which, in turn, are protective of the body from further radioactivity, called hormesis, the phenomenon which they describe. We are not basing our limits here on the phenomenon of hormesis; however, it is in fact a well-documented scientific theory at this point.

In any event, the 100-millirem amount which we propose here is well within the natural variations. As I say, it is less than the change you would get just by moving to Colorado or to Wyoming. Believe me, there are no signs at the Denver airport—I was just there—that say, "Warning. Danger. You are now getting more than 100 millirems more than you would get in Washington, DC.''

Why is this so important? Because the question is, can you build a repository if you make these assumptions of drilling these drill holes down that they go down into the water table and then you have these minuscule amounts at 15 millirems? Then the assumptions you make make it unachievable. There are also other assumptions that would be very important; that is, where you assume the drill hole would be drilled. Is it through the mountain or is it where people would farm or how far away? But we do not deal with that question. But we do deal with that amount, which we believe makes this entirely safe and within the normal limits to which people are exposed.

I also point out, Mr. President, that the 100-millirem amount is the same amount which has been adopted by the Nuclear Regulatory Commission as the amount which you should limit nuclear plants to. The International Commission on Radiological Protection in 1990 recommended that the annual effective dose from practices be limited to no more than 100 millirems per year. The National Council on Radiation Protection on Measurements also adopted the 100-millirem limit. As I said, the U.S. Nuclear Regulatory Commission had 100 millirems. Indeed, the EPA in their Radiation Protection Guidance for Exposure of General Public in 1994 recommends an effective dose from all manmade sources to be no more than 100 millirems a year.

So, Mr. President, I believe it is entirely proper to set this level at that amount, and it is entirely necessary in order to get this facility built.

Mr. President, I remember when we first passed the Nuclear Waste Policy Act. At that time the act called for characterizing three different sites. Characterizing means determining the suitability of three different sites for selection of a final facility. The three sites at that time were in the State of Washington, in the State of Texas, and Yucca Mountain. The estimate of the cost of that characterization at that time was \$60 million per site, which seemed to me to be an extraordinarily expensive amount just to determine the suitability of the site.
In the ensuing years, Yucca Moun-

tain was selected legislatively as the

site to use, but the cost of characterization kept going up. By 1984, I believe it was, the cost had risen to \$1.2 billion to characterize that site. The cost has now gone, according to the latest estimate, to \$6.3 billion to characterize the Yucca Mountain site. Over \$5 billion has been spent. I must tell you, Mr. President, that a great deal of that money has been really wasted. I mean, they have gone to such incredible lengths.

There is the desert tortoise. I care about the desert tortoise. It is a threatened species. But they have environmentalists that put radio collars and have satellites checking on where the desert tortoise is going, spending millions of dollars; people, especially dedicated environmentalists, working out there on the desert tortoise. You know, when you do that across the board, with some of the other heroic things they have done, it is just incredible. What we are saying, Mr. President, is we need to get on with the business of building this facility or making a decision on what we are going to do on the facility.

People have criticized the Department of Energy for waste in this facility. I believe, Mr. President, much of the blame for these escalating costs for this tremendous waste lies right here with the Congress.

We have not been willing to learn what this whole issue is about. We have been willing to accept any scare story that anybody says, and in the process keep putting it off year after year. For the editorials and some of the criticism to say we are rushing to judgment on this issue, when we have known the solutions for years and we keep putting it off because each year is somebody's election year-this year it is a Presidential election year. Last year, one of the Senators was up for reelection. It is that way every time.

Mr. President, we have reached a crisis situation, politically, on this issue. Now pending in the D.C. Court of Appeals is litigation which seeks to declare invalid the contracts underlying whole Nuclear Waste Policy Act, the 1mill fee that is collected on nuclear plants in order to build these facilities. and it puts at risk—I think we have about a \$5 billion accumulated fund which would be at risk if the D.C. circuit is waiting to see what Congress does. Frankly, it is my guess that is exactly why they have been delaying this decision past what is their normal schedule of rendering decisions. If they are waiting for the Congress to act or to determine whether the Congress acts, and if we fail to act in Congress. then we may have a full-scale crises on our hands, because they may well declare the contracts to be invalid.

If they do that, then it is 76 sites around the country in 34 States and, in turn, we would see a real reaction from the people in 34 States that begin to realize they are being victimized as having a site for nuclear waste.

Mr. President, what we propose is a system that will work. Construction on

the interim facility would not begin until 1999. Construction on the permanent facility would not begin until considerably after that. We have high confidence Yucca Mountain will be considered suitable. If it is not, we need to determine that just as soon as possible and move on to another permanent facility.

Mr. President, what we propose in this legislation is reasonable. It is necessary. Believe me, Mr. President, it would be irresponsible to do otherwise. The problem is not going to go away. There are upwards of 40,000 metric tons of nuclear waste around the country today and additional nuclear waste is being generated each and every day. It is not a problem that goes away. It is not a problem that is being dealt with today. The interim storage facility would be much safer than keeping it on site. The permanent facility will be better still.

Mr. President, we need to get on with this process and pass this legislation. I hope the Congress will do the responsible thing, and I hope we will pass this legislation at the appropriate time.

I suggest the absence of a quorum. The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

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

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

#### **RECESS**

The PRESIDING OFFICER. Under the previous order, the Senate will now stand in recess until the hour of 2:15

Thereupon, the Senate, at 12:29 p.m., recessed until 2:14 p.m.; whereupon, the Senate reassembled when called to order by the Presiding Officer [Mr. COATS1.

### NUCLEAR WASTE POLICY ACT OF 1996-MOTION TO PROCEED

The Senate continued with the consideration of the motion to proceed.

The PRESIDING OFFICER. Who yields time?

Mr. CRAIG. Mr. President, over the course of the last good number of days, I believe the American public has grown increasingly aware of the fact that the Senate has been brought to a near halt by Senators who have made every effort to use the rules, as they are entitled to in the Senate, to not allow this Senate or this Congress to consider a very important piece of national policy. That policy rests on how we, as a country, will deal with the issue of nuclear waste.

Every other country in the world that uses nuclear energy to fuel its factories and light its lights has determined that a critical part of the whole of the use of nuclear energy is to adequately handle and manage the waste

stream that comes from it, so that their public can be aware and confident of the fact that all comes together in a total picture. Interestingly enough, most of those countries who do this use the very technology that has been developed in our country to manage their waste. Yet, in our country, that has simply not been the case. We, for whatever reason—and mostly political, and certainly not as a result of science and technology-have argued that this waste should be allowed to build up in a variety of storage facilities around the Nation at the numerous sitessome 80 sites—within 41 States.

As a result of this policy, or absence of policy, today, we are charting a course that will throw nearly a third of our electrical-generating capacity at some time in the future into jeopardy, because it will be impossible, or nearly impossible, for utilities who have been granted the permission by their public to build nuclear-generating facilities to allow those to continue to generate if they cannot manage their waste stream or be allowed to manage it within the technology available.

Senate bill 1936 is legislation that we now have before us that moves this issue. It says to the American public, and to the generating companies of our country, that we believe a sound, continuous policy in our country, by our Government, is critical for the longterm future of this generating capacity, but, beyond that, for the wise and responsible management of the waste

stream that is generated.

Through all kinds of environmental laws over the last two decades, we, as a Government and as a people, have said very clearly that certain kinds of waste or certain kinds of issuances that could result in some sort of environmental degradation are to be handled in strict, responsible ways. Yet, with the issue of nuclear energy and nuclear high-level waste, we have sim-

ply walked away from it.

In the mid-1980's, we finally said: Here is a policy and we are going to ask those who are the benefactors of the nuclear energy—the ratepayers—to pay a certain amount into the trust fund for the purpose of developing a long-term storage policy, a managed storage policy, in the sense of a deep geologic repository. Yet, because of lawsuits, because of the politics of the issue, very little has been done to keep the promise made to the ratepayers of our country and, at the same time, to make sure that at some point, whether it is the President or myself, we can turn to the American public and say that we have done the right and responsible thing.

And we as a nation all have to share in it. But we know what we are doing is sound scientifically, it is sound engineering, and we believe that S. 1936 is a reflection of that growing attitude.

As a result of that, I introduce this legislation, a bill that amends the Nuclear Waste Policy Act of 1982. S. 1936 retains the fundamental goals and

structure of the substitute which was Senate bill 1271 which we were able to report out of the Energy and Natural Resources Committee in March. However, S. 1936 contains many important clarifications and changes that deal with concerns raised regarding the details of that legislation by a number of Members of our Senate.

In addition, we took into account the provisions of H.R. 1020 introduced by our counterparts in the House Commerce Committee, and that passed the House by an overwhelming bipartisan vote a year ago. We adopted much of the language found in H.R. 1020 in order to make the bill as similar to the bill under consideration in the House as we possibly could. I have already begun discussions with House Members who are principals in the development of H.R. 1020. We think we can come to agreement very quickly on the differences between these two separate pieces of legislation.

So I would like to describe what I think are some of the important significant changes we have made. S. 1936, the bill before us that we are debating today, eliminates certain provisions contained in the legislation that came from the committee that would have eliminated the application of the National Environmental Policy Act to the intermodal transfer facility and impose a general limitation on NEPA's application to the Secretary's additions to only those NEPA requirements specified in the bill.

What am I saying? In short order, I am saying no environmental laws are shortcut. While we believe we clearly are at a time when this issue must be dealt with, we also are going to say to the American people and to the Senators who want to vote on this legislation and support us, "No environmental laws are shortcut." This will allay the concern that sufficient environmental analysis would not be done under 1271.

S. 1936 clarifies that the transportation of spent fuel shall be governed by the requirement of Federal, State, and local governments.

I know that my colleague who is now presiding in the Chair has a very real concern about transportation of this waste item. What we are saying-and what I am saying to the Presiding Officer at this moment-is that State and local communities will have full participation under the Federal law and the Federal Hazardous Waste Transportation Act of being full participants in deciding how this waste moves there with this particular jurisdiction in concert with the Federal Government.

S. 1936 also allows that the Secretary provide technical assistance to fund training of the unions, with the expertise and safety training for transportation workers. We want to make sure that what is being done right today is done right in the future, and that the American public can have the kind of satisfaction in knowing that literally thousands and thousands of shipments

of high-level nuclear waste that we have had in our country over the last number of decades with only seven accidents—none of them jeopardizing the containers in which the nuclear waste was being transported; not a one of them ever putting the public in jeopardy-is the kind of professionalism and expertise that we are going to have in the future.

In addition, S. 1936 clarifies that existing employee protection in title 40 of the United States Code only addressing the refusal to work in hazardous conditions apply to transportation under this act. It also provides that certain inspection activities will be carried out by car men and operating crews, only if they are adequately trained.

Finally, S. 1936 provides authority for the Secretary of Transportation to establish training standards as necessary for workers engaged in the transportation, storage, and disposal of spent fuel and high-level waste.

Mr. President, what is important in this legislation now in the area of transportation-and why it ought to become law now-is that we have the kind of adequate time necessary to go through what I have just talked about—effective and responsible training of those critical crews that will be managing the units of transportation that move the high-level waste to a permanent repository. If we wait another decade, if we wait until the lights in the Northeast start going out, if we wait until public pressure is so great because we are having brown outs because nuclear reactors have been shut down because the public will not allow for additional storage space on site, are we going to have the lead time, the kind of responsible, cautious time necessary to make sure that which we do is as professional as it has been in the past and it is today? My suggestion is we will not have that time. All of a sudden we will be in a panic nationwide because we failed to act responsibly, and as a result of that kind of failure we are now in a catch-up mode to handle these kinds of issues so that these reactors can stay on line so that nearly a third of our power source can continue to light the lights of our cities and our factories.

In order to ensure that the size and the scope of the interim storage facility is manageable in the context of the overall nuclear waste program, and yet adequate to address the Nation's immediate spent fuel storage needs, S. 1936 would limit the size of phase 1 of the interim storage facility to 15,000 metric tons of spent fuel and the size of phase 2 of the facility to 40,000 metric tons. Phase 2 of the facility would be expandable to 60,000 metric tons, if the Secretary fails to meet her projected goals with regard to site characterization and licensing of the permanent repository site.

In other words, if all goes well, as it should so that we honor our commitment and our promises in the law that

we are now working under and in the new legislation being proposed, basically we are talking about a facility that would never expand beyond 40,000 metric tons and would begin to reduce that size the moment the permanent geologic repository comes on line, in contrast to the legislation that we have taken from the table, S. 1271. It provided for storage of 20,000 metric tons of spent fuel in phase I and 100,000 metric tons in phase 2.

So, Mr. President, what we have done is a substantial downsizing of the interim facility that would be the primary recipient location for fuels coming in to be characterized ready to go to the permanent repository. I would like to clarify that the new volumes are clearly sufficient to allow storage

of current spent Navy fuel.

Mr. President, something that a lot of people do not realize as we debate these issues-certainly as it is true with commercial reactors—we know this legislation is largely geared to remove the spent fuel, or the nuclear high-level waste from the site of the reactor to take it to permanent repository. But what we have also done from the act of the mid-1980's which began this whole process, we have now included defense, or Federal waste. In my State of Idaho, for example, we are the recipient of every spent fuel rod that comes out of a Navy reactor; the nuclear Navy. We have been the recipient of those since the very first beginning of the Rickover nuclear Navy. As a result of us receiving them, studying them, and researching them, we have created phenomenal efficiencies and safety for the nuclear crew. But for any State that enjoys a nuclear Navy, enjoys it docked within their States, enjoys the revenue and the employees of a nuclear Navy, Idaho, my State, is the recipient of the fuel rods that come from those States. Other States also have Federal high-level nuclear waste. and we have expanded the authority of the law by these amendments to assure that the permanent repository site in Nevada at Yucca Mountain will not be just for commercial fuel but will be for Federal Government's high-level waste and Federal Government high-level waste fuel. It is important to understand that.

Unlike S. 1271, which provided for unlimited use of existing facilities at the Nevada test site for handling spent fuels at the interim facility, S. 1936 allows only the use of those facilities for emergency situations during phase 1 of the interim facility. So, in other words, we built some flexibility in there for emergency situations, but it is so designated within that 1,500-metric-ton requirement. The facility should not be needed during phase 1, and construction of new facilities will be overseen by the Nuclear Regulatory Commission for any fuel handling during phase 2 of the interim facility.

S. 1271, the old bill that came from the committee, would have set standards for release of radioactivity from the repository at a maximum annual dosage to an average member of the general public in the vicinity of Yucca Mountain at 100 millirems. There is a lot of debate about what 100 millirems of exposure is. But I would hate to tell you that you and I receive that kind of exposure on an annual basis by simply being in the city of Washington, DC. If you want to live in Denver, CO, on an annualized basis you are going to receive substantially more exposure than the 100 millirems.

What am I talking about? I am talking about a measurement of radioactivity that is so low that anyone in or around the Yucca Mountain storage facility would in no way ever find themselves at risk as a result of this exposure. Clearly, the Federal Government, under the auspices of all of the engineering and the science that is available, has every intent to build a facility that is as safe as can humanly be built and to meet international standards, national and international risk standards designed to protect public health and safety and the environment.

I said in some of my comments on the floor this morning, this ought to be called the No. 1 environmental legislation of the 104th Congress. I believe it is just that, because I think it acts in a responsible way to assure that the human environments in which we all find ourselves are never put at risk by exposure to high-level nuclear waste materials

While maintaining an initial 100-millirem standard, S. 1936 would allow the Nuclear Regulatory Commission to apply another standard, and I think this is very important for the record to show. If it finds that the standard in this legislation—let me repeat—if the Nuclear Regulatory Commission, under new science and new findings, found that what we are proposing is inadequate, then they would be allowed to advance that proposition and to deal with it in a way that would change it, modify it to bring it down to a lower standard or a different standard. In other words, we are not closing the door or turning off the lights to the idea that science advances itself, and if we find reason to believe that science would argue that 100 millirems, under the current national and international safety standards, is not adequate, then we allow the Nuclear Regulatory Commission to apply another standard.

S. 1936, the legislation before us, contains provisions, not found in S. 1271, that would grant financial and technical assistance for oversight activities and payments in lieu of taxes to the affected units of local government and Indian tribes within the State of Nevada. I know, while my colleagues from Nevada are making every argument possible to block this legislation because of the political consequences that they recognize might be the case in their State, we have also been dealing openly with local units of government in the State of Nevada. There are local units of government who believe

this is positive, from the standpoint of the economics it brings and the longterm employment, and because they have done their homework and they recognize the very real safety involved in this kind of management approach. So what I am telling you is we recognize the Indian tribes involved, and the local units of government, and the payment in lieu of taxes to their affected communities as a result of their willingness to work cooperatively with the Federal Government. S. 1936 also contains new provisions transferring certain Bureau of Land Management parcels in Nye County, NV.

In order to ensure that moneys collected for the nuclear waste fund are utilized for purposes of the nuclear waste program beginning in fiscal year 2003, S. 1936 would convert the current nuclear waste fee that is paid by electrical consumers into a user fee that is assessed based upon the level of appropriations for the year in which the fee is collected. In other words, those who are the beneficiaries of nuclear power pay for the facility and continue to pay for the facility. This has always been the understanding. We are not reaching out to taxpayers in States that are not the beneficiaries of the kind of abundance that is brought through a nuclear reactor producing power in their State; only those who are the recipients of it.

That is not to say there will not be Federal expenses. There are clearly some as it relates to the Nuclear Regulatory Commission and its management responsibility and the Department of Energy and its ongoing management responsibility. But, Mr. President, you and I both know that we, as a government, our Nation's Government, has always kept its arms around the whole of the nuclear issue. It has been something that has not been automatically farmed out in toto to the private sector.

As a result of that, I, once again, return to what I believe is a fundamental responsibility of good government and that is we have an endgame for the nuclear issue. To date, we have not decided, as a country, to do that. We can fuel our Navy ships, we can light the lights of our cities, we can protect the world by the use of the atom, we can treat sick people by the use of the atom. But when it comes to the waste product created by those kinds of activities, we said: "Go away. Not in my backyard. I am frightened of it, or my people are frightened of it." Yet, interestingly enough, there literally is not a basis for fear but the fear itself, because we know how to handle it, and science has argued that we handle it very, very well.

