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PUBLIC WORKS APPROPRIATIONS, 1965

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HEARINGS

BEFORE THE

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

EIGHTY-EIGHTH CONGRESS

SECOND SESSION

ON

H.R. 11579

MAKING APPROPRIATIONS FOR CERTAIN CIVIL FUNCTIONS ADMINISTERED BY THE DEPARTMENT OF DEFENSE, THE PANAMA CANAL, CERTAIN AGENCIES OF THE DEPARTMENT OF THE INTERIOR, THE ATOMIC ENERGY COMMISSION, THE ST. LAWRENCE SEAWAY DEVELOPMENT CORPORATION, THE TENNESSEE VALLEY AUTHORITY, AND THE DELAWARE RIVER BASIN COMMISSION, FOR THE FISCAL YEAR ENDING JUNE 30, 1965, AND FOR OTHER PURPOSES

**ATOMIC ENERGY COMMISSION
TENNESSEE VALLEY AUTHORITY**

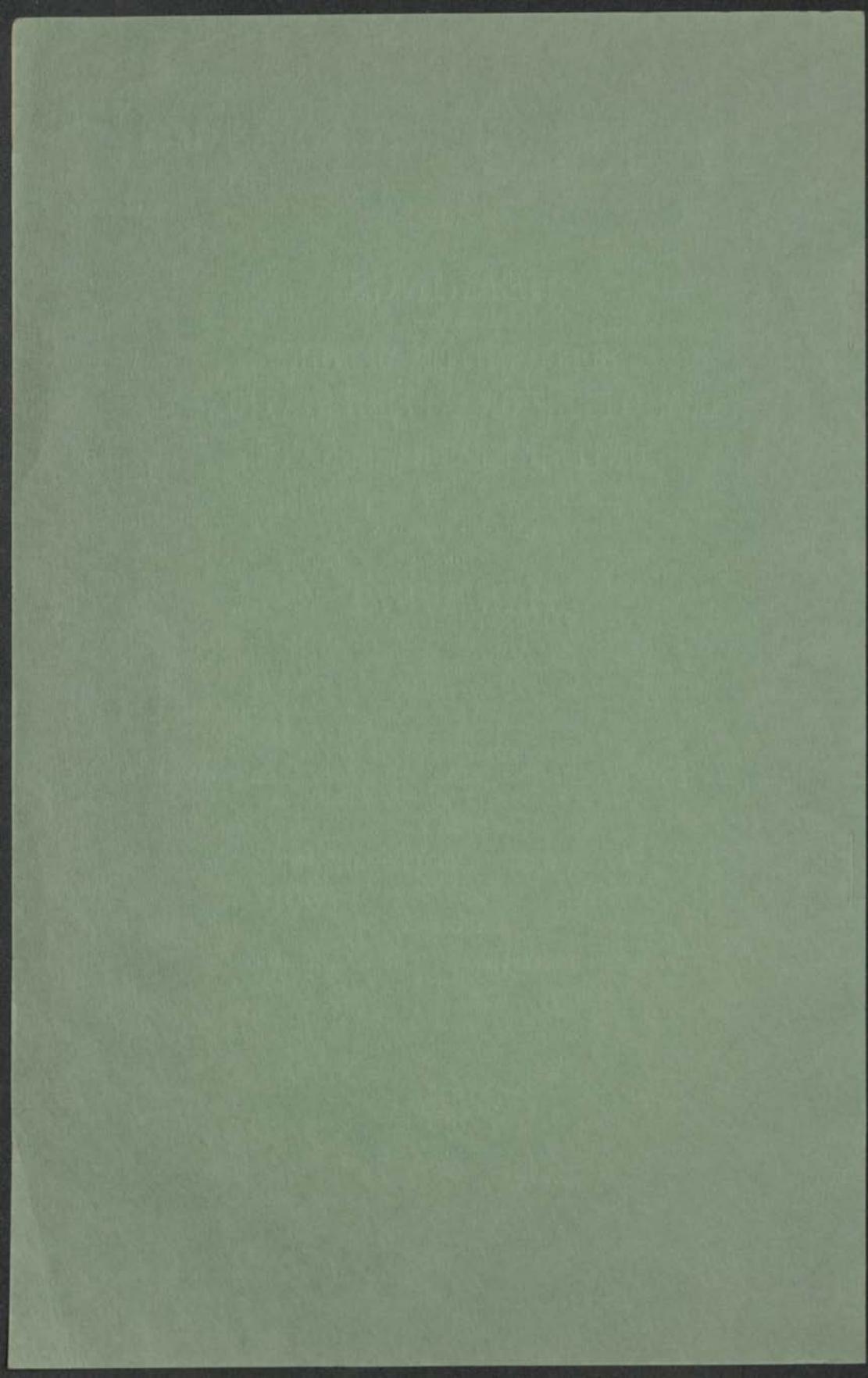
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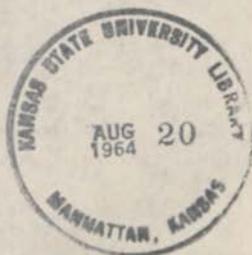
ATOMIC ENERGY COMMISSION
TENNESSEE VALLEY AUTHORITY

