years old. Since then, there has been little progress in extending the ban on testing that was then agreed for the atmosphere, space, and underwater. In the intervening years, the pace of underground testing was actually stepped up periodically by both the United States and the Soviet Union.

Now interest has been revived in further limits on nuclear testing. I believe a Comprehensive Test Ban Treaty is particularly important and attractive at this time, when the immediate prospects for revising the 1972 Interim Agreement on offensive strategic weapons are so bleak.

CTB ADVANTAGES

CTB has several attractions. First, a Comprehensive Test Ban Treaty would complement the agreements reached at SALT I, by making it more difficult for either super-

power to make major qualitative improvements in their nuclear arsenals. If all testing were stopped, at least this would dampen fears on either side that the other would gain a high degree of confidence in some new generation of first-strike weapons.

Second, there is the matter of political will itself. The atmosphere surrounding both détente and the possibilities for arms control would be helped if there were some agreement at the forthcoming Moscow summit. I believe that promoting that atmosphere, so hard won, is particularly important at this time, when there is widespread questioning in the United States (and apparently in the Soviet Union, as well) about the real basis for improved Soviet-American relations. In addition to its own merits, therefore, a CTB would demonstrate that the United States and the Soviet Union are both still committed to real limits on arms. In fact, it might then be easier to break the log-jam at SALT II on revising the Interim Agreement.

This reasoning may explain the strong support for a CTB which Soviet leaders expressed to me during my recent trip to Moscow—about which I will say more later.

Third, a Comprehensive Test Ban would reinforce the Non-Proliferation Treaty, which is due for review next year. Many non-nuclear nations have branded the NPT as unfair to them. They have given up nuclear weapons, along with whatever political and military benefits these weapons seem to confer, while the superpowers forge ahead in their own arms race.

A CTB would be a major indicator of the good faith of the major powers, if they are determined to prevent the spread of nuclear weapons. Such a demonstration of good faith is particularly important now that India has become the sixth power to explode a nuclear device. Will there be more? In part, the answer to this question will depend on what the superpowers do to show restraint—whether or not India, China, or other countries continue to test.

The continuation of underground testing also weakens the efforts of the United States and Soviet Union to bring France and China into real discussions on arms control. A CTB on its own would not prevent proliferation or lead to broader arms control talks; but it could be a significant step on the way.

Finally, a CTB would permit some savings in the nuclear weapons programs of both superpowers, to be applied to other uses, and end the remaining environmental hazards from underground testing. While such hazards are not the overriding reason for banning all tests, about one-fifth of our tests have vented, sending radioactive particles into the air. In addition, the side effects of massive explosions deep within the earth's crust are still not fully known—as concluded by the Pitzer Panel, appointed by the President's Office of Science and Technology.

Many of these arguments for a Comprehensive Test Ban Treaty were reflected in talks I had with Soviet leaders in Moscow during April. In these talks, they shifted their position on an important point. They are no longer insisting that France and China join a CTB at the outset. Rather they are prepared to reach agreement with us now, and then seek the support of other nations. To be sure, Soviet leaders told me they want an escape clause, in the event that France and China do not respond. (Such clauses have become standard in most arms control agreements.) And it is important for us not to allow a CTB to be used as a weapon in the diplomatic conflict between the Soviet Union and China. But Soviet leaders also agreed that a CTB could be an important step forward, symbolizing our shared concern to limit the race in nuclear arms.

VERIFICATION CAPABILITIES IMPROVE

Yet what assurance is there that the Soviet Union would not test nuclear weapons in secret? To begin with, our ability to detect nuclear weapons tests underground has improved considerably during the past decade (and the Soviet Union has frequently expressed a willingness to rely on national means of verification). In fact, testimony before the Senate Arms Control Subcommittee—from a variety of sources—has supported the conclusion that we have a greater capacity now to detect and identify nuclear explosions through national means alone than we would have had in 1963, even with the seven on-site inspections a year that we then demanded. There is widespread belief that current developments in seismology alone would enable us to detect and identify explosions having a yield of only a few kilotons. And this does not take into account satellite reconnaissance and other techniques to gather information.