Section 408 of S. 1271 provided authority for the Secretary to execute emergency relief contracts with certain eligible utilities that would provide for qualified entities to ship, store, and condition spent nuclear fuel. This provision concerned some Members who feared it could be interpreted

to provide new authority for reprocessing in this country or abroad. This provision is not contained in 1936. In other words, let me repeat, any fear that could have been argued that there might be an effort to reprocess fuel, there might be an effort to expand the ability that could create proliferation in our country, is now taken out of the legislation. S. 1936 has none of those provisions within it.

S. 1271 contained a provision that stated the actions authorized by the bill would be governed only by the requirements of the Nuclear Waste Policy Act, the Atomic Energy Act, and the Hazardous Materials Transportation Act. S. 1936 eliminates this provision. Again, I recognize the concerns the chairman has expressed. We have gone directly at those concerns. Instead, we provide that for any law that is inconsistent with the provisions of the Nuclear Waste Policy Act and the Atomic Energy Act, those acts will govern. In other words, when it comes to hazardous material's transportation, we take nobody out of the loop. We short-circuit no one, and we allow local units of government and States to be direct participants.

S. 1936 further provides that any requirement of a State or local government is preempted only if complying with the State and local requirements and the Nuclear Waste Policy Act are beyond current law, and are impossible. In other words, we cannot, by this law, simply walk away from roadblocks that are intended to be put up for the purposes of blocking the road. That cannot be allowed. Certainly. under the interstate commerce clause of the Constitution, I think we all recognize that is so, understanding that we clearly are saying we want it to be the safest possible, as it is today. We want the American people to know that what we are doing is safe and responsible, and that is exactly what the act requires.

This language is consistent with the preemption authority founded on the existing Hazardous Materials Transportation Act. In other words, we have taken the law today that makes our highways safe in the use or transporting of hazardous materials and we said, "no exceptions to the rule."

S. 1936 authorizes the Secretary to take title to spent fuel at the Dairyland Power Consumers La Crosse reactor, and authorizes the Secretary to pay for the on-site storage of the fuel until DOE removes the fuel from the site under terms of the act. This is a provision that I felt was necessary to equitably address concerns in Wisconsin and Iowa. Of course, that goes back to previous Government actions that place the Government in a position of responsibility for those stored fuels.

S. 1936 contains language making a number of changes designed to improve the management of the nuclear waste program, to ensure the program is operated, to the maximum extent possible, in like manner to a private busi-

ness. I feel this will improve the overall management of the spent-fuel program

Finally, the bill contains language that addressed Senator JOHNSTON's concerns. The language in S. 1936 provides that construction will not begin on an interim storage facility at Yucca Mountain before December 31, 1998. In other words, for those who are concerned about transportation, we are giving phenomenal lead time through the year 1999 to make sure that all of the systems are in place, because the facility, to receive those shipments, could not be ready before that with construction beginning on or after December 31, 1998.

I am most pleased we have been able to work with Senator JOHNSTON. He has led on this issue for years and is clearly one of the leading authorities in this body, if not in the country, as it relates to current policy on nuclear waste and nuclear waste management, and we have worked very closely with him in assuring that this bill met a large number of his concerns.

The bill provides for the delivery of an assessment of the viability of the Yucca Mountain site to the President and to Congress by the Secretary of Energy 6 months before the construction can begin on an interim facility. In other words, we are not destroying existing law. We are simply expediting the activities that would have to start after the certification of the facility or the site at Yucca Mountain.

We are saying, in essence, get your engineering studies done, get yourself ready to go so that by 1999, construction can begin if, in fact, the site has been certificated. If, based upon the information before him, the President determines in his discretion that Yucca Mountain is not suitable—and he may find that, the studies might indicate that, for the development of the repository we are talking about—then the Secretary shall cease work on both the interim and permanent repository program at the Yucca Mountain site.

The bill further provides that if the President makes such a determination, he shall have 18 months to designate an interim storage facility site. If the President fails to designate—in other words, this is something you cannot pass go on, the clock is still ticking, the lights are still on, but they could still be dimming, Mr. President—whomever is the President at that time, they simply have the responsibility, as does the Congress, to deal with this issue in a forthright manner.

We say, if the President fails to designate a site or the site has not been approved by Congress within 2 years of its determination, the Secretary is instructed to construct an interim storage facility at the Yucca Mountain site in Nevada or at the test site 51 out in the deserts of the national test area in Nevada.

The provisions ensure that the construction of an interim storage facility

at Yucca Mountain site will not occur before the President and Congress have had ample opportunity to review the technical assessments of the suitability of the Yucca Mountain site for a permanent repository and to designate an alternative site for interim storage based upon technical information.

However, this provision also ensures that ultimately an interim storage facility site will be chosen. In other words, what we are saying, Mr. President, is "you can't pass go." At some point and in the future, in the very near future, we as a Government must act responsibly for the sake of our Nation, for the sake of our energy base and for the sake of our environment. Without the assurance, we leave open the possibility we would find in 1998 we have no interim storage, no permanent repository program, and after more than 15 years and \$6 billion spent, we are back to where we started in 1981 when we passed the first version of the Nuclear Waste Policy Act. This is within the 50 States of the Union. What we are saying is, we must find a facility to store the waste in a safe and responsible way.

Coupled with that, Mr. President, are a variety of other agreements. For example, in my State, my Governor has negotiated under a Federal court order an agreement with the Department of Energy that by certain dates at the turn of the century waste begins to leave our State. If we do not have the facility built, then the Governor has the power of the Federal courts to say, "No more shipments." In this instance, no more shipments of spent-nuclear fuel.

What happens to our nuclear Navy at that time that has no other place for repository? Does waste pile up on the docks at the refueling sites around on the east and west coasts? I doubt that happens.

Yet, at the same time, the State of Idaho and the Federal court says that if the Federal Government fails to respond and fails to react in prescription with the agreement and certainly consistent with the legislation that we are debating this afternoon, then there are no more shipments

What happens at that point? That is why we are here. That is why we are asking our colleagues to act responsibly in working with us and with the American public to assure we move legislation, law, policy and, therefore, end result, the development of an interim storage facility and a permanent repository on the timely basis that we all want to see happen.

This issue provides a clear and simple choice: We can choose to have one remote, safe, and secure nuclear waste storage facility, or, through inaction and delay, we can perpetuate the status quo and have 80 such sites spread across our Nation.

As I have said in my earlier comments, what happens when the sites fill and the public in the 80 locations say,

"We don't want additional storage at that location"? What does the State government do? What does the public utility of that State do? Do they turn to the utility involved and say, "Turn it off, shut it down"?

Twenty-five percent or so of the power capacity largely in the Northeast and Midwest is dependent upon this kind of energy production. I do not think that is what we want to happen. That is why the majority leader, when he read the facts, looked at it and saw this was a time when clearly it was important for this Congress to move, that the legislation was ready, that it stood in a bipartisan fashion that we had worked out and negotiated all of the necessary changes to make sure we were able to do this.

It is irresponsible to shirk our responsibility to protect the environment and the future of our children and our grandchildren. This Nation needs to confront nuclear waste management and the problem facing it is now. I do urge my colleagues to vote for cloture as we move down the line, as we did today, by a large number. It is time we expedite getting this to the floor for a final vote, that we work with our colleagues in the House, and that we ask our President to share with us in this national responsibility.

We have contacted the executive branch of Government time and time again over the course of the last 2 years. Chairman FRANK MURKOWSKI, chairman of the Energy and Natural Resources Committee, in four different pieces of correspondence has said, "Mr. President, if you don't agree with us, then show us what you can agree with so that we can work together to assure a responsible end to this very, very critical problem."

As a result of that, nothing. The answer back was nothing. The answer today was political. Mr. President, this is an issue that goes beyond politics. It must go to policy, it must go to action, it must go to a public that knows that this Senate and the House and the President together have acted in a responsible way to assure the effective and the appropriate management of high-level nuclear waste in our country, both commercial and Government-generated waste. S. 1936 gives us that.

After over a year and a half of compromise in building this key piece of legislation, we are now to the floor and asking our colleagues to participate with us in passing this legislation.

I see no one else on the floor at this time, so I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. CRAIG. 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. CRAIG. Mr. President, for a few moments I want to discuss the issue of transportation safety. This morning I went back to my office after there had been some debate on the floor about transportation safety in this country. I know that it is a key concern to a good many Senators, including yourself, as waste moves from across the country to a central location, as to how that waste will be handled.

I saw something that surprised even me even though I have had the privilege over the years to see some of the containers in which nuclear waste is transported. What I would like to enter into the RECORD now and show for the Senators is some of what I watched on the videotape.

Scary statements have been made by the Senators from Nevada that there would be risk. I think they were using a term that was of their invention called a mobile Chernobyl. That is a dramatic statement that absolutely has no basis of truth because we have been transporting waste for a good number of years, and simply it does not exist. I will suggest why.

As a matter of fact, there have been

As a matter of fact, there have been 2,400 shipments of spent nuclear fuel by the nuclear energy industry, and others, over the past 25 years. No fatality, no injury or environmental damage has ever occurred because of radioactive cargo. There have been accidents, yes, but the casks have performed as designed

What I saw this morning, Mr. President, in the video was exactly what happened. Here is one of the pictures. This picture is of a flatbed truck over here with one of the casks on it. And that flatbed truck went down a roadway and it struck a solid concrete wall, a 700-ton concrete wall, at 80 miles an hour. If you saw this on videotape, you can begin to understand the dramatics of it.

The truck's cab literally disappeared. This bright orange object, which is the container itself, bounced up against the concrete wall, because by then the cab of the truck had been pulverized, and it bounced back. Afterward, technicians were beginning to peel off from the face of this orange cask an object of metal. And your first reaction is, Mr. President, well, that is the cask. It was damaged. It was the cab of the truck that had literally been peeled around this object, this cask that holds the spent nuclear rods. The cask was undamaged.

Another picture is of a similar flatbed truck that is parked across a railroad crossing. Of course, this material can be transported both by truck and by rail. The naval waste that comes to Idaho is transported by rail. The truck is parked in the middle of a railroad crossing. As a result of that, a locomotive, traveling at 80 miles an hour, broadsides it. And the weight is a 120-ton locomotive. Again, the orange object itself is the cask that stores the nuclear objects. It bounces literally as after test after test

This container was originally designed to be dropped from the air. The

reason was because we anticipated aerial transportation. So all of the designs required by the Nuclear Regulatory Commission said that is what it has to do. How about dropping it from 30,000 feet, originally? Well, that is what it was designed to do. Here is a drop from 30 feet now on to an unyielding surface.

Mr. President, it is important to remember that every other surface is yielding. The ground itself is a yielding surface because when you hit it with heavy impact, it gives, it bounces, it breaks away. In this case, the surface is solid concrete. It was dropped 30 feet on to a solid concrete surface with a steel spike sticking up out of it with the intent of penetrating the container itself. What happens? The container bounces off. As a result, again, no damaging of the container.

Here is an example. It is engulfed in 1,475 degrees Fahrenheit, a fire for 30 minutes; submerged under 3 feet of water for 8 hours. All of those are part of the video test. The container, again, was never ruptured. There was no jeopardy. There was no leak of radioactiv-

The reason I bring these issues to the floor is because my colleagues keep saying, "high-risk transportation." That is why we have had over 2,400 shipments over the last several decades, Mr. President, and no one—no one—has been injured as a result of the release of radioactivity. Simply because—guess what?—our Government did it right.

Admiral Rickover did it right. The industry and the Nuclear Regulatory Commission did it right. They required that the containers that transport this high-level waste be so impenetrable that nothing could happen to them. And that is exactly what has happened. In all the tests, as in seven real-world accidents, the transportation containers retained their integrity and would have kept their radioactive material sealed safely inside. That is extremely important for the record.

Whether it is the 30-foot or the 100-foot drop, whether it is the raging locomotive at 80 miles an hour at 120 tons, whether it is the truck itself going at 80 miles an hour into a solid concrete wall, the bottom line, Mr. President, is in no instances have we had jeopardy and release of radioactivity.

I hope we are able in some way to allay the concerns that a lot of our citizens have that while this material is being transported through the countryside to a safe and permanent location, that we would not, nor would this law ever allow, nor certainly in the case of current law does it allow, our citizens to be at risk.

Transportation is an issue, and it will always be one. It is very easy to stand on the floor of the U.S. Senate and talk about a catastrophe, talk about a situation that could create a safety problem for millions of Americans. Now, Mr. President, if that situation exists, I do not know where it exists. The reason I do not know where it

exists is because this country has been in the business for well over three decades now of transporting high-level nuclear waste across the Nation, into our State of Idaho, from all points where naval vessels are refueled. We have transported it in other forms from commercial reactors to Federal facilities for purposes of tests and research, and all instances they have tracked with similar containers to these shown in the pictures, and there has never been an accident in which radioactivity is released.

Let me make sure the record is perfectly clear: There have been accidents. I understand there have been sevensome accidents out of the 2,400 shipments. Those accidents resulted in, I am sure, damage to property and probably injury to individuals, but there was no environmental injury. There was no release of radioactivity. That, of course, is the test here. That is the argument of my colleagues from the State of Nevada that somehow 50 million Americans are going to be put in jeopardy. Not so, Mr. President. It just 'ain't'' so, or we would not be here today talking about legislation. There is not a Member of the U.S. Senate who would want to or who in any knowing way would ever put any of their citizenry or those people whom they serve and represent in jeopardy.

The thing that is exciting for me to stand on the floor of the U.S. Senate after we have researched it. after we have studied and understood what the industry is about, what DOE has done, what the Navy is doing, what the Nuclear Regulatory Commission requires, is that I can stand here and believe with all of my energy that what we offer is the safest possible approach for the movement and the transportation of this waste to a permanent repository. That is the way all of these issues ought to be handled. That is what the American public deserves, a fair and honest debate and the assurance of the kind of safety that is provided now by industry, by defense, and by our Government.

This legislation in no way short-circuits any of that. In fact, we have assured that all of the environmental laws, all of the transportation laws, all of that in S. 1936, all fit together and in no way do we bypass existing law or existing protection. Those are the facts. Now, you can choose to judge them in different ways, but you cannot dispute the simple fact. The simple fact, in 2,400 shipments over the course of the last 30 years, 2,400 shipments in containers like the container I have shown you in these pictures and charts this afternoon, never once was one ruptured or jeopardized in a way that caused an environmental release that would have, had people been near it, placed them in jeopardy. Those are the facts. That is the reality of how we handle this issue.

I am pleased I have had an opportunity to be part of what is a very critical debate and a very important piece of public policy to our country. I yield the floor.

The PRESIDING OFFICER (Mr. KEMPTHORNE). The Senator from Alas-

Mr. MURKOWSKI. Mr. President. I have listened carefully to the Senator from Idaho relative to the merits of addressing once and for all the disposal of our high-level nuclear waste.

Mr. President, how much time is re-

maining on both sides?

The PRESIDING OFFICER. The Senator from Alaska has 76 minutes remaining, the Senator from Louisiana, Mr. JOHNSTON, has 22 minutes, the Senator from Nevada, Mr. REID, has 121 minutes, and the Senator from Nevada, Mr. BRYAN, has 180 minutes.

Mr. MURKOWSKI. I thank the Chair. Mr. President. I will discuss with my colleagues a number of items relative to disposition of the nuclear waste debate that is going on. The first item would be a letter dated July 15, 1996, by Mr. Panetta, Mr. Panetta, of course, is the President's right-hand man. I ask unanimous consent the letter be printed in the RECORD

There being no objection, the material was ordered to be printed in the RECORD, as follows:

> THE WHITE HOUSE. Washington, July 15, 1996.

Hon. THOMAS A. DASCHLE,

U.S. Senate.

Washington, DC.

DEAR SENATOR DASCHLE: I would like to express the Administration's position on S. 1936, a bill to create a centralized interim high-level nuclear waste storage facility in Nevada. The Administration cannot support this bill, and the President would veto it if the bill were presented to him in its present

The Administration believes it is important to continue work on a permanent geologic repository. According to the National Academy of Science, there is a world-wide scientific consensus that permanent geologic disposal is the best option for disposing of commercial and other high-level nuclear waste. This is why the Administration has emphasized cutting costs and improving the management and performance of the permanent site characterization efforts underway at Yucca Mountain, Nevada. The Department of Energy has been making significant progress in recent years and is on schedule to determine the viability of the site in 1998.

Designating the Nevada Test Site as the interim waste site, as S. 1936 effectively does, will undermine the ongoing Yucca Mountain evaluation work by siphoning away resources. Perhaps more importantly, the enactment of this bill will destroy the credibility of the Nation's nuclear waste disposal program by prejudicing the Yucca Mountain permanent repository decision. Choosing a site for an interim storage facility should be based upon objective sciencebased criteria and should not be made before the viability of the Yucca site is determined in the next two years. This viability assessment, undertaken by the Department of Energy, will be completed by 1998.

Some have alleged that we need to move spent commercial fuel rods to a central interim now. According to a recent report from the Nuclear Waste Technical Review Board (NWTRB), an independent board established by Congress, there is no technical or safety reason to move spent fuel to an interim central storage facility for the next several years. The Nuclear Regulatory Commission (NRC) has determined that current technology and methods of storing spent fuel at reactors are safe. If they were not safe, the NRC would not license these storage facilities. Also, the NWTRB assures us that adequate at-reactor storage space is, and will re-

main, available for many years.

In S. 1936, the Nevada Test Site is the default site, even if it proves to be unsuitable for the permanent repository. This is bad policy. This bill has many other problems, including those that present serious environmental concerns. The bill weakens existing environmental standards by preempting all Federal, state and local laws and applying only the environmental requirements of this bill and the Atomic Energy Act. The results of this preemption include: replacing the Environmental Protection Agency's authority to set acceptable radiation release standards with a statutory standard considerably in excess of the exposure permitted by current regulations; creating loopholes in the National Environmental Policy Act; and eliminating current licensing requirements for a

permanent repository.

I hope that you will not support S. 1936. It is an unfair, unneeded, and unworkable bill. We have the time to develop legislation and plan for an interim storage facility in a fairer and scientifically valid way while being sensitive to the concerns of all affected parties This includes those in Nevada those along the rail and roadways over which the nuclear waste will travel, and those who depend on and live near the current operating commercial nuclear power plants.

Thank you for your consideration of these views

Sincerely,

LEON E. PANETTA Chief of Staff.

Mr. MURKOWSKI. According to Mr. Panetta, the President opposes our bill since it would designate Nevada as the interim site without determining the viability of Yucca Mountain, NV, as a permanent repository.

Let me provide the White House with a little factual information. Senate bill 1936, which Senator CRAIG and I have proposed, prohibits, specifically prohibits, the construction of an interim facility in Nevada until December 31. 1998. That is after the determination of Yucca's suitability. That is as a consequence of Senator JOHNSTON's input.

The Panetta letter says that "the bill weakens existing environmental standards by preempting all Federal, State, and local laws." The facts of the matter, Senate bill 1936 does not provide NEPA waivers and other provisions in our earlier bill. Senate bill 1271. We do not permit, however, environmental laws to be misused or to have to go back and revisit decisions made by Congress in this bill, decisions such as the fact that we will have an interim facility and that will be in Nevada after the Yucca Mountain site has been shown to be viable.

Mr. President, everybody should understand the permanent repository effort continues at Yucca Mountain. The merits of Yucca Mountain to be ascertained as a permanent repository depend primarily on two issues: One is licensing; the other is suitability.

That is an issue ongoing, an issue that will be addressed. In the meantime, we have waste accumulating at more than 80-some-odd sites in 41

States. What we propose here is we have an interim facility to take that waste from those States and put it at Yucca until such time as it can be determined that Yucca meets the requirements of a permanent repository.

Now, I do not know who wrote the letter at the White House for the Chief of Staff, but I am inclined to think that person was reading the old bill, Senate bill 1271, rather than the new bill, Senate bill 1936. We attempted to address concerns by the administration and others in the new bill, Senate bill 1936, which was more or less a composite, if you will, of many of the things that people felt were wrong in Senate bill 1271. We put together what amounts to a chairman's mark or a consensus to move this bill forward.

I will provide my colleagues with a little background on our efforts to address this with this current administration. I personally worked for the past 15 months, upon achieving the chairmanship of the Energy and Natural Resources Committee, to bring the administration into a constructive, into a bipartisan dialog, to try to address responsibly this problem.

As you know, Mr. President, being from Alaska, I do not have a dog in this fight, so to speak. Alaska, while we are interested in solving the problem, does not currently have any nuclear waste and is not looking for a repository. But I have a responsibility, just as the other 99 Senators, to address what is an environmental problem for this country, and this is an opportunity to correct an environmental deficiency with some positive legislation—legislation that would move from these sites this material to one site in Nevada that has been used for over 50 years for all types of nuclear testing.

Nobody wants the waste, Mr. President. I am sympathetic to my friends from Nevada relative to the position they are in. On the other hand, it has to go somewhere. It is a simple deduction of where are you going to put it if nobody wants it? We created it in this country. The consequences of it speak for themselves: on the positive side, generating power. Also on the positive side, contributing toward a lasting peace and breaking up the Soviet Union in an arms race. These were all part of the nuclear commitment of this country.

On the downside, of course, is the waste associated with this, whether it be weapons grade or waste that comes from our nuclear reactors. We currently depend on nearly a third of our power generated to come from nuclear energy. We simply have to address it with a resolve.

On April 7, 1995, I wrote a letter. That letter was directed to our President. At that time, I was the newly elected chairman on the Committee on Energy and Natural Resources. I indicated that "one of my top priorities was to help meet this challenge facing the Nation"—I am quoting here—"in developing a safe, scientific, sound means of managing spent fuel."

Given the Department of Energy's announcement that it recently had made in that timeframe of April 1995 that it could not meet its obligations to begin accepting nuclear waste in 1998, I indicated to the President that we must address this issue in an aggressive and forthright manner.

So there we were, Mr. President, back in 1995, and the Department of Energy announced they would not have the capability of accepting the nuclear waste they had contracted for many years earlier, and they collected some nearly \$12 billion from the ratepayers of this country. They could not meet their commitments.

Now, I indicated further that "judging from the attention on this matter by the Secretary of Energy, I had assumed it was a top priority for the administration." But I indicated that the President, in recent letters the President sent to Senator BRYAN and the Nevada Governor, Governor Miller, seemed to suggest otherwise.

Further, my letter reads:

While you acknowledge, Mr. President, there are national security interests involved, your letter states that you can't support any current legislation to fix the problem at this time.

I further stated in my letter to the President:

If you cannot support current legislative proposals at this time, members of my committee, the Energy and Natural Resources Committee, would like to know how and when you plan to offer an alternative proposal.

Again, April 17, 1995, I further stated: You are no doubt aware that the environmental and security implications of failing to reach a solution in the not-too-distant future are significant. With all due respect, Mr. President, I and many members of my committee believe it is time for you to become an active participant in efforts to resolve this pressing challenge. We urge you to either support the concepts in several current legislative proposals, or to offer a plan of your own. We have already held hearings on the spent fuel programs and continue to work toward a solution. Your advice and involvement would be greatly appreciated.

Copies went to Secretary O'Leary and Senator BENNETT JOHNSTON.

So we put, if you will, the President of the United States on notice that if he did not like the proposal that we were working on, to come on up with some constructive suggestions on how to change it. He has that obligation, if he is opposed to what we are trying to address, to resolve the problem so that we can move on with our responsibility.

Well, Mr. President, the disposition of that letter of April 7, 1995 to the President was that 4 months passed and there was simply no answer from the President or the White House.

Well, not being one to give up, the Senator from Alaska, on August 7, wrote another letter to the President. I will read it as follows:

AUGUST 7, 1995.

DEAR MR. PRESIDENT: I last wrote you on the subject of managing the Nation's spent nuclear fuel on April 7, 1995. In my prior letter, I made reference to the fact that you, in a letter to Senator BRYAN, stated that you could not support any spent fuel management legislation currently before the Congress at this time. Your position raised a number of questions. One, if you cannot support any pending legislation, what can you support, Mr. President? If you will not support legislation now, when might you support it?

I wonder if it is after the election. That is an insert, I might add, and not from the letter:

If all the comprehensive spent fuel management legislation before Congress is unacceptable, will you provide us with draft legislation that is acceptable? I further refer to my letter of April 7. I challenge the administration to become an active participant in either supporting the concepts in pending legislation or by offering a comprehensive plan of its own.

I further explain in my letter to the President:

Unfortunately this has not yet occurred. In fact, neither you nor your office has ever responded to my letter.

That was my letter of April 7:

Are we to conclude that you will simply continue to remain critical of all the pending proposals without offering constructive, comprehensive alternatives? Recently, a House subcommittee marked up its legislation to address the spent fuel management problems. Floor action may yet occur in the House this year. Meanwhile, our committee continues its deliberations with industry. consumer groups, regulatory authorities, and others, with a view toward achieving a broad consensus. Even the Appropriations Committee is anxious to see some progress and is inserting provisions in their bills to promote action. Everyone seems to be working on the issue except your administration. Further, I believe that the spent fuel management problem is one that best can be solved by working in a bipartisan, collaborative manner.

Unfortunately, your administration has failed to provide meaningful guidance at this important stage in our deliberations. I would again urge you to submit comprehensive legislation to address this important problem or voice your support for concepts embodied in legislation currently before us. The courtesy of a reply would be appreciated.

I enclosed the letter of April 7 in my letter, which I read, of August 7.

Well, this time, we did get an answer, and the answer came back on August 18. That letter was signed by Alice Rivlin, Director, Executive Office of Management and Budget.

It is rather interesting to reflect on this letter which I ask unanimous consent to be printed in the RECORD along with my letter of August 7.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

U.S. SENATE, COMMITTEE ON ENERGY AND NATURAL RESOURCES, Washington, DC, August 7, 1995. Hon. WILLIAM J. CLINTON,

President of the United States, The White House, Washington, DC.

DEAR MR. PRESIDENT: I last wrote to you on the subject of managing the nation's spent civilian nuclear fuel on April 7, 1995.

In my prior letter, I made reference to the fact that you, in a letter to Senator Bryan, stated that you could not support any spent fuel management legislation currently before Congress at this time. Your position raised a number of questions:

If you cannot support any pending legislation, what can you support?

If you will not support legislation now,

when might you support it?

If all the comprehensive spent fuel management legislation before Congress is unacceptable, will you provide us with draft legis-

lation that is acceptable?

In my April 7 letter, I challenged the administration to become an active participant by either supporting the concepts in pending legislation or by offering a comprehensive plan of its own. Unfortunately, this has not yet occurred. In fact, neither you nor your office has even responded to my letter. Are we to conclude that you will simply continue to remain critical of all the pending proposals without offering constructive, comprehensive alternatives?

Recently, a House Subcommittee marked up its legislation to address the spent fuel management problem. Floor action may yet occur in the House this year. Meanwhile, our Committee continues its deliberations with industry, consumer groups, regulatory authorities and others with a view toward achieving a broad consensus. Even the Appropriations Committees, anxious to see some progress, are inserting provisions in their bills to promote action. Everyone seems to be working on this issue, Mr. President—except your administration.

I believe the spent fuel management problem is one that can best be solved by working in a bipartisan, collaborative manner. Unfortunately, the opportunity for the administration to provide meaningful guidance at this important stage in our deliberations is quickly being lost.

I again urge you to submit comprehensive legislation to address this important problem, or voice your support for concepts embodies in legislation currently before us. This courtesy of a reply would also be appreciated.

Sincerely,

Frank H. Murkowski, *Chairman.* 

EXECUTIVE OFFICE OF THE PRESI-DENT, OFFICE OF MANAGEMENT AND BUDGET,

Washington, DC, August 18, 1995. Hon. Frank H. Murkowski,

Chairman, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter to the President concerning the civilian nuclear waste program. As you know, the Administration is devoting its full efforts to complete the site characterization and other technical aspects of the permanent repository on the earliest possible schedule.

With respect to proposals that would crease an interim storage facility at Yucca Mountain, the Administration is conducting an internal policy review, as we do with all legislation in Congress. The Office of Management and Budget is leading this review, in its usual role. The Department of Energy is centrally involved, since it manages the nuclear waste program. Other agencies and offices are participating as appropriate to their programs.

We expect to be in a position to communicate an Administration policy recommendation to you by the time you return from the Labor Day recess. I apologize for the delay in responding to your letters, and look forward to providing more information very soon.

Sincerely,

ALICE M. RIVLIN,

Director.

Mr. MURKOWSKI. Mr. President, this letter does not address the question of what the administration pro-

poses as an answer if it does not like what we come up with. It simply acknowledges the two letters of the President. It indicates that:

With respect to the proposal that we create an interim storage at Yucca Mountain, the Administration is conducting an internal policy review, as we do with all legislation pending in Congress. The Office of Management and Budget is leading this review, in its usual role. The Department of Energy is centrally involved, since it manages the nuclear waste program.

All of which are self evident.

The last paragraph addresses the issue in the following way:

We expect to be in a position to communicate an Administration policy recommendation to you by the time you return from the Labor Day recess.

And Ms. Rivlin apologizes for the delay.

So here we started out in April, the first letter; August, the second letter to the President; third, we get a letter saying they are going to take it up after the recess. Time went by. Fall came. The leaves fell. Frost came. Snow came, Snow came down, Christmas passed. Then New Year's. One can only assume that the administration did not want to engage in this issue or try to solve the problem. So being somewhat consistent, on January 10, I decided I could wait no longer. So on January 10, I wrote another letter. Over the past 9 months—one can conceive a child in that timeframe.

Dear Mr. President: I have written two letters to you requesting that the Administration offer a comprehensive plan that would allow the Federal Government to meet its commitment.

What we have now is a program that has spent twelve years and \$4.2 billion of tax-payer dollars looking for a site for a permanent high-level nuclear waste repository. By 1998, the deadline for acceptance of waste by the Department of Energy . . . is at hand.

The Yucca Mountain site is not determined at this time to be licensable. We have 23 commercial power reactors that will run out of room in their spent storage pool. By 2010, the DOE's rather optimistic target date for opening a permanent repository, an additional 55 reactors will be out of space. It is estimated that continued on-site storage through 2010 would cost our Nation an additional \$5 billion.

I referred to my letters of April 7 and August 7 citing that I had received assurances from Alice Rivlin and an indication that the administration would have a response after Labor Day.

I further advised the President that I have not had that response as promised.

On December 14, Hazel O'Leary testified before the committee and indicated that she would oppose any legislation that would authorize the construction of interim storage at the Nevada test site.

I further indicated to the President that the option of status quo was not acceptable. I further indicated that, if the administration continued to reject congressional proposals, I would ask the President to offer an alternative plan that would allow the Government to fulfill its commitment to the electorate, the taxpayers of this country.

To hear some say-the minority leader-that we are somehow being rushed into this, that this is action taken on the spur of the moment, or the comments from the Washington Post in their editorial that there is no need to rush into this, this has been cooking with the administration since the administration came into office. They simply do not want to address the issue. They do not want to have to make a decision on their watch. They do not want to have to make a decision before the election. Obviously, our friends from Nevada, of the other party, may feel this is certain. This is a legitimate environmental issue of the highest nature. It is an obligation of this body to address it.

We have expended 15 years in the process. We are up against some realities that I think bear further examination. One is that there are some members of the environmental community who are opposed to the continuation of nuclear power generation in this country, even though nearly a third of our power generation is dependent on it. The States license the storage facilities. As the storage facilities begin to fill up, these companies are desperate as to what to do with the spent fuel. The fact that they have been collecting from the ratepayers over \$12 billion that has been given to the Federal Government to take that fuel in 1998 is basically incidental to these groups that oppose nuclear power generation. They see this as a way to permanently shut down the nuclear industry in the United States.

I do not think that is the answer, Mr. President. The answer is again to recognize that we have this problem today, and we have the option of storing, until a permanent repository is established, this waste in Nevada in a temporary repository.

I want to conclude my reference with regard to this correspondence because I wrote my letter in January 1996. Then in March 1996, nearly 1 year after the first letter of August 1995, or April 1995, I finally got a reply. The reply said basically the status quo was fine and that the administration opposed everything.

I ask unanimous consent that a letter be printed in the RECORD dated March 1 from Alice Rivlin.

There being no objection, the letter was ordered to be printed in the RECORD, as follows:

EXECUTIVE OFFICE OF THE PRESIDENT, OFFICE OF MANAGEMENT AND BUDGET,

Washington, DC, March 1, 1996. Hon. Frank H. Murkowski,

Chairman, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter of January 10th to the President outlining your continuing concern about the direction of the civilian nuclear waste program. He has asked that I respond on his behalf.

The Administration appreciates and shares the concern that you and many of your colleagues have expressed about the time and resources that the government has invested in the search for a suitable site for a geologic repository for spent nuclear fuel and highlevel nuclear waste. We also appreciate the concerns that you and others have raised about the costs of extended storage of spent nuclear fuel at reactor sites from the nation's commercial nuclear power plants and about the need for centralized interim storage pending completion of a permanent facility. We share your desire to resolve this complex and important issue. At the same time, as the President has stated, we are committed to doing so in a way that is objective and fair to both the citizens of Nevada and the rest of the Nation.

In response to your concerns, both my October 13th letter to leaders of the Conference Committee on the FY 1996 Energy and Water Appropriations bill and Secretary O'Leary's testimony before your committee on December 14th provide the Administration's views on how the issue should be approached. We believe that the government's long-standing commitment to geologic disposal should remain the basic goal of Federal high-level radioactive waste management policy. Significantly deferring or abandoning that commitment would jeopardize the entire waste management program, with potentially adverse consequences for ratepayers, utilities, the national energy outlook and defense policy, the cleanup of the Department of Energy's nuclear weapons complex, and international nonproliferation and environmental policy. The prospects for timely development of any necessary interim storage facilities could be particularly damaged by any potential weakening of our long-term strategy for disposal. As Idaho Governor Batt indicated in your December 14th hearing, the willingness of any State to accept interim storage is likely to be contingent upon confidence in the availability of a permanent facility. Furthermore, the technical requirements of any interim facility also will be significantly affected by the likelihood that the Yucca Mountain site ultimately will be available as the permanent repository site.

Accordingly, we strongly oppose designating an interim storage facility at a specific site at this time. We believe that any potential siting decision concerning such a facility ultimately should be based on objective criteria and informed by the likelihood of success of the Yucca Mountain repository site. Thus, we feel it is necessary to complete the scientific and other assessments that are now underway to determine the viability of the site at Yucca Mountain, Nevada, to serve as the permanent repository before considering specific options for an interim storage facility. Our current schedule anticipates completing that viability assessment in the 1998-1999 time frame. We hope that the Congress will provide resources sufficient to keep us on that schedule. Any effort expended on an interim facility in the meantime should only focus on non-site-specific design and engineering.

The accelerated progress that the nuclear waste program has made recently results from planning and management innovations begun by this Administration. As Secretary O'Leary made clear in her testimony, we agree with you that the status quo is not an option. Consistent with the principles outlined here, the Department is continuing to make strategic adjustments to maintain and improve performance within anticipated resource levels.

Thank you for your continuing commitment to a sound nuclear waste policy. We look forward to continuing to work with you

toward that end in the months and years to come.

Sincerely,

ALICE M. RIVLIN,

Director

Mr. MURKOWSKI. Mr. President, the letter is rather significant because, while it acknowledges the consequences for the ratepayers and the legitimacy of cleanup of our nuclear waste complex, it does not address anything positive relative to responding to the dilemma associated with finding a site. They strongly oppose designating an interim storage facility at a specific site at this time. It has taken them a year to say that. "We strongly oppose designating an interim storage facility at a specific site at this time."