In addition, the Soviet Union would always be uncertain of our capabilities. And, being uncertain, Soviet leaders would have to calculate the risks—and the consequences—of being caught cheating. With so much else at stake in arms control and in our bilateral relations, these risks and consequences would weigh heavily on them. This would be especially so since the benefits to be gained from cheating—some improvements in low-yield weapons—are most unlikely to bring any marked advantage in the nuclear arms balance.

I believe, therefore, that the issue of verification no longer need stand in the way of further limits on nuclear testing by the superpowers. Consequently, I have introduced a Senate resolution calling for a mutual moratorium on all nuclear testing by the United States and the Soviet Union, followed by a conclusion of a Comprehensive Test Ban Treaty, hopefully to be negotiated in time for the Moscow summit this summer. At time of writing, this resolution has 36 co-sponsors, and has been cleared for Senate action by the Foreign Relations Committee.

"THRESHOLD" TEST BAN INADEQUATE

Press reports on preparations for the forthcoming summit, however, indicate that the Administration is seeking only a "threshold" test ban—that is, a limit on tests producing a seismic signal above a given magnitude. Of course, for the political and psychological reasons I have advanced above, even a threshold treaty which genuinely ruled out major changes in strategic weaponry could still be valuable.

But even a threshold treaty set at a lower level would be less desirable than a complete ban on testing by the superpowers. First, it is not clear that a threshold treaty would be enough to demonstrate the commitment of the superpowers to end their arms race. Would India have tested a nuclear device if Washington and Moscow had signed a CTB? We cannot know, although India long demanded this progress as the price of its own forbearance. Its recent action, therefore, should increase our desire to regulate the superpower arms race—with a comprehensive, rather than another partial, test ban agreement.

Second, a threshold treaty would be even more difficult to monitor than a CTB, since it would require a precision in seismic detection that is not needed when the issue is one of verifying whether or not there has been a nuclear explosion of any size at all. Disagreements on such technicalities could very well lead to more political tension, not less.

Third, the level of the threshold would tend to be set by arms developers rather than by arms controllers. As long as some level of testing is permitted, there will be strong pressures to test up to the limits (as

happened with the Partial Test Ban Treaty—even if quotas were imposed on the number of tests each power could make each year. There would also be a tendency to refine nuclear weapons arsenals even further—especially in the area of tactical weapons. This could lead to a blurring of the distinction between nuclear and non-nuclear weapons.

Finally, will the Soviet Union accept a threshold ban that would be a real improvement on the present Partial Test-Ban Treaty? Since the Soviet Union generally tests weapons larger than ours, a threshold ban would tend to favor U.S. weapons developments, and could raise doubts in Soviet minds about our sincerity in wanting to advance mutual interests in this area.

For all these reasons, I believe that a threshold ban would be far from the best answer in the area of controlling nuclear testing. I have urged the Administration to pursue a Comprehensive Test Ban to the limits of negotiation, before turning to a less desirable alternative. And I believe that CTB can be negotiated this year.

AGE DISCRIMINATION

Mr. BENTSEN. Mr. President, the Washington Star-News of June 10 carried a lucid and thoughtful study of the question of age discrimination by Leonard Curry. As Mr. Curry notes:

When a business executive over the age of 40 is passed for promotion or loses his job, chances are 50-50 he is the victim of age discrimination, although it would be hard to prove.

Mr. Curry catalogs the subtleties and the characteristics of age discrimination, which has, in my view, become an issue of considerable social significance. With medical science working to unlock the secrets of aging, with longevity steadily increasing, it has long seemed to me that it is unwise in human and economic terms to pressure older workers to retire or to refuse to consider them on an equal basis when making hiring decisions.

In March of 1972, I introduced a bill to bring local, State, and Federal employees under the protection of the Age Discrimination in Employment Act, a measure I introduced on three occasions before it was finally signed into law by the President as part of the recent minimum wage bill. The passage of that measure insures that the Government will have to live up to the same standards it sets for private enterprise.

One of the problems Mr. Curry points to in his article is the difficulty of finding and enforcing cases of age discrimination. When I first investigated the problem in early 1972, I found the primary reasons for lax enforcement of the law. The Labor Department had only 69 persons working nationwide on the issue, and in Washington there were but four professional staff members and two clerical workers. There was a substantial backlog of complaints.

When I introduced my bill to broaden coverage, I also stipulated that I wanted an increase in funds to enforce the act. The level of funding in my bill, \$5 million, represents a 66 $\frac{2}{3}$ -percent increase in available funds. I will be monitoring the enforcement of the new law carefully to see if the Labor Department is following its mandate from the Congress.

I ask unanimous consent to have Mr. Curry's article printed in the RECORD.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

[From the Washington Star News, June 10, 1974]

HARD TO DETECT: AGE BIAS POSES A BIG PROBLEM

(By Leonard Curry)

When a business executive over the age of 40 is passed for promotion or loses his job, chances are 50-50 he is the victim of age discrimination, although it would be hard to prove.

"Age discrimination is the most illusive and damaging type of discrimination," says Carin Ann Clauss, associated solicitor of the U.S. Fair Labor Standards Division. "It cuts down workers in their prime."

Ms. Clauss, a Labor Department expert on age bias, says it is more difficult to prove than race or sex discrimination because most of its victims are in positions that are difficult to assess for productivity.

A short order cook can be checked to determine whether 40 hamburgers still are coming off the grill every hour. But how is the output of a manager measured, especially under the recession conditions of today? If auto sales fall, is it the quality control manager's fault or the energy crisis?

Since Congress passed the age discrimination law in 1968, nearly 7,000 Labor Department investigations reveal that white collar workers, especially middle and upper management, are the most frequent victims. Next are unskilled laborers. Least affected are employees with valuable mechanical skills and union protection.

The reason for these patterns is readily apparent, whether the guilty company is the giant Standard Oil of California, which had to repay \$2 million in salaries and rehire 120 senior employees, or the Friendly Ice Cream Co. of Massachusetts whose hiring policies were judged age discriminatory.

An economy move is most effective when you can eliminate executives over the age of 40. These older managers and executives usually are paid more than younger men in similar posts, the opening up of their jobs stimulates younger men with the prospect of promotion and, by turning out a senior executive before retirement age, the company avoids paying full pension benefits.

With unskilled labor, the financial benefits are not so great on a per capita basis. But releasing scores of older workers whose longevity has brought them higher pay and replacing them with younger people at starting wages is beneficial to the balance sheet.

Skilled labor is least affected by age discrimination because persons in these jobs usually are in production and companies trying to curb expenses eliminate production workers last. In addition, the shrinking number of skilled workers in many industries enhances their value regardless of age.

There are three major categories in which age discrimination falls, according to Labor Department investigators. They are a youth bias in recruiting, massive layoffs in which older employees go first and forced retirement.

Of the three, recruiting and hiring practices are the easiest for investigators to spot. Classified ads for "junior executives" or "junior accountants," and recruiting aimed almost exclusively at college campuses are the signals.

This was the case with Friendly Ice Cream, whose counter personnel were young and whose want ads were designed to attract youthful workers.

A more oblique type of recruiting bias also was found in New England—although it is by no means confined to that region—where companies listed a high school diploma as a requirement. Since 8 of 10 younger Ameri-

cans are high school graduates compared with 4 of 10 older Americans, the effect was a significant reduction in job openings for workers over 45.

An even more subtle form of hiring discrimination has been found in regard to middle-aged women, many of whom are returning to the workforce after raising families.

"Fearing they won't get a job, these older women sell themselves cheap," says Ms. Clauss. "When they agree to work for less than the prevailing market rate, the effect is to depress income for themselves and for other workers."

Although not as widespread, it was a pattern that also turned up for older men who had lost jobs.

Forced retirement is the second area where age bias is prevalent and relatively easy to uncover. Usually the worker is asked to retire before age 65 for economy reasons.

"We take the position you cannot be forced out and have been successful in pressing it," Ms. Clauss says.

"Stereotypes play a major role in forced retirement. The owners worry that the average age of employees is too high, especially in top management. Older employees, this reasoning goes, mean a company must be less productive. There is the fear the older worker's memory is not as good. A youth movement usually begins."

The reasons for forced retirement are subjective when age bias is discovered, much the same as for the third category—massive layoffs in which older employees go first and in higher numbers.

Anaconda Copper was going through a period of slumping income and rising expenses. Anaconda cut the workforce, apparently across the board. Investigation by the Fair Labor Standards Division disclosed, however, that 40 per cent of the reduction was concentrated among workers over 50.

"In the massive layoff, it is possible to hide age discrimination," says Ms. Clauss. "We found the pattern in Anaconda in hundreds of hours of examining their books. It is also an example of how age discrimination is hidden."