They further believe any potential siting decision concerning such a facility should be based on objective criteria, whatever that means, and informed by the likelihood of success at the Yucca Mountain repository. In other words, they want Yucca Mountain licensed and established before you move this material. There is no indication that is going to be done before the year 2010, or thereabouts. What are we going to do in the meantime—shut down our power sources? Clearly that is not a responsible option.

So, again, Mr. President, the history on this issue shows an administration that simply has no responsibility as far as playing a role in the ultimate disposition of how we work with this waste situation. There has been nothing about working with us to solve the problem, nothing about what they would propose on the legislation to solve the problem; simply do nothing; status quo.

Mr. President, that is irresponsible. I suppose we could have given up at this point but we did not. Because I do not think any of us like a government that breaks its promises, and we have broken our promise to the ratepayers and to the industry because we are not prepared to take it to 1998. I do not agree the ratepayers need to spend an extra \$5 to \$7 billion creating 80 nuclear waste dumps all around the country when one will do. One will do in an area where we have set off nuclear devices for some 50 years. So we set off to address the problem in S. 1271, that the administration says it did not like. We incorporated in our approach suggestions by my good friend, Senator JOHN-STON, the ranking member of the Energy Committee, to await the interim repository until the viability of the permanent repository was established. We compromised. So this morning we were greeted by the letter from Leon Panetta saying the President would now veto the bill. The ridiculous part is there is no indication they have read the new bill, but they already decided

I have been begging you, Mr. President, President Clinton, to get into the game for more than a year. Thus far you simply decided to punt. Mr. President, do not punt yet. There is still

time for you to get into the game. You have a responsibility, as we do. We are in the fourth quarter now. Time is running out, but there is still time for you to help us solve the problem.

And, Mr. President, this is not an issue about the nuclear lobby. We keep hearing from the Washington Post, the Nevada Senators, the minority leader, that the bill is for the nuclear power lobby. It is not. I was going to introduce letters of support from the Governors and attorney generals to the President and to Members of Congress from Florida, Georgia, New Mexico, Vermont, North Carolina, South Carolina, Pennsylvania, Arizona, Massachusetts, Virginia, Wisconsin, Rhode Is-Arkansas, Delaware, Illinois, Iowa, Kentucky, Maryland, Michigan, Minnesota, Mississippi, Ohio and Oregon. These are 23 States. They want this problem solved at this time.

Mr. President, these letters are available to Senators through my office. I would ask unanimous consent to print these in the RECORD, but they are too voluminous.

There are numerous misstatements that have been made on the floor that I must address. I am going to take a little time now to do that, but it will not be too much time. I will be very short because I know there are other Senators who want to speak.

What is the truth about S. 1936? The misstatement has been made that S. 1936 would effectively end the work on a permanent repository and abandon the health, safety, and environmental protection our citizens deserve. This came from page S7637 of the CONGRESSIONAL RECORD of July 10.

The fact is, section 205 of S. 1936 directs that work continue on a permanent repository in Yucca Mountain. Fees being paid by American electric customers are more than adequate to pay for both the interim facility and the permanent repository program. Indeed, to help ensure a permanent repository is built and that the interim facility does not become a de facto permanent facility, as the Nevada Senators have contended, reasonable and achievable overall system performance standards are specified in the legislation

A statement that the transport cask could only survive a 30-mile-per-hour crash was made by one of the Nevada Senators this morning. It is interesting, because there has been a lot of engineering, a lot of money spent on these casks. The fact is, these casks have been tested in 83-mile-per-hour crashes. They have been tested in conditions that the Nuclear Regulatory Commission and the Sandia National Laboratory say encompass the range of accidents that can happen in the real world. At one time they were attempting to design casks that would withstand free fall from 30,000 feet, the theory being they may move some of this nuclear waste by special long-range 747 aircraft

There have been horror stories about train wrecks. Let us set the record

straight. We have been transporting nuclear waste around the world for 40 years. There have been 20,000 nuclear waste transportation movements around the world. There have been a few accidents, but there has never been a cask failure or radioactive release, because the casks have performed as designed. The transportation is safe and it will continue to be safe.

How many Members of this body are aware of the nuclear waste that moves through their State, whether it be Colorado, whether it be Indiana? It moves to Savannah, it moves to Idaho, it moves to the State of Washington, and it moves responsibly because safeguards are initiated. And this waste will move safely because safeguards will be enacted.

There are other Members I see who want recognition, so I am going to sum up by saying we must act now. One waste site, not 80 waste sites. Let us save the consumers of this country \$5 to \$7 billion that would otherwise be expended by delay. It can be safe for Nevada. It can be safe for the Nation. I grant it is a political problem. I grant nobody wants it. But I challenge that somebody has to take it, so let us put it where we have had nuclear testing for over 50 years, in the deserts of Nevada. It is not a technical, scientific problem. We have an opportunity and we have an obligation to get the job done. No more stalling. No more excuses. Let us get the administration on board. Let us do it. If we have to override a President's veto, let us do it. Because this is the environmental issue of this Congress and to defeat it is to defeat what is right for the environment. And that makes it wrong. One waste site, not 80.

I reserve the remainder of my time and ask the Chair how much time is re-

maining on our side?

The PRESIDING OFFICER (Mr. KEMPTHORNE). The Senator from Nevada [Mr. REID], has 131 minutes. The Senator from Nevada [Mr. BRYAN], 180 minutes. The Senator from Louisiana [Mr. JOHNSTON], has 22 minutes. The Senator from Alaska has 45 minutes.

Mr. MURKOWSKI. I reserve the re-

mainder of my time.

Mr. JOHNSTON. Nuclear waste legis-

lation needs to do four things.

First, it needs to provide for the storage of nuclear waste between 1998, when a quarter of the Nation's nuclear powerplants will have run out of storage space, and the date, 14 or more years distant, when the permanent repository will open and begin accepting the utilities' waste.

Second, it needs to set the existing repository program on a sounder footing by endorsing the Department of Energy's plan for completing scientific studies at the site and setting forth the licensing standards by which the repos-

itory will be judged.

Third, it needs to fill the gap in transportation planning by selecting an appropriate route to ship nuclear waste between existing railroads and Yucca Mountain.

Fourth, it needs to ensure that the program is adequately funded.

The bill before us meets all four of these tests. While it differs from the bill I introduced at the beginning of the Congress and the bill reported by the Committee on Energy and Natural Resources in March, the differences are ones I can live with.

Indeed, the pending bill makes a number of useful improvements over the committee-reported bill.

On interim storage, the new bill goes a long way to meet the administration's concerns about siting the interim storage facility at Yucca Mountain before the site has been found suitable for the repository. The bill bars construction of the interim storage facility until the tests can be completed and sets up a mechanism for the President to pick a different site if Yucca Mountain proves unsuitable. It also reduces the capacity of the interim storage facility to alleviate concerns that the interim facility might otherwise supplant the repository.

On the repository, the new bill gives the Nuclear Regulatory Commission the authority to impose tougher standards than the ones set forth in the bill. While I believe that the 100-millirem standard in the committee-reported bill was scientifically sound, the new bill gives the technical experts at the NRC the ability to set a different standard if a tougher standard is needed to protect the public health and safety.

The new bill drops a number of the more controversial provisions of the committee-reported bill, including a provision that would have permitted utilities to ship their spent fuel to Europe for reprocessing and another that would have preempted a wide range of State and Federal environmental laws.

In addition, the new bill adds a number of helpful provisions designed to give financial and technical assistance to local governments and Indian tribes affected by the program and to ensure that nuclear waste is transported safely

ly.

The new bill adds a number of other provisions that concern me.

For one, I cannot understand why the bill requires the Secretary of Transportation to issue worker-training standards for storage and disposal of nuclear waste. I do not quarrel with giving the Secretary of Transportation the power to set worker-training standards for the transportation of nuclear waste. but the Department of Transportation has no expertise in the storage and disposal of such waste. Storage and disposal are already regulated by the Nuclear Regulatory Commission, which does have the expertise. This provision creates an unnecessary and duplicative bureaucratic requirement and offers more opportunities to delay the nuclear waste program and make it more

Second, I am concerned with the new funding mechanism in section 401 of the bill. I would have retained the existing one mill per kilowatt-hour fee on nuclear electricity and have taken steps to free the funds collected from electric ratepayers for this program from existing budget caps. Instead, S. 1936 takes the course mapped out in the House bill. It ties the amount of fees collected each year after October 1, 2002 to the amount appropriated to the program in that year. While this approach may offer relief after 2002, it does nothing to address the current funding problem and it will work against the use of the funds already collected but not yet spent on the program.

Third, I am troubled by the new water rights provision in section 501. The purpose and effect of this provision are not immediately clear, but I fear that it may give the State of Nevada power it does not now possess to obstruct nuclear waste storage and disposal activities at Yucca Mountain.

Fourth, I am opposed to title VII of the bill, which exempts the nuclear waste program from the civil service laws. Since roughly 90 percent of the people working on the program are already employed by private-sector contractors, I am not convinced that depriving the remaining 10 percent of their civil service protections will dramatically improve the program's performance. I do fear that this provision sets a bad precedent and may prove counterproductive.

Finally, I am concerned by the bill's failure to authorize a rail link between existing railroads and the Yucca Mountain site. I understand the reasons for this. A rail link could cost a billion dollars or more. But the benefits of keeping nuclear waste canisters off the public highways may justify the cost. This issue deserves further consideration.

These concerns do not detract from my overall support for the bill. In the interest of passing a bill this year, I do not intend to offer amendments on these issues at this time. I would hope that consideration can be given to fixing these problems in conference.

Mr. KEMPTHORNE addressed the Chair.

The PRESIDING OFFICER (Mr. CRAIG). The Senator from Idaho.

Mr. KEMPTHORNE. Mr. President, about an hour ago a reporter came up to me outside of these Chambers and said: In light of the fact that we have yet to act on 13 appropriations bills, and the fact there is very little time remaining in this Congress, is it appropriate that you are debating this issue of nuclear waste and where it should be located and disposed of?

I responded to the reporter: In light of all that you have just said, it is long overdue. It is decades in coming, that we finally have this time on the Senate floor where we can discuss what do we do with this nuclear waste. This is not an issue as to whether or not you are pronuclear or antinuclear, because, if you turned off every nuclear powerplant today, we have hundreds of metric tons of nuclear waste sitting

throughout the United States and something has to be done with that nuclear waste.

It has been stated by a number of the speakers here today that we have 34 States that currently have commercial nuclear waste that is kept in those States. Let me also point out that, according to information provided by the Nuclear Energy Institute, there are 32 States that rely on nuclear energy for part of their electrical power. In addition, a number of reports indicate that 23 nuclear utilities will begin to run out of storage space for spent nuclear fuel in 2 years—in 2 years; and in 12 years another 55 reactors are expected to run out of storage space.

As utilities exhaust available storage space for fuel, electrical brownouts will occur as States and local utilities begin to see the Federal Government's inability to address a national problem, a problem that has been here,

again, for decades.

Mr. President, we talk about this. We use statistics and numbers. But let me just mention some of the States that rely upon nuclear power for their energy, and what percent of their energy is derived from that nuclear source: Vermont, 81.5 percent; Connecticut, 74.1 percent; Maine, 73.6; New Jersey, 69.8 percent of its energy is derived from nuclear sources; South Carolina, 60.2 percent; Illinois, 52.7 percent, well over half; New Hampshire, 52.2 percent; Virginia, 48.3 percent; Pennsylvania, 39.8 percent; Mississippi, 36.7 percent; North Carolina, 35.4 percent; Arkansas, 35.2 percent; Arizona, 32.5 percent; Minnesota, 29.9 percent; Georgia, 29.3 percent of its energy comes from nuclear; Nebraska, 28.9 percent; New York, 28.2 percent; California, 26.6 percent; Maryland, 25.6 percent; Wisconsin, 23.3 percent. The list goes on. I ask unanimous consent the entire list be printed in the

There being no objection, the material was ordered to be printed in the RECORD, as follows:

STATE ELECTRICAL GENERATION BY NUCLEAR ENERGY, 1994

Ranking by nuclear percent and State	Nuclear generation (million kWh)	Nuclear as percent of State total kWh
1. Vermont	4.316	81.5
2. Connecticut	20,260	74.1
3. Maine	6,632	73.6
4. New Jersey	22,129	69.8
5. South Carolina	44,475	60.2
6. Illinois	72.654	52.7
7. New Hampshire	6.204	52.2
8. Virginia	25,429	48.3
9. Pennsylvania	67,207	39.8
10. Mississippi	9,615	36.7
11. North Carolina	32,346	35.4
12. Arkansas	13,924	35.2
13. Arizona	23,171	32.5
14. Minnesota	12,224	29.9
15. Georgia	28,927	29.3
16. Nebraska	6,345	28.9
17. New York	29,225	28.2
18. California	33,752	26.6
19. Maryland	11,222	25.6
20. Wisconsin	11,516	23.3
21. Kansas	8,529	22.9
22. Alabama	20,480	21.5
23. Louisiana	12,357	20.7
24. Florida	26,682	18.8
25. Michigan	14,144	16.9
26. Missouri	10,006	16.3
27. Tennessee	11,932	15.9
28. Massachusetts	3,895	14.2

STATE ELECTRICAL GENERATION BY NUCLEAR ENERGY, 1994—Continued

Ranking by nuclear percent and State	Nuclear generation (million kWh)	Nuclear as percent of State total kWh
29. Iowa	4,107 28,067 10,952 6,740	12.8 11.0 8.5 8.2

Source: DOE/EIA, Electric Power Monthly, March 1995.

Mr. KEMPTHORNE. Mr. President, this demonstrates the difficulty that the States in the United States of America are facing. You have a beautiful State, the green State of Vermont; over 80 percent of its energy comes from nuclear. I think the folks in Vermont want to have a solution. I do not think Vermont wants to face brownouts from a power supply. I do not think the people of Connecticut want to face brownouts; Connecticut, which has 74.1 percent of its nuclear energy or energy coming from nuclear. You have the Governors of these

You have the Governors of these States—in the State of Florida, Lawton Chiles sent a letter to Senators GRAHAM and MACK, and he said:

Florida ratepayers have paid more than \$397.4 million into the Nuclear Waste Fund for use by the Department of Energy in managing the spent fuel from Florida's five nuclear powerplants. In spite of these continuing payments from the citizens of Florida, the DOE is still unable to meet its statutory obligations. In fact, Florida, along with numerous other State utility commissions and attorneys general, have sued the DOE over its failure to meet its legal obligations.

# Continuing:

A centralized interim storage facility is the only way the DOE will be able to meet its responsibility to begin accepting spent fuel on time, and prevent the creation of three interim storage sites in Florida.

That is from Gov. Lawton Chiles, a Democrat. This is not a partisan issue by any stretch of the imagination. In Vermont, Gov. Howard Dean states:

I am urging you to support changes in the Nuclear Waste Policy Act that would ensure that the Federal Government meets its responsibility to electricity consumers to begin accepting spent fuel from commercial powerplants in 1998. Legislation that would address this situation \* \* \* is now pending in the U.S. Senate.

That takes a look at the commercial aspect of this, the fact we have so many States that derive their power from nuclear powerplants, the fact that you have the spent fuel from those reactors that is beginning to pile up throughout the United States.

But there are other States that we categorize as "other nuclear material." What would be an example of that? A Navy shipyard. Take, again, the State of Connecticut, where they proudly build Navy's nuclear-powered submarines, truly the finest submarines built by any country in the world, the 688 nuclear class attack submarine. They will be building the *Seawolf*. But you know, Mr. President, this is a situation where they build nuclear submarines in Connecticut on behalf of the Government and on behalf of the U.S. Navy, but after some years at sea, they

then have to take the spent nuclear fuel rods from those nuclear reactors, and they have to transport those to the State of Idaho.

(Mr. MURKOWSKI assumed the chair.)

Mr. KEMPTHORNE. Mr. President, so you see, Idaho and Connecticut are really tied together in this whole thing. That is why I have had good discussions with the Senators from Connecticut. I know they have to look out for their people who derive such good economic benefit from building these naval nuclear attack submarines in their State, and I know that they realize that with that goes the responsibility of somebody has to come up with the technique to deal with these spent nuclear fuel rods. The last thing we want to do is to say, "Don't build any more of these nuclear submarines." I don't think that is what we want to say. I am sure the folks in Connecticut do not want to hear that.

We can see the dilemma for so many States. A State like Connecticut that is building the submarines but also derives 74.1 percent of their power from nuclear powerplants. This is not just one State that is saying, "Time out, we have a problem," it is the States of this Union that are saying, "Own up to the responsibility, Government of this land."

It is time for us to come up with a solution. It is time for us to realize, again, that this is not a pronuclear-antinuclear issue. Not at all. It is an issue about whether or not we are going to be responsible.

I have read some of these other letters, but there is one other letter I would like to read from a citizen from the State of Idaho who lives in Sun Valley, ID, Bernice Paige. This was written to the Secretary of Energy Hazel O'Leary:

This letter is to express my views on Federal responsibility to store spent nuclear fuel. It is incredible that the Federal Government has not only dragged its feet for the past 12 years and failed to get a repository constructed, but now they even are considering breaking their agreement with the nuclear power utilities. I urge you to proceed with construction of storage and disposal facilities to take spent fuel from nuclear utilities as soon as possible.

She goes on to say, and I conclude with this:

I have been retired for 13 years and spend many hours as a volunteer for our Nation's trails and other environmental issues. Nevertheless, I keep abreast of nuclear issues worldwide. We must not fail to provide the needed Federal fuel storage for these utilities that provide 20 percent of our electricity.

So, Mr. President, I think that sums up how many of us feel about this. It is a tough issue. We now have a piece of legislation that directs the Department of Energy to do the job it was directed to do and to build a storage facility for spent fuel. If the Senate rejects this option, we can already see the consequences: forty-one States will continue to serve as long-term storage

sites for spent nuclear fuel, and existing storage facilities for spent nuclear fuel will be used far beyond their design level.