"In race and sex discrimination, the investigator can just look around for black faces and women to determine quickly whether to look further. When age is involved, the factors are not so apparent."

PROGRAM

Mr. ROBERT C. BYRD. Mr. President, the Senate will convene at 10 a.m. tomorrow. After the two leaders or their designees have been recognized under the standing order, the following Senators will be recognized, each for not to exceed 15 minutes, and in the order stated: Senators JAVITS, HUMPHREY, and ROBERT C. BYRD.

There will then ensue a period for the transaction of routine morning business of not to exceed 15 minutes, with statements limited therein to 5 minutes each, at the conclusion of which period the Senate will proceed to the consideration of H.R. 11221, under a time agreement. Yea and nay votes will occur thereon.

Upon the disposition of that bill, the Senate will take up S. 585, and there is a time agreement on that bill. A yea and nay vote or votes could occur.

On the disposition of that bill, the Senate will proceed to take up S. 1485, under a time limitation; and upon the disposition of that bill the Senate will take up S. 1486, under a time limitation.

Rollcall votes are expected on tomorrow, and it is hoped we will have a good

day, a busy day, and a very productive day.

Mr. TOWER. Mr. President, will the Senator yield?

Mr. ROBERT C. BYRD. I yield.

Mr. TOWER. If the business outlined by the distinguished majority whip is disposed of by tomorrow evening, could he give us some enlightenment as to Friday?

Mr. ROBERT C. BYRD. I would hope that I could say this off the record. [Laughter.]

The PRESIDING OFFICER. Would the Senator like unanimous consent to do that?

Mr. ROBERT C. BYRD. Let me say this to the Senator sincerely. I think the Senator asked a pertinent question. If the Senate has a productive day tomorrow and is able to dispatch its business with its usual effectiveness, I would say that—

Mr. TOWER. Let us hope with better than usual effectiveness.

Mr. ROBERT C. BYRD. Well, I will say if it does it with effectiveness as usual, there is a fairly good chance that committees may be able to work on Friday without interruption.

Mr. TOWER. I think the distinguished Senator.

ADJOURNMENT TO 10 A.M.

Mr. ROBERT C. BYRD. Mr. President, if there be no further business to come before the Senate, I move, in accordance with the previous order, that the Senate stand in adjournment until the hour of 10 a.m. tomorrow.

The motion was agreed to; and at 4:40 p.m. the Senate adjourned until tomorrow, Thursday, June 13, 1974, at 10 a.m.

NOMINATIONS

Executive nominations received by the Senate June 12, 1974:

DEPARTMENT OF STATE

David E. Mark, of Maryland, a Foreign Service officer of class 1, to be Ambassador

Extraordinary and Plenipotentiary of the United States of America to the Republic of Burundi.

Robert P. Smith, of Texas, a Foreign Service officer of class 2, to be Ambassador Extraordinary and Plenipotentiary of the United States of America to Malta.

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

Philip O'Bryan Montgomery, Jr., of Texas, to be a member of the Board of Regents of the Uniformed Services University of the Health Sciences for the remainder of the term expiring May 1, 1977, vice Anthony R. Curreri, resigned.

D.C. PUBLIC SERVICE COMMISSION

H. Mason Neely, of the District of Columbia, to be a member of the Public Service Commission of the District of Columbia for a term of 3 years expiring June 30, 1977 (reappointment).

CONFIRMATIONS

Executive nominations confirmed by the Senate June 12, 1974:

DEPARTMENT OF STATE

Deane R. Hinton, of Illinois, a Foreign Service officer of class 1, to be Ambassador Extraordinary and Plenipotentiary of the United States of America to the Republic of Zaire.

William D. Wollé, of Iowa, a Foreign Service officer of class 3, to be Ambassador Extraordinary and Plenipotentiary of the United States of America to the Sultanate of Oman.

Robert P. Paganelli, of New York, a Foreign Service officer of class 1, to be Ambassador Extraordinary and Plenipotentiary of the United States of America to the State of Qatar.

Pierre R. Graham, of Illinois, a Foreign Service officer of class 2, to be Ambassador Extraordinary and Plenipotentiary of the United States of America to the Republic of Upper Volta.

Robert A. Stevenson, of New York, a Foreign Service officer of class 1, to be Ambassador Extraordinary and Plenipotentiary of the United States of America to the Republic of Malawi.

Seymour Weiss, of Maryland, to be Ambassador Extraordinary and Plenipotentiary of the United States of America to the Commonwealth of the Bahamas.

OVERSEAS PRIVATE INVESTMENT CORPORATION

The following-named persons to be members of the Board of Directors of the Overseas Private Investment Corporation for terms expiring December 17, 1976:

Gustave M. Hauser, of New York.

James A. Suffridge, of Florida.

INTERNATIONAL BANK OFFICES

William E. Simon, of New Jersey, for appointment to the offices indicated:

U.S. Governor of the International Monetary Fund for a term of 5 years and U.S. Governor of the International Bank for Reconstruction and Development for a term of 5 years;

A Governor of the Inter-American Development Bank for a term of 5 years; and

U.S. Governor of the Asian Development Bank.

U.S. ARMS CONTROL AND DISARMAMENT AGENCY

The following-named persons to be members of the General Advisory Committee of the U.S. Arms Control and Disarmament Agency:

Harold Melvin Agnew, of New Mexico.

Gordon Allott, of Colorado.

Edward Clark, of Texas.

Lane Kirkland, of Maryland.

Carl M. Marcy, of Virginia.

Joseph Martin, Jr., of California.

John A. McCone, of California.

Gerard C. Smith, of the District of Columbia.

(The above nominations were approved subject to the nominees' commitment to respond to requests to appear and testify before any duly constituted committee of the Senate.)

IN THE DIPLOMATIC AND FOREIGN SERVICE

Diplomatic and Foreign Service nominations beginning James E. Akins, to be a Foreign Service officer of class 1, and ending Annette L. Veler, to be a Foreign Service officer of class 7, which nominations were received by the Senate and appeared in the Congressional Record on May 7, 1974.

Diplomatic and Foreign Service nominations beginning William K. Payeff, to be a Foreign Service information officer of class 1, and ending E. Ashley Wills, to be a Foreign Service information officer of class 7, which nominations were received by the Senate and appeared in the Congressional Record on May 7, 1974.

EXTENSIONS OF REMARKS

PAPERWORK TYRANNY

HON. JESSE A. HELMS

OF NORTH CAROLINA

IN THE SENATE OF THE UNITED STATES

Wednesday, June 12, 1974

Mr. HELMS. Mr. President, stations WBT and WBTW of Charlotte, N.C., recently broadcast an editorial that commands our attention.

It sometimes occurs that the least conspicuous forms of government tyranny are the most obnoxious. This is certainly true of the faceless paperwork tyranny that lurks in the offices of the Federal bureaucracy.

We are all familiar, too familiar, with the subtle way in which this tyranny operates. It begins right here on the floors of Congress with well-intentioned legislators, who persuade themselves that the Federal Government needs to control

yet another aspect of American life. To maintain this control, records must be kept, orders must be dispatched, questionnaires must be answered, compliance must be secured. Anonymous forms and letters must be sent from anonymous sources to unsuspecting individuals.

The upshot of this is an unremitting flow of paper from Federal offices into the homes and businesses of America. Probably the hardest hit victims of this flood are the small businessmen, who can be observed at almost any hour of the day or night swimming in a sea of Federal forms.

Mr. President, much of this paperwork to which we subject our fellow countrymen is not only time consuming, but petty, duplicative, and silly—to say nothing of the invasions of privacy.

The Paperwork Burden Relief Act is a step in the right direction toward a return to sanity. I ask unanimous consent that the timely WBT/WBTW edi-

torial on this proposal be printed in the Extensions of Remarks.

There being no objection, the editorial was ordered to be printed in the Extensions of Remarks, as follows:

[A WBT/WBTW Editorial]

THE PAPERWORK BURDEN RELIEF ACT

If you find filling out income tax forms a wearying, time consuming task, how'd you like to have to make out equally or more complex forms every 15 days?

That, says the National Association of Public Accountants, is how often the business community has to file some federal report or other. Estimates are that these report forms add up to 10 billion sheets of paper a year and cost business \$18 billion to complete. How many more billions it costs us taxpayers for the various agencies of government to process these forms is anybody's guess. Maybe it's better we don't know.

The chore of gathering and reporting all the information required by government forms—usually under threat of fine or prosecution if you don't do it right and on time—