In closing, I commend my colleague from the State of Idaho, Senator CRAIG. I also commend the chairman of the Energy and Natural Resources Committee, the Presiding Officer, Senator MURKOWSKI, the Senator from Louisiana, Senator BENNETT JOHNSTON, for their leadership for months and months, bringing us to this point, so, yes, we are finally dealing with this issue, as we should, as a responsible body, and to say to my friends from Nevada, I understand your concerns, but I think we are all in this together. We have to find a solution.

So, again, that is what this legislation is about. Mr. President, I yield the floor.

Mr. BRYAN addressed the Chair.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. BRYAN. I thank the Chair.

Mr. President, I want to begin this afternoon by trying to give a graphic example of what it is that we fear if we do not have the adequate safeguards and protections, which, in my view, and in the view of the administration and many of my colleagues, are simply not present in the legislation before us, S. 1936.

We frequently speak of nuclear waste in the abstract, as if it is something that is esoteric and scientific, and, indeed, the very description of what constitutes nuclear waste is a bit convoluted.

So I want to describe the situation that occurred in the State of the distinguished Senator from Idaho to give you an idea just how lethal and deadly this stuff is. We are not talking now just about something that is kind of distasteful, kind of unpleasant, a little bit risky, something that we do not want any mishap to occur because it would be terribly inconvenient or expensive to clean it up. We are talking about something that is life threatening, something that lasts for tens of thousands of years—tens of thousands of years.

A very tragic accident occurred in Idaho Falls in January of 1961. There were three young servicemen who were working on a reactor. Nobody contemplated that there would be a serious problem. They were adjusting some control rods. All of a sudden, the reactor went critical. The alarms were set off. All kinds of security measures were initiated. The emergency response team, such as they were, responded. The search began for the three men who had been working with the reactor. Wearing protective clothing, they entered the facility. What they found was a horrifying situation. I will just talk about one of the three because I think it makes the point.

One of the men who was missing was a gentleman by the name of McKinley. Upon looking into the building, they found that he was pinned to the ceiling by a control rod. He was dead. His body was highly contaminated with nuclear waste. The others were found saturated with highly contaminated water from the reactor. Particles of fuel had penetrated their skin resulting in large open wounds due to the blast effect. In trying to extricate these men from their entombment, everything had to be treated as if it were high-level waste because it in fact was high-level waste. So all of the protective gear had to be employed.

Even the solemn act of burying, paying last respects to a loved one involved some extraordinary procedures, because as a result of this explosion an accident; nobody wanted it to happen. Nobody thought it would happen. It had never happened before. How many times have we heard that about an accident? "It never happened before. We did not think it would occur. We never dreamed this could happen. How in the world could something like this have happened? How could we have foreseen the consequence?" So this accident that occurred in early 1961 clearly falls within that.

But the body of the deceased had itself become high-level nuclear waste. In the cemetery in which he was emplaced, it was encased in 12 inches of poured concrete and placed in 3 feet of packed Earth around it because the remains, decomposed, of that body would remain highly contaminated, dangerous, itself per se high-level nuclear waste, for all intents and purposes to the end of time, for thousands and thousands of years.

So when we talk about the dangers of nuclear waste, we are talking about some of the most dangerous stuff in the world, in the history of civilization. When we are talking about strategies to provide for its storage and ultimate disposal, it seems to me that we ought to, when in doubt, err in favor of the most stringent standards. We are not just talking about this generation. Our time here, by nuclear waste deterioration standards, is a finite period of time. We are just kind of a microspeck on that graph of timespan that it takes for high-level nuclear waste to ultimately deteriorate over tens of thousands of years.

So when we are asked, why do we fight? We fight because we believe that the health and safety, indeed the very lives, of the citizens of our State are at risk. No Member of this body, whatever his or her political affiliation may be, wherever they place themselves on the ideological scale, from liberal to conservative or in the political center, could live with himself or herself for 1 day if they did not do everything within their power to fight to protect the health and safety of the citizens of that State.

My colleague from Nevada and I have undertaken this task because we believe it is a matter of, potentially, life or death for Nevadans under this ill-conceived scheme that is embraced in \$2.1036

We have all seen our colleagues on both sides of the political aisle go to the so-called political mat to advance their State's interests. I think all of us, whether we agree or disagree with the proposition, have a good measure of respect for that. People say, "By golly, Senator X or Senator Y is a great advocate," whether it is to secure an additional appropriation for a project that is deemed worthy in that State or whether it is to protect a State from part of these ongoing series of base closures we have experienced in the recent years. We all recognize the nature of that.

But what we oppose here today is something that is totally different. This is not to secure an additional appropriation for our State for some project that is near and dear to Nevadans. This is not to prevent the closure of some base in our State. This is something, in my experience as a Member of the U.S. Senate, that is really without peer. As the lawyers would say, this is a case sui generis. I know of nothing like it—nothing like it—because what we simply try to do is to protect the health and safety of our citizens.

We believe there is a far broader issue than just the concerns that we have as Nevadans about our own citizens. We believe that there is a major policy flaw in this legislation. I believe that, as Oliver Wendell Holmes once commented, "A page of history is frequently more instructive than a volume of logic." So I think it is somewhat helpful to review a little bit of the history of this.

I remember as a youngster, in the dawn of the nuclear age, tritium had been detonated, as a matter of fact, on this very day, 51 years ago, July 16, 1945. I remember that because of the fortuitous circumstance of my own birth. Today happens to be my birth-day. So I always remember that.

In the aftermath of the success of the Manhattan Project, and what it did to accelerate the end of World War II—and let me just say, parenthetically, not related to this debate, I believe that President Truman's decision was sound. I believe that we spared the lives of hundreds of thousands of Americans and brought that tragic war to a conclusion, as we properly should have.

But in the aftermath of that, there was great excitement engendered about the future of nuclear power. What did it portend for America? I was a youngster in grade school. I acknowledged that if there be any academic strengths that I have, it would not lie in the field of science. But how well I recall, as a youngster each week we used to get, as schoolchildren in my time did, a Weekly Reader. It kind of talked about some of the things that were occurring that would transform and change the future. Because even as youngsters in grade school, we understood that we were going to be a part of that future.

In the period after World War II, technology was exploding in so many different areas. I recall distinctly that there was talk about nuclear power, too cheap to meter, that there would be some kind of a nuclear thing right outside of everyone's home and the traditional sources of energy would be relegated to the dustbin of history. I remember all of that as a kid.

This mentality, this boosterism on behalf of the industry, understandable in its initial phase because nuclear energy was the product of a military necessity in World War II, the Manhattan Project, that mentality continued long after the end of World War II. In that desire to transform nuclear energy into its civilian purpose, no thought, Mr. President, no thought was given to the byproduct, the issue that confronts this Senate on this very day and has for many years-how do we dispose of the high-level nuclear waste, the byproduct, essentially, the spent fuel rods that come from nuclear reactors?

It is interesting to note some of the things that were discussed over the years. From 1957 to 1982, various Federal agencies sought to build geologic repositories and the National Academy of Sciences was brought into it. Great debate raged as to whether it should be buried in subseabeds off the coastal shores of our country. At one point, the scientific community was quite excited after the birth of the space age, that somehow we could send this lethal, deadly stuff, put it in space. Somebody thought after a while, that may not be such a good idea because there could be an accident, and if there was an accident, this stuff would be spread all over creation. So wiser heads, cooler heads, more reasoned sober minds concluded that certainly is not a very good idea. So that was rejected.

That kind of brings us into the 1960's, when all of a sudden, Kansas, a State that has brought to this Chamber our former distinguished majority leader, that Kansas would be an ideal site. The Atomic Energy Commission, which is the historical progenitor of the Department of Energy, has kind of gone through several iterations over the years, but we are talking about the folks who would be the ancestors to the present occupant of the energy policy arm of our Federal Government, the Atomic Energy Commission said the great place for this is Kansas. They went hell for leather. Kansas was where it was going to be. Indeed, everything was moving along. It was assumed that would be a great site. All of a sudden, somebody realized when they punched bore holes into the repository areas that were being proposed, they penetrated into the aquifer. I think most of us know that the largest aquifer in America, maybe the world for all I know, is the Ogalala Aquifer. It runs, literally, from north to south, from the upper Great Plains in the United States down into the panhandle. Lo and behold, the idea of contaminating an aquifer kind of got people's attention, particularly the good folks in Kansas. Their congressional delegation got energized and they responded and said, "My God, this cannot be true. This cannot be possible." The AEC cannot be serious, having been now advised that we may contaminate an aquifer, they cannot be serious about that.

Let me say, entrenched views, bureaucratic inertia, a little bit of the pride of authorship, a scientist saying to those of us who are laymen, "We know what is best for you, let us make these decisions. We understand you all cannot begin to understand the complexity of this." The AEC, the Atomic Energy Commission, did not abandon its choice of Kansas notwithstanding this evidence

Now, if you are not from Nevada that may strike you as astonishing. Here is a public policy body, no question that there are distinguished, very capable scientists in it. One would assume they would act in a rational and responsible manner, that once presented with this kind of evidence it would be all over, and the response would be, "Ladies and gentlemen, you are right. We ought not to proceed along these lines." That did not happen, Mr. President. Only when Kansas' congressional delegation got energized and inserted a clause into the reauthorization bill which blocked further study at the Lyons, KS, site did this come to an end.

(Mr. THOMPSON assumed the chair.) Mr. BRYAN. That is the 1960's into the early 1970's.

We heard a lot about the so-called WIPP site, waste isolation pilot project. Sometime in the early 1970's, the former Governor of New Mexico invited the Atomic Energy Commission to study sites in New Mexico for a siting, locating of transuranic nuclear waste. This was at a time when the processing was still considered viable. So the interest was in handling a destination for transuranic waste, and the belief was that a salt dome formation had geologic advantages and we should place the storage there.

Over the years, that facility has been much troubled in terms of some of the scientific and technical concerns. My colleagues from that State, one a Republican and one a Democrat, have called to the attention of this body fairly recently their concerns about the levels of radiation, because it would be New Mexicans who would be affected. They did as any colleague worthy of his or her salt would do. They have made, I think, some very persuasive arguments. By and large, the body has yielded to their concerns about those standards. This is not an unfamiliar argument that one hears on the floor of the Senate.

Well, 1982 comes around. I remember that year. I was involved in a hotly contested race for Governor of my State. There was a lot of discussion about the Nuclear Waste Policy Act of 1982. We looked at it in Nevada. I must say that we had some skepticism, skepticism born on the experience that we had from an earlier era when Nevada

was chosen as the site of atmospheric nuclear tests. We embraced that with naivete, some enthusiasm, some sense of national pride because we were going to be on the cutting edge.

This time, now, I am almost ready to get into high school and I am caught up in the community sense that, wow, this is a big deal. Some of the merchants in town actually changed the name of their business to "atomic" this or "atomic" that. The distinguished occupant of the chair would be too young to recall these years, but we even had an atomic hairdo at that period of time that was somewhat of a fashion sensation of the moment. By the time I got into high school we got so enthusiastic that the cover of our high school annual Wildcat Echo had the nuclear mushroom cloud with all of the colors that are generated with that enormous heat and energy that is brought to focus. Nevadans were told. "This is absolutely safe." We were encouraged to kind of get up in the morning and share the experience in silence. We learned—even those of us not agile of mind when it comes to things that are mathematics or scientific-that speed of light travels much more rapidly than does the speed of sound, and that if we were careful and got up and watched this—as we did at 5 or 5:30 in the morning—we could see that flash in the sky, set our watch, and wait for the seismic impact. The seismic impact would hit. I mean, we had a small home, but those windows rattled and the doors shook. At that moment, we could calculate, because we knew what the speed of sound was, how far from our home ground zero was. That was kind of a little assignment we were given in school. We were told, "Do not worry about a thing, this is great."

Let me just say that the evidence is quite to the contrary. What is particularly disturbing is that there were some people who knew what the evidence was. We now know that some of those scientists that reassured the Bryan family and our neighbors that it was safe were sending their own families out of State when these tests were occurring. We all know, as responsible Members of this body, that today the Senate and the other body appropriates money each year to provide for those poor, innocent victims who were downwind, who were told, "There is not a thing to worry about," who suffer from genetic defects, who suffer from cancer, whose health may be irretrievably lost. We provide for them.

So that perspective, I think, is helpful, Mr. President, because having been told not to worry about anything, and decades later being a Member of this Chamber, where I, as well as every Member of this body, appropriate taxpayer dollars to compensate those victims downwind, we are particularly sensitive to the issue of health and safety because, as they say, we have been there. We have a little understanding.

Let me get back a little bit to the 1982 act. I looked at the act and I said,

you know, this looks like the Congress has done a pretty good job. In 1982, perhaps the rhetoric was a little lower and the institution was less polarized and Americans may have been less cynical, but, by and large, it was still pretty good sport in the early eighties to beat up on the Congress. But I said, you know, this looks pretty fair.

The general parameters of the 1982 act have been, in my view, prostituted as a result of some of the legislative changes that have been made. The 1982 act said, look, we will search America and look for the best sites for a geological repository for high-level nuclear waste. We will look at different geological formations. There was great interest in granite, which tends to be located in the northeastern part of the States. We will look at the salt dome formations that were so attractive to those who were looking for the transuranic site. We will look at a formation out in Nevada called "welded tuff." We will search the country and look for the best sites, and then we will study, or as the scientific community calls it, "characterize" each of those sites, and send that information to the President of the United States. Then the President will make his decision as to which one. It will be regionally balanced. No one part of the country will bear it all. Recognizing that States did not have the financial resources available to the Federal Government, there was an assurance that the States that were being considered would have funding from the Federal Government so they could engage their own technical people, independent and apart from the Department of Energy, as the agency had become known over the years, having changed from ERDA to the Department of Energy. That seemed pretty fair.

That was signed into law, as I recall, by then President Reagan in January 1983. I took the oath of office as Governor in January 1983. Troubled clouds were on the horizon from the very beginning. We had been assured, as a being considered, that there would be resources available to us to conduct that independent study. That was real important to us. Ours is a small State. It is very important to us. We made the request, as did other States who were being considered, and the Department of Energy stonewalled, refused, rejected, denied, ignored, cut us off

So the States that were being considered filed suit in district court. You do not have to be a Learned Hand to know that when the law specifically provides that there would be this kind of resources available and spelled out in statute that the States that were being considered had a pretty good case. We won in the district court. Then, again, we went back to the Department of Energy and we requested, we cajoled, and the answer was the same. We were ignored, denied, rejected, shut out.

So then we went to the circuit court, the higher level in the Federal system.

Again, the States that were being considered, all a part of this lawsuit, prevailed again, and still the Department of Energy objected, objected, objected. Finally, we came back to the Congress, as Governors, asking only for what was ours. We were not asking for any pork barrel projects. We were just asking for the money to be able to engage technical people so that we could be satisfied that indeed the science being conducted was untainted, fair, objective. legitimate, and that our people—if the day ever came that we might be selected as one of these three sites would be protected.

To the credit of the Congress, they directed the Department of Energy to release the money. Mr. President, that is not an auspicious beginning-not an auspicious beginning. I may have the sequence slightly out of order. But soon after that, the 1984 campaign began. Lo and behold the incumbent President began assuring the people in the southeastern part of the States that the salt dome formations, which would be looked at, were home free. You did not have to worry about that. That was nothing to be concerned with. So one began to say, wait 1 minute, somebody is "dealing seconds," as we say in Nevada. This is not a fair deal. The premise of the act was to look all over the country and make the decision based on science. Now, here in the context of a political campaign, a region is getting a pass, we are not going to look at you. I must say that that was not only unsettling, it was outrageous, absolutely outrageous.

Then all of a sudden the word was that they were not going to look at anything in the Northeast. Congressman Markey, who then chaired a subcommittee, held an oversight hearing sometime. This predates my arrival in the Congress. Lo and behold, after examining documents prepared by the Department of Energy, the internal documents revealed that they were going to abandon any consideration of a site in the northeastern part of the country where granite is situated because the political pressure would be too great. So much for sites.

Then former Secretary Harrington, in effect, unilaterally made the determination that no consideration would be given to a need for a second repository. So it was pretty clear that what we would look at is one area of the country to take it all, a repudiation of the basic premise of the act, which is that there should be regional equity, that there should be a shared responsibility, and that science and the geology of the region, not its political clout—in other words, any political operatives—should be the consideration. That went out the window.

In 1987, the so-called Screw-Nevada bill was not having a real good relationship with the Department of Energy. Our plight was tooth and nail. They were not amenable to any of our suggestions. They had their own strategy for the study process. In 1987—the original bill was to look throughout the country; look at the different regions; look at the different geology and then come up with three sites to be sent to the President. After their studies characterized the present site, all of a sudden that goes out the window; not done in an up-or-down fashion. Nobody had an opportunity to really get into the merits in terms of offering amendments. This came as part of a reconciliation. So the Screw-Nevada bill, infamous in my own State, infamous by any standard in any State, would look only at Nevada.

I frequently hear my colleagues who are great proponents of the nuclear industry—which is certainly their right—exalt their actions in the name of science. This has nothing to do with science. This has everything to do with blatant, naked political power directed against a small State with a very small delegation in the House. We happen to be the victims of that power play.

When I say people were enraged in my State, that is a polite euphemism. So much for science. So much for science. It was that action, frankly, that spurred my own interest for the first time to consider becoming a Member of this body.

It got worse. The nuclear utilities could see that Nevadans were not going to buy into anything that outrageous. No group of people in any State could accept that kind of treatment. It had nothing to do with science. It had nothing to do with merit. The risks were so great that, indeed, all of these nuclear eggs are in one basket. One kind of thinks of that old Rube Goldberg image where somehow we are going to adjust the rules because all of the expectation, all of the energy, is going to be devoted to making that site work

I will share with my colleagues one of the more outrageous things that the industry did. In September 1991, they commissioned a document called "The Nevada Initiative." Mr. President, this is a lot like the battle plan for Operation Overlord, the invasion of Normandy in 1944. The language is cast in the format of establishing a beachhead and how we can persuade Nevadans to accept this. I mean, it is absolutely outrageous and offensive. It talked about the spending of millions of dollars by the nuclear power industry to persuade Nevadans just how safe this stuff was.

I recall one of these ads quite well. We had a former media personality who kind of let us see, when he had his cup of coffee in the morning, him hold up a ceramic pellet out of the spent fuel rod as if you could replace your cream, or if you had something a little stronger in your coffee in the morning, that would be it as well. I mean, it was so absurd that it became a subject of great ridicule and humor by some of the disc jockeys on some of the Nevada

radio stations. They identify who enemies are; that is, those who are opposed. I am proud to say that my colleague and I made that list. We are in the hall of fame.

They went on to talk about how they could separate and divide us, what their campaign objectives were; in the short term, create the necessary political and public climate to allow further site characterization to proceed within the next 3 years, to build a framework for political media and public awareness. Oh, my. It was quite a document. Key audiences were developed and natural allies; correspondingly, the key opposition. They talk about the need to assemble a media team. Of particular offense to women in my State was the suggestion that the primary target will be women age 25 to 49, a group at the highest statistical potential for affecting polls, if they could be informed, be assured, moved. Media campaign will also target the industry's most sympathetic base, age 35 to 54. They spent millions. The consultants got rich. The airwaves were bombarded.

Mr. President, we are not fools. We know when they are trying to blow on by, pull the wool over our eyes. We understand that.

So the view in Nevada is, as it has been for more than a decade, we do not trust them. We do not have that great sense of confidence.

That is why I think it is so terribly important for us to have that background in mind as my colleague and I continue this discussion as we try to enlighten our colleagues.

In that document, "The Nevada Initiative," not much is said about safety; very little. That is the concern we have—safety. Everything is kind of done in the media; how we will hype this, spin this, get all of this together. I mean, it was a shocking performance, in my opinion.

Let me just mention one other thing that occurred along the road. I mentioned safety because that is our concern—health and safety.

In 1992 we had an energy bill before us. It had great bipartisan support. It was debated extensively in the Senate. Amendments were added, amendments were deleted. At no time was any amendment addressed to reducing health and safety standards at Yucca Mountain. Lo and behold, in the conference-and to those who are listening in this Chamber and who are not familiar with the legislative process, a conference occurs when the Senate version of a bill and the House version of a bill are different and they need to be reconciled. And a conference report is not amendable. So, if you can include it in the conference report, then by and large you have no opportunity to offer an amendment to strike it, to delete it, to remove it.

This was what has now become a very familiar pattern, and that is an attempt to dilute, to reduce, to lower the health and safety standards. It sought to deprive the Environmental Protec-

tion Agency, the EPA, of its independent authority and judgment as to what health and safety standards ought to be. I think that is pretty outrageous. That is pretty outrageous. We opposed it. Understandably, we had no opportunity to remove it, it was an up-ordown vote on the bill, and the National Academy of Sciences has selected to make those kinds of recommendations. I believe the proponents of this amendment thought the National Academy of Sciences would provide them with what they sought, and that was a standard that would be much lower, much easier to accomplish.

Let me just say, to the credit of the National Academy of Sciences, they did not take the bait. They did not take the bait. They recommended riskbased standards, something that the proponents of this strategy did not want. They pointed out that the international consensus, in terms of the millirem exposure rate on an annual basis from artificial sources above the natural background level should range from 5 to 30 millirems a year. I will have much more to say about that later on. They recommended protecting the most at-risk individual, and the use of the critical group for application of the standard. That is a scientific measuring standard that I must say I do not completely understand. But, to the credit of the National Academy of Sciences, that is an accepted standard. an accepted approach. And they recommended that standard apply to a period of greatest risk beyond the 10,000 years—beyond.

They further concluded that there is no scientific basis for the assumption that no human intrusion will take place.

Finally, they recommended the broadest possible public comments and participation.

Those observations are relevant because, in S. 1936, those are ignored. So, that is the history and experience that we have had, that brings us to the point we want to discuss some of the specifics of the bill and some of our concerns.

Let me begin with the premise the Nuclear Waste Technical Review Board—we have heard that referred to a lot these days. One of the things in the 1987 amendments, those that produced the ill-named "screw Nevada" bill, was a technical review board, the Nuclear Waste Technical Review Board.

I think it is important to understand the context of this. This is not something that was foisted upon this Congress by the Nevada delegation. Congress was seeking advice and guidance on this very complicated issue, and they authorized a technical review board to have some of the most eminent scientists of our time: Dr. John E. Cantlon, chairman, Michigan State University, emeritus; Dr. Clarence R. Allen, California Institute of Technology, emeritus; Mr. John W. Arendt, of John W. Arendt Associates; Dr. Gary

D. Brewer, University of Michigan; Dr. Jared L. Cahon, Yale University; Dr. Edward J. Cording, University of Illinois at Urbana-Champagne; Dr. Donald Langmuir, Colorado School of Mines, emeritus; Dr. John J. McKetta, Jr., University of Texas at Austin, emeritus; Dr. Jeffrey J. Wong, California Environmental Protection Agency; Dr. Patrick A. Domenico, Texas A&M University; Dr. Ellis D. Verink, Jr., University of Florida, emeritus; Dr. Dennis L. Price, the Virginia Polytechnic Institute, and State University.

These institutions are widely known and respected in America, as are their graduates or their employers, as the case may be. These are among the most eminent men of science. I emphasize the word "science," Mr. President, because we frequently hear invoked on the floor of the Senate: This should all be done as a matter of science; let science prevail.

May I say, our experience, from the onset of the 1982 Nuclear Waste Policy Act, is that science has always taken a back seat and politics, particularly nuclear politics and the desires of the industry, have taken the front seat. Here is what they said. It has been cited before but I think it needs to be mentioned again. After reviewing two dozen technical and nontechnical issues, the board framed this question:

Is there an urgent technical need for centralized storage of commercial spent fuel?

The answer, in language that even the layman can understand:

The Board sees no compelling technical or safety [no technical or safety] reason [none] to move spent fuel to a centralized storage facility for the next few years.

That analysis did not please the nuclear industry. They went critical themselves. So, what has occurred, I think, is interesting. It is a side bar, to some extent, to this bill. But in the bill itself, after having created this technical review board, it is interesting to note in the evolution of this piece of legislation there have been many progenitors to S. 1936. The 1987 act that created the nuclear waste technical review board established its function as follows:

The board shall evaluate the technical and scientific validity of activities undertaken by the Secretary after the date of enactment of the Nuclear Waste Policy Act of 1987, including site characterization activities and activities relating to the packaging for transportation of high-radioactive-level waste or spent fuel.

Follow with me, if you will, Mr. President and my colleagues, the progress of legislation dealing with the issue of high-level nuclear waste in this Congress. In January of 1995, S. 167 was introduced, and it did not change the scope or the responsibility of the Nuclear Waste Technical Review Board in any way.

On February 23, 1995, H.R. 1020 was introduced in the other body; no changes to the authority and the responsibility of the Nuclear Waste Technical Review Board.

September 20, 1995, H.R. 20, reported by the House Commerce Committee, unchanged in this respect.

And even as recently as September 25, 1995, S. 1271, introduced by our colleague, the senior Senator from Idaho, and which was the bill that was originally on the floor until it was superseded by S. 1936, made no change—no change.

In late March 1996, the technical review board issued its report concluding, without equivocation, without reservation, emphatically, that there is no need from a technical or safety perspective at this point to go to an interim storage.

Lo and behold, on July 9, 1996, S. 1936 springs into existence, and now we see the responsibilities of the technical re-

view board being limited.

You do not really have to be a nuclear physicist to see what is happening there. The very board that the Congress created contains some of the most distinguished, eminent scientists in America, produces a finding which the nuclear utilities do not like. They were apoplectic, because if merit were to be the controlling force of this argument, as my senior colleague, who was a distinguished trial lawyer in our State, has often said, if we could argue this case before a fair and objective jury on the merits, it is not a contest; we win overwhelmingly on the merits.

So when this distinguished board created by this Congress reaches a conclusion that is inconsistent with what the utilities want, we spank it: "You've been a bad boy. We send you to your room, and we limit your authority."

Mr. President, that is power. That is heady stuff. I can imagine every nuclear utility boardroom in America burned a little extra fuel after the results of this report, because this undermines, destroys, demolishes the argument that there is a necessity for this piece of legislation.

But that is not new. If one goes back to July 28, 1980, on the floor of the Senate, a debate occurred with respect to a piece of legislation supported and favored by the nuclear utilities that has such a familiar ring. I believe that I could quote the context of that debate, and the conclusion would be reached that is something that has been said on the floor of the U.S. Senate in just the

past few days.

Then is now. The nuclear utility industry was trying to engender a hysteria that there would be a brownout, that somehow there would be a shutdown and that parts of our country would be deprived of electrical power. In fact, it was asserted that if this piece of legislation were not enacted, that nuclear utility civilian reactors would have to close down as early as 1983 because they did not have the space or the capacity—it sounds familiar, we heard that argument on the floor today. Sixteen years ago that argument was made:

It is an urgent problem, Mr. President. It is urgent because we are running out of reac-

tor space at reactors for the storage of fuel, and if we do not build what we call away-from-reactor storage—

Another name for interim—

and begin that soon, we could begin shutting down civilian nuclear reactors in this country as soon as 1983.

Sixteen years ago, nearly two decades, almost a score of years, what have the intervening years established with respect to that claim of hysteria? Not a single nuclear reactor in America in 16 years, as those statements were made, ever closed because of lack of storage space.

Today we hear that cry again: "Reactors will have to shut down; regions of the country will be deprived of power."

The Nuclear Waste Technical Review Board makes the argument, after examining the evidence, that that is simply not true—is not true.

So I think with respect to the argument of necessity, that is that somehow we need to get this all done, this is a red herring. So if the undergirding premise is that this legislation is before us as a matter of national priority, that there is a compelling national interest, that, indeed, there is an urgency in acting, that Heaven forbid, if we do not enact it, some catastrophic thing could occur to the electrical supply power availability in America, we have heard that before. They were saying that 16 years ago, and it simply is

There is no need. Now I grant you, for the nuclear utilities, it would be Christmas in July; they would love it. That is what they have wanted for years. They have every right to make that assertion, as does any individual or company in America. But making that claim does not make it true, and making that assertion does not make it right, and the claim and the assertion is blatantly false. There is no emergency. There is no crisis. There is no necessity to act. So this whole framework of crisis, urgency before us, simply does not exist. And we ought to understand that. There is no need to take any action.

I have heard it said by my colleagues, who reach a different conclusion than I have on this issue, that this is an important environmental issue. "We must take action to protect and save the environment. This is the most important environmental issue, the most important environmental votes," words to that affect, to paraphrase, to be fair. That has been asserted by our colleagues who are making the arguments on behalf of the nuclear utilities.

Let us examine those arguments. The League of Conservation Voters, in responding earlier this year to S. 1271—it is, with respect to the overall policy in terms of how it deals with environmental issues, in my view, no different than S. 1936. We will go into that in a moment. Here is what one of the premier environmental organizations in America says. "S. 1271"—just insert S. 1936 in its place—"would severely weaken environmental standards for

nuclear waste disposal by carving loopholes in the National Environmental Policy Act and the Safe Drinking Water Act in forbidding the Environmental Protection Agency from issuing radiation standards. Centralized interim storage will be not only hazardous, but unnecessary and expensive." The League of Conservation Voters.

The League of Women Voters, expressing its opposition to S. 167, introduced by one of our colleagues earlier in the session, but essentially incorporating the same concept of interim storage with the environmental laws. in effect, being set aside when they are in conflict. "We believe that the bill's approach is wrong and that the bill creates more problems than it solves." And then the league went on to say, "We fear that the implementation of S. 167. the Johnston bill, will result in long-term, above-ground storage of highly radioactive materials in an unsafe location." They opposed the bill.

Mr. ABRAHAM assumed the Chair. Mr. BRYAN. Mr. President, the Sierra Club is another preeminent environmental organization in the country. The Sierra Club has indicated that the Nuclear Waste Policy Act of 1996, S. 1271, which is now S. 1936—a bill that threatens the health and safety of hundreds of communities nationwide-will soon come to the Senate floor. "On behalf of the Sierra Club's half-million members nationwide, I urge you to oppose it." And then the Sierra Club goes on to observe: "There is no technical basis for choosing the Nevada Test Site for an interim storage facility for highlevel nuclear waste.'

Another organization that has strongly opposed this is Public Citizen:

The Senate may soon vote on S. 1271, the Nuclear Waste Policy Act of 1996. On behalf of our Nationwide membership, I urge you to oppose this misguided bill and to support the filibusters by Senator Bryan and Senator Reid against the measure.

U.S. Public Interest Research Group: We are writing to urge your opposition to S. 1271, the Nuclear Waste Policy Act of 1996. S. 1271 is an environmental disaster and should be rejected. S. 1271 would roll back environmental protections, including most of the National Environmental Policy Act, forbidding EPA from setting radiation release standards—

It goes on to observe, "preempting all State and Federal environmental protection laws."

Friends of the Earth expresses its opposition to S. 1936:

On behalf of the thousands of Friends of the Earth members nationwide, I urge you to oppose 1271.

Citizens Action has written to express its opposition.

Greenpeace has written to express its opposition.

Also opposing this are the Citizens Awareness Network, Military Production Network, Nuclear Information Resource Service, Environmental Action Foundation, Missouri Coalition for the Environment, 20/20 Vision, Native Youth Alliance, Nuclear Waste Citizens Coalition, Prairie Island Coalition,

Safe Energy Communication Council, Nuclear Information Resource Service.

Mr. President, the point has been asserted on the floor that indeed this is a critical piece of environmental legislation. I agree. It is a disaster. It is a disaster. For a quarter of a century with, by and large, bipartisan support, a system of environmental measures has been enacted into law that has cleaned our air, improved the quality of our water, protected endangered resources in America, and that is why every national environmental organization that I am aware of has indicated its strong opposition to the bill.

So when my friends on the other side of this issue argue that this is an important environmental measure—perhaps the most important to be undertaken in this session—and that we need to enact this piece of legislation, S. 1936, because it is important for the environment, there is no evidence by any of the responsible national environmental organizations that share that conclusion. Indeed, their view is quite to the contrary, that this legislation would be a disaster.

Now, I want to take you through some of the key provisions of the bill. S. 1936, like S. 1271, emasculates a number of environmental laws. Let me call my colleagues' attention to the provisions that do this. I have heard it asserted on this floor that indeed we need to protect and retain those environmental provisions that currently are the law. S. 1936, in effect, is a rewrite of the Nuclear Waste Policy Act of 1982. If this were enacted-and I believe that it will not be, based upon the vote this morning. It is clear that there are enough votes to sustain a Presidential veto. But if it were enacted, this would rewrite the Nuclear Waste Policy Act of 1982. It is claimed that S. 1936 is an improvement over its predecessor, S. 1271, because it has been asserted that indeed we protect those environmental provisions of the law. That is not the case, Mr. President. Section 501, at page 73, makes it pretty clear. It is subtle. Give marks where marks are due to the nuclear utilities. They have crafted this very cleverly. But here is what it says:

If the requirements of any law are inconsistent with or duplicative of the requirements of the Atomic Energy Act and this Act, the secretary shall comply only with the requirements of the Atomic Energy Act and this Act in implementing the integrated management system.

Mr. President, I know the distinguished occupant of the chair is an able and distinguished scholar, and he need not have this Senator interpret the law for him, and I do not in any way denigrate his ability. But there are millions of people watching this Congress and what we are going to do. There has been, in my judgment, a drumbeat of misguided efforts on the part of the new Congress to simply roll back the protections that have been incorporated in our legislative framework for more than two decades. Twenty-five

years ago, probably two-thirds of the rivers, streams, and lakes in America were so polluted that you could not swim in them and you could not fish in them. Air pollution problems were unchecked and growing in seriousness.

It is my view that when those who write about our time of the last quarter-century, they will not write favorably about much of what has been done. But one of the great public policy achievements of the 1970's and 1980's is what we have done in the environment. Let me say, giving credit where credit is due, that a Republican President had much to do with that early environmental legislation. Richard Nixon can certainly be faulted—and this Senator does fault him for other conduct unrelated to the environment-but much of what occurred early on enjoyed his very strong support and was bipartisan.

Today we have reversed those numbers. Today it is two-thirds of the rivers and streams and lakes in America are once again fishable and swimmable. One can only recall that a television nightly talk show host had a field day when, I believe, the Cuyahoga River in Cleveland caught fire in the late 1960's it was so polluted; the river that courses by the Nation's Capital, the river that George Washington watched from his home on the banks of the Potomac, so polluted you could not swim in it. You could not fish in it. Today you can.

None of this is to suggest that those rivers or that our air has returned to a pristine condition, but it is a fair analysis and a sound conclusion that the environment today is much better for our children, and if we do not emasculate those environmental laws it will be much better for our children's children as a result of the actions taken by our predecessors in this institution in enacting those major environmental provisions.

So I must say that this Congress does not have a good track record in terms of what some, particularly in the other body, would like to do with the environmental laws.

So that is why the National Environmental Policy Act, the Federal Land Policy and Management Act, the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation and Liability Act that we know as the Superfund, the Clean Air Act, the Clean Water Act, Antiquities Act, the American Indian Religious Freedom Act, Archeological Resources Protection Act, the Endangered Species Act, the Safe Drinking Water Act, Farmland Protection Policy Act, Federal Facility Compliance Act, Fish and Wildlife Coordination Act, Federal Water Pollution Control Act, National Historic Preservation Act, Noise Control Act of 1972, Toxic Substances Control Act, Emergency Planning and Community Rightto-Know Act, and the Pollution Prevention Act of 1990, Mr. President, are part of an elaborate and comprehensive framework of environmental laws designed to protect all Americans—all Americans. They are not restricted to any region. No particular area or community is excluded. That is a right to which all Americans are entitled.

Here is what this act does. As I was sharing a moment ago, if any requirement of S. 1936 is in conflict with any one of these enactments, any one, this bill directs that they be ignored; that if there is a conflict S. 1936 prevails, wiping out the protection of a whole series of environmental laws.

That is one of the reasons the environmental community has advanced such strong opposition. This would be a major public policy disaster, and for the first time we would say in America that some of these environmental laws are not available for the protection of some Americans who happen to live in a particular region of the country.

Mr. GRAMS addressed the Chair. The PRESIDING OFFICER. The Senator from Minnesota.

Mr. REID. Who yields time?

The PRESIDING OFFICER. Who yields time?

Mr. REID. It is my understanding, having spoken with Senator MURKOW-SKI, that he wanted to yield some of his time to the Senator from Minnesota.

 $\mbox{Mr.}$  GRAMS. Senator  $\mbox{Murkowski}$  yields time.

The PRESIDING OFFICER. The Senator may proceed.

Mr. GRAMS. Mr. President, I commend the majority leader for his leadership in bringing S. 1936 to the Senate floor. I also commend my colleagues, Mr. CRAIG and Mr. MURKOWSKI, for their tireless efforts in creating a bipartisan solution to this national crisis, because S. 1936 will ensure a safe solution to the problem of nuclear waste storage for the 21st century and beyond. I believe this is the most critical piece of environmental legislation that Congress will consider this decade, if not for this century.

When our grandchildren look back at this historic debate, they should read that we fulfilled a pledge to resolve this Nation's spent nuclear fuel crisis, and we did it in an economically and environmentally friendly way.

This challenge has eluded us for nearly 15 years, but as the critical 1998 deadline rapidly approaches, Members from both sides of the aisle, from Alaska to my home State of Minnesota to Florida, have come together to devise a national solution. I firmly believe that S. 1936 represents our best hope, and today we stand ready to move ahead with this plan.

Over the last few days, we have heard from some of our colleagues that this legislation is unnecessary. Some have argued that we could leave the spent fuel at its current sites until we find a permanent place to put it. Some have argued that resolving this issue would put the taxpayers on the hook rather than those who are responsible.

But what my colleagues fail to mention in their statements is that the ratepayers are taxpayers. Every American, directly or indirectly, has benefited from nuclear power, and they are already on the hook, so to speak. After all, ratepayers nationwide have already paid over \$10 billion into the nuclear waste trust fund.

Mr. President, I have two letters regarding this point. One comes from Commissioner Kris Sanda of the Minnesota Department of Public Service, and another comes from a CEO of a Minnesota utility. I ask unanimous consent to have both printed in the RECORD immediately following the text of my full statement.

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

(See exhibit 1.)

Mr. GRAMS. Mr. President, anyone who has followed this contentious debate will agree achieving this legislative solution has been a very difficult process, but it is a process that we cannot afford to wait until after the next election to resolve.

The Department of Energy is legally bound to begin accepting spent fuel in the next few years, and yet, until this Congress, we have not identified even a temporary storage location, let alone finish suitability tests on a permanent one. And the pressure by the States for a solution continues to build.

Over 30 States across this Nation have commercial and nuclear waste that is now stored inside their borders. Unless Congress enacts a permanent solution soon, States, like my home State of Minnesota, will lose between 20 and 30 percent of their overall energy supply shortly after the turn of the century. The irony is that the ratepayers of my State have already paid \$250 million-plus to the Federal Government for the promise that the waste would be removed.

Nearly two decades later, ratepayers are no closer to getting rid of their nuclear waste than they were before the Department of Energy gave its written promise to remove it.

Mr. President, I would also like to add that that has led Minnesota's Department of Public Service Commissioner Sanda to call for the halting of the ratepayer contributions to this fund.

While this decision is pending before Minnesota's Public Utility Commission, the State of Iowa has also just begun a similar process, announcing a notice of inquiry into such an option. The movement across the Nation has begun. The failure to enact S. 1936 will have a cascading effect across the Nation, and then it will truly require a taxpayer bailout.

But S. 1936 would change that. Under S. 1936, we will put into place the mechanism to begin spent fuel removal and storage. That will happen before the end of this century. This legislation enables the Federal Government to live up to its legal obligations to the taxpayers and also to live up to its moral obligations to the citizens of this country and also to the environ-

ment. By naming an interim storage site at area 25 of the Nevada test site, this bill unties the hands of the Secretary of Energy. Since the current Secretary requested such legislative action in a hearing before the Senate Energy and Natural Resources committee last year, one would wonder why this administration remains adamantly opposed to an initiative that fully empowers the DOE to move forward with the program, and particularly since the administration claims to want a permanent solution to this environmental

This is not the first time that the administration or the DOE has dragged its feet. Last year, I met with the Secretary and members of the Civilian Waste Program to discuss Minnesota's waste problem. While the DOE appeared sympathetic to the plight of Minnesotans, they could not foresee anything near having an interim site completed prior to the year 2003 and for a cost of less than \$300 million.

Since this was significantly beyond the cost and the time projections for other private storage initiatives that were under development outside of the DOE, I introduced legislation to privatize the DOE interim storage facility. But then miraculously the DOE's own projections were nearly halved by both time and cost by the time we had the next Senate hearing.

So it is amazing how many tax dollars can be saved by the mere, simple introduction of competition into this process. That is why I was pleased to have the opportunity to work with the author of this legislation, Senator CRAIG, and the chairman of the Energy Committee to ensure the maximization of private-sector participation. Furthermore, Mr. President, I believe it also sets the stage for further privatization of the overall program.

Mr. President, there are many key elements of S. 1936 which have farreaching benefits, but I believe the greatest benefit of the bill is that it does provide a real workable and environmentally safe solution for Minnesota's and also the Nation's spent nuclear fuel.

Since I came to Congress in 1993, resolving this issue for Minnesota has been one of my highest priorities. Today we begin the process of doing just that. So on behalf of my constituents, the men and women and children of Minnesota, I want to thank the authors of S. 1936 for providing us with a reason to restore the people's faith in their Federal Government. As we put aside the politics and get down to the work ahead of us, I look forward to the remaining debate as an opportunity to also move forward resolving this most difficult crisis. I urge all of my colleagues to support S. 1936 when this body begins full consideration of the measure. Thank you, Mr. President. I yield the floor.

### Ехнівіт 1

MINNESOTA DEPARTMENT OF PUBLIC SERVICE, OFFICE OF THE COMMIS-SIONER.

ST. PAUL, MN, June 6, 1996.

Hon. ROD GRAMS,

U.S. Senate, Dirksen Senate Office Building, Washington, DC.

DEAR SENATOR GRAMS: I am writing to thank you for your support of Senate File 1271 (S.F. 1271). Passage of S.F. 1271 this session is crucial to our Nation's taxpayers/ ratepayers. Entities as diverse as the Nuclear Energy Institute and the National Association of Regulatory Utility Commissioners have calculated cost savings of five to ten billion dollars to United States taxpayers/ratepayers if S.F. 1271 becomes law. We must succeed in our effort to stop the Department of Energy and the Clinton Administration from imposing these unnecessary costs on the Nation.

I has come to my attention that opponents to S.F. 1271 have stated that since not all Americans are served by utilities that own nuclear generating stations, those citizens will not benefit from the cost savings contained in S.F. 1271. As the Commissioner of your home state's lead energy policy agency, I can assure you that argument is flat out wrong. I trust the following discussion will illustrate this point

For reliability reasons, our Nation's electrical grid is divided into several regional power pools. The Mid-Continent Power Pool (MAPP) serves our home state, North and South Dakota, Nebraska, Iowa, portions of Montana and Wisconsin, and the Canadian provinces of Manitoba an Saskatchewan. In addition to ensuring the reliable delivery of electrical energy, MAPP serves as a clearinghouse for spot and intermediate term market for energy and capacity transactions. MAPP executes transactions between electric utilities that have lower cost generation and those that have higher cost generation. Given that energy produced by Northern States Power Company's Prairie Island and Monticello nuclear plants are among the lowest cost units in the MAPP region, there are certain times of day and seasons of the year when energy from those plants is sold by NSP to other utilities in MAPP. While our records do not allow us to match the sale of energy from specific plants for resale to other utilities, energy from Prairie Island and Monticello formed part of sales made by NSP to the following utilities that serve Minnesota ratepayers in 1995:1

Cooperative Power Association; Interstate Power Company; Minnesota Power Company; Otter Tail Power Company; Missouri Basin Municipal Power Agency; United Power Association Minnkota Power Cooperative: Dairyland Power Cooperative: Southern Municipal Power Agency; City of North St. Paul;

City of Olivia;

City of Shakopee;

City of Winthrop;

City of Delano; City of Glencoe;

City of Truman;

City of New Ulm;

City of Sleepy Eye;

City of Blue Earth: and

City of East Grand Forks.

The utilities listed above have been bene-

fited from the ability to substitute lower cost purchased power from NSP. Had they used their own plants to generate their power, the energy costs would have been higher. Those higher energy costs would translate into higher rates for consumers. I should also note that the Nuclear Waste Fund's (NWF) one mil per kilowatt hour fee

<sup>&</sup>lt;sup>1</sup>This information is taken from the Northern States Power Company's 1995 Federal Energy Regulatory Commission Form 1.

is included in the price these utilities pay for power purchased from NSP. As a result, ratepayers from the utilities listed above also pay into the NWF. Consequently, it is without question that the vast majority of Minnesotans pay into the Nuclear Waste Fund via their electric rates and that all Minnesotans benefit from NSP's nuclear facilities. regardless of which utility provides their power. The same is true for electric consumers in North Dakota South Dakota Iowa and Wisconsin, as well as virtually all consumers across the country, even those whose primary utility does not use nuclear fuel to generate electricity.

Thanks again for your continued support

for S.F. 1271.

Sincerely,

KRIS SANDA, Commissioner

NORTHERN STATES POWER Co.. Minneapolis, MN, June 20, 1996.

Hon. ROD GRAMS,

U.S. Senate, Anoka, MN.

DEAR SENATOR GRAMS: I wanted to take this opportunity to applaud you for your leadership efforts to resolve the commercial spent nuclear fuel disposal issue. Your cosponsorship of S. 1271, the Nuclear Waste Policy Act of 1996 is greatly appreciated. The bill provides the right national policy solution for Minnesota and the nation as a whole. Your support will assure a healthy business climate in our state due to the low cost power Prairie Island produces efficiently and safely.

Time is of the essence to move legislation in this session of Congress. Senate action is critical prior to the July 4th recess. Recently, the Minnesota Department of Public Service (DPS) recommended that customer payments into the Nuclear Waste Fund be withheld and placed into an escrow account. Other states could follow suit. The Minnesota DPS action underscores the growing frustration among state regulators with the Administration's delays in developing an integrated nuclear waste management system. We would appreciate your help in urging prompt floor action on S. 1271.

S. 1271 recognizes the unique funding mechanism for managing the nation's commercial spent nuclear fuel. The Nuclear Waste Policy Act of 1982 created a one-tenth of a cent surcharge on electricity generated by nuclear power plants so that consumers who benefit from the electricity also would fund the nation's radioactive waste management system.

As you have correctly stated, in many cases there is no difference between the consumers of electricity and taxpayers. All consumers of electricity in the Northern States Power Company (NSP) Service Territory System, whether in the Twin Cities or Fargo, North Dakota, have contributed to the nation's radioactive waste management fund. In addition, many other Minnesota citizens are contributing to the waste program. As with other nuclear utilities, nuclear waste fund payments are internalized in NSP's wholesale and retail power salesmaking even wholesale customers (which could include cooperatives or municipal utilities) contributors to the nuclear waste fund.

Utility customers to date have committed more than \$12 billion to the nuclear waste trust fund. Not only have Minnesota consumers paid \$226 million to the fund, they also have paid about \$20 million for added on-site storage capacity at the Prairie Island nuclear power plant, and are paying for significant wind development and other costs associated with the Prairie Island legislation.

Each year, more than \$600 million from electricity consumers is paid to the U.S.

Treasury to fund the program. However, Congress appropriated only \$315 million for the Energy Department's civilian high-level waste management program in FY '96, and only \$151.6 million of this came from the Nuclear Waste Fund. The remainder comes from the Treasury to pay for defense wastes. The balance in the fund is now more than \$5.8 billion, which accrues interest each and every year.

The federal government is responsible for taking title to and managing spent nuclear fuel beginning in 1998 under provisions of the Nuclear Waste Policy Act and contracts signed with utilities who own and operate nuclear power plants. Each component of the waste management system-including the transportation-must meet rigorous Nuclear Regulatory Commission regulations to protect public health and safety.

S. 1271 does not expose taxpayers to an under funded liability. Just the opposite is true. As part of the funding profile for the program, the federal government must pay only the appropriate share for all defense-related nuclear waste that will be disposed at the repository. DOE has recently revised its estimates of the defense program's share of the program costs from 15 percent to 20 percent, and it will probably grow to at least 30 percent. This alone will likely offset any pre-

dicted ''unfunded'' shortfalls.
Furthermore, S. 1271 is directly concerned with the costs of the program. Provisions in S. 1271 are specifically designed to provide cost and schedule efficiencies that will ensure the 1.0 mill/kWhr fee, in addition to the defense contribution, will be more than adequate to fully fund this program. Studies that show the fee is not adequate are entirely based on the old DOE program which has been proven to be costly and inefficient.

However, delays will cost. It is estimated that electricity consumers will have to pay an additional \$7.7 billion for extended on-site management of spent nuclear fuel if the federal government does not develop a central storage facility by 1998, and the repository does not begin operation by 2015. Like the Nuclear Waste Fund fee, this added cost will be borne by electricity consumers, not taxpavers.

As stated, studies attempting to show that the Nuclear Waste Fund is inadequate to cover the cost of high-level radioactive waste management are based on outdated DOE program data. S. 1271 refocuses the DOE program to provide cost and schedule efficiencies that will ensure that the fee, coupled with the DOE defense payments for the program, will fully fund America's spent fuel management system.

Finally, you are aware of the continuing controversy of nuclear waste in Minnesota. Just last session, efforts were being made to further penalize NSP and its customers for storing nuclear waste at Prairie Island. The federal government's failure to keep its commitments is a direct cause of this controversy, which has only added costs to our customers' bills.

I offer you my encouragement and support to move S. 1271 to the Senate floor for action this year. Many thanks for your leadership efforts on this issue of critical national importance.

Sincerely,

JIM HOWARD.

The PRESIDING OFFICER. Who yields time?

Mr. BRYAN. I yield myself such time as I may need.

Mr. President, during the course of the debate on S. 1936, as it has resonated across this Chamber today and earlier, a contention has been advanced

that indeed S. 1936 is a much improved form of its predecessor, S. 1271, because it has been asserted that there is the full application of the National Environmental Policy Act, one of these very important pieces of legislation which earlier I had described as an essential part of the environmental protection fabric that protects all Ameri-

I invite my colleagues to read this bill, as I know they all have or will before casting their vote. Here is what it says about the National Environmental Policy Act, and particularly an environmental impact statement.

It provides for an environmental impact statement. So far so good. Then it goes on to say: But the Secretary shall not consider the need for an interim storage facility, shall not consider the time of the initial availability of the interim storage, shall not consider any alternatives to the storage of spent nuclear fuel and high-level radioactive waste, shall not consider any alternatives to the site of the facility, shall not consider any alternatives to the design of the criteria.

Mr. President, that is what an environmental impact statement is all about, to consider the range of options that may be available and to ascertain which of those may be the preferable course of action. So, for it to be contended that the National Environmental Policy Act is protected and provided for in this bill would be equivalent to asserting that the Bill of Rights is fully applicable, however, we have deleted the right of free speech, we have deleted the right of freedom of religion, we have deleted the right of bail, we have deleted the right to counsel. In effect you have nothing, you have absolutely nothing.

So that, again, Mr. President, is one of the more compelling arguments that brings every national environmental leader in America to the conclusion that enacting this piece of legislation, S. 1936, would savage the environmental protections which Americans have sought and enjoyed for more than two decades. It would, in effect, preempt State and other Federal laws, such as those depicted behind me on the chart. And it would, in effect, so restrict the Environmental Policy Act as to make those kinds of analyses almost worthless.

Let me turn to one other issue, fairly briefly, before I conclude. That is the question of standards. S. 1936, among its more astounding provisions is something that is pretty technical but something that affects the health and safety of every Nevadan. We are talking about the radioactive emissions standards. Those standards are measured, in terms of exposure, in terms of millirems. What this bill provides is for an annual dose of 100 millirems. So 100 millirems is the standard which is set under the provisions of this bill.

Now, 100 millirems—Mr. President, the Safe Drinking Water Act provides for a standard of 4 millirems. The EPA

has set that standard. For WIPP, that is a facility in New Mexico that receives or is scheduled to receive transuranic waste, that provides for a 15-millirem standard. The National Academy of Sciences, in terms of its range of exposures, recommends 10 to 30 millirems. This piece of legislation has the audacity to say that 100 millirems is the standard for those of us in Nevada. Absolutely outrageous.

We have heard earlier in this Congress from our colleagues from New Mexico, who have been concerned about the health and safety of New Mexicans. One can certainly understand that. On the 20th of June of this year, Senator DOMENICI arose and made the comment: "What is most important to us," referring to himself and his colleague, Senator BINGAMAN, "and what is most important to the people of New Mexico is that as this underground facility proceeds," referring to the WIPP facility, "to the point where it may be opened and finally be a repository, that it be subject to the Environmental Protection Agency's most strict requirements with reference to health and safety."

Let me make that point again. Senator Domenici is absolutely right. What he and his colleague were saying is that before the transuranic waste is received at the WIPP facility in New Mexico, the New Mexico Senators want to be assured, in order to protect the health and safety of their constituents, residents of the State of New Mexico, that the Environmental Protection Agency's most stringent requirements with reference to health and safety be imposed. Now, that strikes me as being very reasonable.

Throughout that particular take, the distinguished senior Senator kept emphasizing the importance of leaving those standards in place and giving the EPA the ability to make such determinations. That, I submit, is sound policy. By what standard of logic, by what reasoning process, what kind of analytical, convoluted reasoning would lead to a conclusion that that is the reasonable standard to be applied in New Mexico— that is, let the EPA set the standard—but somehow in Nevada. which is targeted for high-level nuclear waste, for us, ought to be 100 millirems? That simply makes no sense at all, none, absolutely none, and it is outrageous.

Consistent with an evolving pattern of conduct, in 1992, as I was commenting earlier in my speech today, the nuclear utilities in the energy act that was enacted that year, circuitously sought to deprive the EPA of the ability to set the standard in Nevada should it become the recipient of nuclear waste. To refresh the recollection of my colleagues, that energy bill was processed with a number of amendments both in the House and on the floor of the Senate, and not a day of hearing was held with respect to the standards for nuclear waste in Nevada.

In the conference, where an attempt is made to reconcile differences between the Senate version and the House version, a provision is inserted that did deprive the EPA of setting the standard—the very thing that Senator DOMENICI and Senator BINGAMAN, rightly, and we all agree on the floor, needed for their protection in New Mexico in the transuranic facility. Namely, to make sure that the EPA sets the most stringent standard for health and safe-

Now, under the artifice of the conferenced process, the EPA is deprived of jurisdiction. My senior colleague and I pointed that out on the floor. I believe it is fair to say that most every colleague that we talked to agreed with our provision that it was absolutely scandalous that an attempt would be made to deprive the EPA of its ability to exercise its independent judgment to fix that standard.

We were locked into a parliamentary situation that was inescapable. The energy bill contained a number of very desirable provisions totally unrelated to the Nevada situation. Because in a conference we were unable to get an amendment to delete that provision, my colleague and I fought valiantly but unsuccessfully in terms of killing that bill.

Now, I share that background because the pattern I have described, if you do not like what the scientists you have empowered to make a decision tell you, then you ignore them. That is what occurred that so angered the nuclear utilities, when they were asked, as part of the Nuclear Technical Review Board to make some judgments, and they concluded there was no crisis, no urgency, no need whatever to have interim storage at this time. That was their conclusion. That does not fit with the strategy and the desire of the nuclear utilities, so immediately, in this legislation, S. 1936, they are legislatively spanked, and their jurisdiction authority is restricted.

Now we have the National Academy of Sciences. They are inserted in place of the EPA in the 1992 Energy Act and they are instructed to come back with their own report. Mr. President, they did. In a document entitled, "Technical Bases for Yucca Mountain Standards," some of the more eminent scientists of our time:

Robert W. Fri, chair, Resources for the Future, Washington, D.C.; John F. Ahearne, Sigma Xi, the Scientific Research Society, Research Triangle Park, N.C.; Jean M. Bahr, University of Wisconsin, Madison; R. Darryl Banks, World Resources Institute, Washington, D.C.; Robert J. Budnitz, Future Resources Associates, Berkeley, CA; Sol Burstein, Wisconsin Electric Power, Milwaukee (retired); Melvin W. Carter, Georgia Institute of Technology, Atlanta (professor emeritus); Charles Fairhurst, University of Min-Charles Minneapolis: nesota. McCombie, National Cooperative for the Disposal of Radioactive Waste, Wettingen, Switzerland; Fred M. Phillips, New Mexico Institute of Mining

and Technology, Socorro; Thomas H. Pigford, University of California, Berkeley, Oakland (professor emeritus); Arthur C. Upton, New Mexico School of Medicine, Santa Fe; Chris G. Whipple, ICF Kaiser Engineers, Oakland, CA; Gilbert F. White, University of Colorado, Boulder; and Susan D. Wiltshire, JK Research Associates, Inc., Beverly, MA.

I mention those names so my colleagues and those who are listening to the debate will know there are no Nevadans. These are scientists. Here is what they said in response to the 1992 amendment that was interjected into the conference. Let me make a line-byline comparison with what we have in S. 1936. My colleagues will note it indicates S. 1271, but S. 1936 makes no change at all.

On the left side, Form of Standard, Level of Standard, Who Is To Be Protected—that is the classification. The top, NAS Recommendation, is the product of the scientists whose names I have read. On the far right would be what this piece of legislation does.

Form of standard recommended by the National Academy of Sciences is to be risk based. What does S. 1836 provide? Mr. President, 100 millirem a year, set by statute. We talked at some length about that a moment ago.

Level of standard: The National Academy says no specific recommendation, but points out internationally recognized consensus is between 5 millirem and 30 millirem a year. Let me just interject that is a standard that is rather universally acclaimed. I believe that every country that has considered that standard, and we will share the names of those countries that have nuclear power in Europe and have adopted a standard that is within that range or even less.

Who is to be protected? "Critical group"—a small, relatively homogenous group whose location and habits are representative of those expected to receive the highest doses. S. 1936 is a much more restricted standard. A person whose physiology, age, general health, agricultural practices, eating habits and social behavior represent the average for persons living in the vicinity of the site. Extremes in social behavior, eating habits or other relevant practices or characteristics shall not be considered.

Then the question goes on as to how long must a standard be met, because we are talking about something that is lethal for thousands and thousands of years. I might point out in the recorded history of civilization, no society that we are aware of has ever built or designed anything that has lasted for 10,000 years. It is a marvel to the modern world, as it certainly was to the ancient world, some of the impresarchitectural achievements sive achieved by the ancients—the pyramids, the Colossus of Rhodes, the Hanging Gardens of Babylon, the Parthenon, and many others are all architectural wonders that today even in

our sophisticated time, we marvel and admire.

But none of those have existed for 10,000 years. So how long a standard must be met is particularly significant to the health and safety of those persons who will be living in that area generations from now.

The National Academy of Sciences says, "The repository should be required to meet a standard during a period of greatest risk"—no scientific basis for limiting the time period to 10,000 years or any other value. What do we have in this piece of legislation? A thousand years.

Let me skip and go down to a couple more here. The human intrusion standard. The National Academy of Sciences said, "No scientific basis for assuming there would be no human intrusion. The performance of the repository having been intruded upon should be assessed using the same analytical methods and assumptions, including those about the biosphere and critical groups used in the assessment or performance for the undisturbed case."

What does S. 1936 direct? "The statute instructs the Nuclear Regulatory Commission to assume that human intrusion will not take place."

As to how to resolve public policy issues raised by the standard, here is the recommendation of the National Academy of Sciences: "We recommend that resolution of policy issues be done through a rulemaking process that allows opportunity for wide-ranging input from all interested parties."

You do not have to be an eminent scientist to believe that that is reasonable. That is a process that allows an opportunity for people to be heard, to express a viewpoint.

S. 1936 says, "No public comment allowed."

So, as you can see, S. 1936 evolved and is part of a pattern that ought to be patently obvious to any observer. Once again, the Congress invites a distinguished scientific group to make its recommendations, and if the recommendations are not to the liking of the nuclear utility industry and not to the liking of the industry because they impose some reasonably stringent standards to protect health and safety. we trash them, we ignore them and say, "Oops, sorry we asked. We had no idea you would tell us we had to do that to provide the very basic components of health and safety.

And so, by way of a concluding observation, before yielding to my colleague for him to continue his comments and observations, this bill, from an environmental and public health safety perspective, is an embarrassment, it is a travesty, it is a legislative abomination, it is an assault upon the health and safety and dignity of human life. It applies only to those of us in Nevada, who are targeted to receive this eyelevel nuclear waste.

By what standard of fairness, by what standard of objectivity can it be defended or justified that one small area in America be set apart, and that it be advocated that the panoply of protections provided under the environmental laws of our country should have no application to them if they in any way conflict with the nuclear utilities' desire to pursue, as embodied in S. 1936? What is the moral justification of rejecting the recommendations of an objective body of scientists, who have said, "These are the standards that we recommend, in terms of exposure, for those persons who may be living in the vicinity"? They are rejected out of hand and simply ignored.

So not only is this, from a public policy point of view, indefensible, not only does it legally deprive Nevadans of their rights and their health and protection, it is morally flawed as well, because it suggests implicitly that somehow those of us who, by birth or choice, have chosen to make our homes in Nevada should be treated separate and apart from other Americans, and our health and safety is less important than those who live in New Mexico or in other States—all with the singular goal in mind of advancing the interests of the powerful special interest lobby, which is relentless in its purpose, and that is the nuclear utility industry, as they seek to foist their nuclear waste upon those of us in Nevada.

I yield the floor.

Mr. REID. Mr. President, I yield such time as I may consume.

Mr. President, I, first of all, want to talk about what some of the people have said who support this legislation. First of all, the supporters of S. 1936 are appealing to States with nuclear powerplants or nuclear operations, implying that their well-being depends upon the passage of S. 1936. This is not true. There will be brownouts without S. 1936. They said the same thing in 1980, as my colleague from Nevada so aptly pointed out in his earlier statement.

I say before my friend leaves the floor, I consider myself well-versed on the subject of nuclear waste, and I do not often acknowledge—publicly, at least—that someone knows more about a subject than I do. But it is without question that the Senator from Nevada, my colleague, has devoted months and months of his professional career to understanding this issue, and no one in America understands the issue better than he. So I appreciate very much the statement made by my colleague.

He clearly pointed out the verbatim statement made by the former chairman of the Energy Committee, now the ranking member, that there would be brownouts in 1980. Of course, there were none. There will be no brownouts if S. 1936 does not pass. There will be no brownouts without S. 1936. If there are brownouts, it will not be as a result of not hauling nuclear waste away from the plants.

They said the same in 1980, that there would be a brownout if offsite storage was not available in 1983. Here we are,

16 years later, without offsite storage and without brownouts from the shutdown of nuclear reactors at power generation sites. There will be no end to nuclear shipbuilding without S. 1936. We know that. There will be no nuclear waste dumps in these States if this bill does not pass. The current law and DOE programs are addressing all these issues.

We are searching for a permanent repository. S. 1936 will not advance that effort but will clearly set it back. But that is what the powerful lobby wants to do. They do not want to advance it. We will have safe storage with reactor sites for decades to come. We have no crisis. There will be only positive consequences of defeating this legislation—mainly, to allow us to continue the effort to find a permanent repository.

Mr. President, the one thing that is very, very clear and has not been addressed today, even though we have raised the issue not once, not twice, but numerous times, is that a report to Congress from the Secretary of Energy on March 20 of this year by the Nuclear Waste Technical Review Board said that there is no reason to move nuclear waste from where it now exists. Scientists said this. We have not heard a proponent of S. 1936 tell us why these scientists are wrong.

Supporters of S. 1936 continue to ask what the alternative is to 1936. "If not S. 1936, then what?" "What does the President and what do the opponents of S. 1936 propose?" That is what they have said today on several occasions.

The answer is very simple: Stay the course, the current law.

I have not always agreed with the course, but let us at least have some scientific bearing. We have a program that is addressing our long-term nuclear waste needs. We have a program that is addressing our immediate nuclear waste needs. Under current law we are able to implement the DOE's program plan, and it will give us an assessment of the suitability of Yucca Mountain by 1998. That is very soon.

What else do we need? Nothing new and certainly nothing now. Certainly not S. 1936 which would end the search for a permanent repository. But these fancy executives who are writing the letters, who are going to Chambers of Commerce and, quite frankly, being deceptive in what they say to the chambers and other responsible organizations, are being deceptive because they go and they say, "Our cooling ponds are full. Don't you agree that the only thing is to move it?"

What they fail to tell them is that the scientists disagree. The scientists say leave it where it is until we get a determination as to the permanent repository.

S. 1936 is not a solution to anything. S. 1936 is the problem. It is not the solution. The fact that the current program has not completed its work and has not moved as quickly as the powerful executives want and that we do not

know the ultimate end point of this research does not mean we have to change course at this time. Independent reviews support this position. The Nuclear Waste Technical Review Board, I repeat, says keep the present course. We need not do anything more than we currently have for many years. There is no crisis. There is no need for new regulation.

We have heard referred to on a number of occasions today what the Washington Post said. The Washington Post is a newspaper that we in Washington read on occasion. I misplaced my copy. I appreciate a copy being handed to me. It is on every desk in the Chamber. The Post said today, among other things, in one sentence that sums up this whole debate:

This is too important a decision to be jammed through the latter part of Congress on the strength of the industry's fabricated claim that it faces an emergency.

This, Mr. President, is not a statement made by the Senator from Nevada but a statement made by the editorial board of one of the largest, most prominent newspapers in the United States. There is no crisis.

We have also heard people say that S. 1936 does address the problems of S. 1271, its predecessor bill. Not true. They claim that the deficiencies in S. 1271 have been corrected in S. 1936. They acknowledge that there were problems with S. 1271 and they have taken care of them. Not true.

My colleague spoke at some length about why that is a fabrication. There is new window dressing. A new paint has been put on the same old wreck of a house but under the paint you still have the very old wood that will not last long. Substantive changes simply have not been made. S. 1936 still preempts all State and local laws and essentially all Federal laws. S. 1936 undermines the objectivity of the scientific research at Yucca Mountain. The criticisms by the President of the United States of S. 1936 are just as valid as his criticisms of S. 1271. There have been no substantive changes. That is why the President last night through his Chief of Staff did not sign a letter to the minority leader outlining his objections to this disastrous law, S. 1936, until it was thoroughly reviewed by the entire staff the White House.

You do not have to take my word. You can just read the bill. For example, take page 73 of this bill entitled "General and Miscellaneous Provisions," and its subheading is "Section 501, Compliance with Other Laws."

If the requirements of any law are inconsistent with or duplicative of the requirements of \* \* \* this act, the Secretary shall comply only with the requirements of the \* \* \* act in implementing the integrated management system. Any requirement of a State or political subdivision of a State is preempted if—

And it outlines the ifs; not very broad except it just emasculates every environmental law we have passed within the last 25 years:

Complying with such requirement and a requirement of this act is impossible; or—

Listen to this dandy:

Such requirement, as applied or enforced, is an obstacle to \* \* \* this act \* \* \*

I do not know what an obstacle is, but it does not take much.

One of the things that we have not talked about that we should be talking about, Mr. President, is the NRC, Nuclear Regulatory Commission, certification requirements for spent fuel transportation. And what I want to talk about there is that the certification requirements for spent fuel transportation containers certainly are not insurance against the consequences of a remote accident. And I might add, they are certainly not insurance against any act, but the consequences of an accident will not observe the boundaries of where the accident occurs. Just because the accident might be remote is no basis for comfort. And we know, we have described where the railroads and the highways go. Fifty million people live within a mile of the highways and railroads.

Radioactive waste will burn and disburse many tens of thousands of miles before deposition and contamination of far distant territory takes place. We know by looking at what happened at Chernobyl, Olga Korbut, the great Olympian I talked about earlier today, who lived 100 miles from Chernobyl, is dying of her disease that came about as a result of this nuclear accident. Are we going to warn this at-risk population, this 50 million people along the transportation route, are we going to warn them to stay tuned to some emergency frequency just in case something unexpected happens? Chernobyl never happened until it happened. Now we are concerned of other Chernobyls. And if we do that, that is, warn the at-risk population to stay tuned, what are we going to tell them if an accident does happen? Who will help? When will they help? Who will be liable?

The term "mobile Chernobyl" has been coined for this legislation. A trainload of waste may not contain the potential for disaster that Chernobyl did, but the result will be little different for those affected by the inevitable accident. I submit that we are not prepared to implement the transportation of this hazardous materialnot today, not tomorrow. The risk is real, and we are responsible for ensuring readiness and preparation to reduce it to minimal levels of both probability and consequence. It does not make sense to double that risk by premature and unnecessary transportation to an interim storage site that has not been determined to be the final site where these materials are to be disposed.

Terrorism, vandalism and protests. Unforeseeable accidents, even of small likelihood, are intolerable in the absence of responsible capability to respond to these accidents. Accidents are only one kind of a problem we must be able to deal with. We must be capable of dealing with accidents, but it is only

one of the problems that develop. Much has been spoken recently of America's vulnerability to both domestic and foreign attacks. It really saddens me to agree that some of America's enemies today are American citizens. Misguided as they may be, enemies they certainly are. Vipers in Arizona—we have on film their little escapades, blowing up things. We had someone who was able to infiltrate that group, who heard the statements they made: Anybody who talks against them to authority, we will kill them. But that is only one of many.

The trade center in New York blown asunder, Oklahoma City—we can go all over the country and find these acts of terrorism that have taken place. But we certainly must look at our own States: Reno, Bureau of Land Management, roof blown off; IRS building, the bomb which was a dud; Carson City, Forest Service wall blown off; part of a Forest Ranger's home blown up.

So we know they are out there. There are known enemies of America and the values it promotes and stands for. Because of our constitutional rights, which are our national heritage, we cannot deny our enemies many of the same freedoms we ourselves enjoy.

Mr. President, I see the leader on the floor. I will be happy, at such time as he wants me to desist for whatever he might want to do—I will be happy to do that. All he has to do is give me the word.

Mr. LOTT. Mr. President, if the distinguished Senator is at a point where it would be appropriate?

Mr. REID. Certainly.
Mr. LOTT. Mr. President, we are in the process, now, of working with both sides to see if we cannot come up with a further agreement with regard to how we would handle the nuclear waste issue. We do have some agreements that have been worked out on the Executive Calendar and on a couple of bills. I would like to go ahead and get those done. These have been cleared with the Democratic leadership. Then, as soon as we get this other agreement finally worked out, we will take that

# MORNING BUSINESS

(During today's session of the Senate, the following morning business was transacted.)

Mr. BYRD addressed the Chair.

The PRESIDING OFFICER. The Senator from West Virginia.

### SAFE DRINKING WATER

Mr. BYRD. Mr. President, there is an old adage that, "You never miss the water until the well runs dry." I come to the Senate floor today to speak about an issue that is essential to the health and well-being of every American—safe drinking water. All life as we know it depends on the necessary element of water.

Most Americans take safe drinking water for granted. Most Americans just