Printed for the use of the Committee on Appropriations.



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PUBLIC WORKS APPROPRIATIONS FOR 1965

FRIDAY, JUNE 26, 1964

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 2 p.m., pursuant to notice, in room S-128, U.S. Capitol, Hon. Lister Hill, chairman of the subcommittee, presiding.

Present: Senators Hill and Ellender.

TENNESSEE VALLEY AUTHORITY

STATEMENT OF A. J. WAGNER, CHAIRMAN, ACCOMPANIED BY A. R. JONES, VICE CHAIRMAN; FRANK E. SMITH, DIRECTOR; G. O. WESSENAUER, MANAGER OF POWER; LEWIS B. NELSON, MANAGER OF AGRICULTURAL AND CHEMICAL DEVELOPMENT; CHARLES J. McCARTHY, GENERAL COUNSEL; MARGUERITE OWEN, WASHINGTON REPRESENTATIVE; E. PHILIP ERICSON, ASSISTANT TO THE GENERAL MANAGER (BUDGET AND PLANNING); AND L. E. ELLIS, CHIEF, BUDGET STAFF.

SUMMARY OF BUDGET ESTIMATE

Senator HILL. The subcommittee will come to order.

Mr. Wagner, you may proceed any way you see fit.

We are glad to have you with us, Mr. Jones, Mr. Smith. Nice to have you gentlemen with us. A summary of your budget estimate will be placed in the record at this point.

CONSERVATION AND DEVELOPMENT OF TENNESSEE VALLEY RESOURCES

The Tennessee Valley Authority is a corporation wholly owned by the Federal Government. It is an independent agency under a Board of Directors responsible to the President and the Congress. It was created by the Congress in 1933 for the unified conservation and development of the resources of the Tennessee Valley. TVA is charged with the responsibility for developing the Tennessee River for navigation, flood control, and the generation of electric power; for chemical research, the introduction of experimental fertilizers useful in agriculture, and production of related materials needed for national defense; and for encouraging, in the national interest, the comprehensive resource development and economic growth of the Tennessee Valley region in cooperation with the States and their subdivisions and agencies.

A comparative summary of the budget program described on the following pages is shown below:

	1963 actual	1964 estimate	1965 estimate
Appropriations (new obligational authority)-----	\$35,071,000	\$47,142,000	\$50,915,000
Expenditures (accrued):			
Appropriations-----	33,177,300	51,146,738	53,262,000
Power proceeds and borrowings-----	272,990,937	309,039,000	319,437,000
Nonpower proceeds-----	28,252,318	28,183,000	25,384,000
Total, budget-----	334,420,555	388,368,738	398,083,000
Payments to the Treasury-----	48,874,543	50,206,000	52,200,000

Summary of 1965 budget financed from appropriations:

Continuing construction of Nickajack Dam and Reservoir near Chattanooga, Tenn. (p. 42)-----	\$9,800,000
Beginning design of multipurpose water control system for Bear Creek, Ala., and Miss. (p. 44)-----	215,000
Continuing construction of the Beech River multipurpose water control system, Tennessee (p. 47)-----	3,005,000
Continuing construction of a new lock at Guntersville Dam, Ala. (p. 16)-----	5,687,000
Continuing construction of flood protection facilities for the cities of Bristol, Tenn.-Va. (p. 23)-----	1,724,000
Rehabilitation of and additions to chemical facilities at Wilson Dam, Ala. (p. 65)-----	6,300,000
Continuing Land Between the Lakes demonstration, Kentucky and Tennessee (p. 124)-----	6,000,000
Additions and replacements of other facilities; and investigations for future facilities-----	3,284,000
Program expenses:	
Navigation operations-----	573,000
Flood control operations-----	530,000
Multipurpose reservoir operations-----	3,592,000
Surveys and studies for river development-----	267,000
Fertilizer, agricultural, and munitions development-----	7,301,000
Cooperative valley development-----	2,213,000
Land Between the Lakes demonstration-----	209,000
General service activities-----	215,000
Total, program expenses-----	14,900,000
Total proposed appropriation-----	50,915,000

Summary of 1965 budget financed from power proceeds and borrowings:

Continuing construction of:	
Widows Creek steamplant unit 8 (Alabama)-----	2,977,000
Paradise steamplant units 1-2 (Kentucky)-----	2,609,000
Bull Run steamplant unit 1 (Tennessee)-----	37,943,000
Construction expenditures for a new steam unit at a location not yet determined-----	23,448,000
Transmission system facilities-----	65,900,000
Completion of Melton Hill project; additions and replacements of other power facilities; investigations for future power facilities; acquisition of coal land and rights; and changes in inventories and deferred charges-----	6,943,000
Power operating expenses-----	179,617,000
Total-----	319,437,000

Proceeds from power operations in 1965 are estimated at \$294,728,000; proceeds from borrowings at \$75 million; and other proceeds at \$986,000. Payments to the Treasury are estimated at \$52,200,000—\$42,200,000 as a dividend (return on the appropriation investment in the power program) and \$10 million as a reduction in the appropriation investment in the power program.

Summary of 1965 budget financed from nonpower proceeds:

Fertilizer program operating expenses	\$18,396,000
Reimbursable services	6,584,000
Multipurpose reservoir operating expenses recovered	404,000
Total	25,384,000

Nonpower proceeds for the year are estimated at \$25,035,000, of which \$17,675,000 is from the fertilizer program; \$6,584,000 represents reimbursement from other agencies; and \$776,000 other miscellaneous receipt items.

BUDGET REQUEST, 1965

Mr. WAGNER. Thank you, Mr. Chairman.

TVA's appropriation request which is before this committee is for \$50,915,000. About \$36 million of this is for construction activities and about \$15 million for our operating programs.

The details of the proposed expenditures are in the budget program which you have and I will not go into detail on those except briefly.

Senator HILL. You might summarize them for us.

Mr. WAGNER. Thank you.

NICKAJACK PROJECT

The largest item in the appropriation request is \$9.08 million to continue construction on the Nickajack project which is a multipurpose dam and reservoir project on the main stem of the Tennessee River to replace the Hales Bar Dam. The project will be completed in the fall of 1967. Construction is now underway.

Senator HILL. Excuse me one minute.

I am glad to see our friend, Senator Ellender, has come in.

Suppose you start right at the beginning.

Mr. WAGNER. I shall be glad to.

The appropriation request before your committee is for \$50,915,000. About \$36 million of this is for construction and \$15 million for operating programs. The details are spelled out in the budget program which is before you and I won't detail them. I will briefly give you some of the highlights and, of course, we will be glad to answer any questions.

The largest item in this appropriation request is for \$9.08 million to continue construction of the Nickajack project. This is a multiple-purpose dam and reservoir project on the main stem of the Tennessee River downstream from the Hales Bar Dam which it will replace.

HALES BAR DAM

You will recall that last year we advised the committee that the Hales Bar Dam which was built just after the turn of the century on uncertain foundation had developed major problems, and that it would be more economical to replace it than to try to continue further repairs.

Senator ELLENDER. Is that dam being built under appropriated funds?

Mr. WAGNER. The funds we seek here are appropriations, Senator Ellender. The question of financing the portion of this project that will be allocated to power is one which we are discussing with the Bureau of the Budget.

The project replaces a multiple-purpose project and it would have a comparable power installation. We think there would be reason for initially financing the power portion with appropriated funds as has been done on other multiple-purpose dams on the main stream. That question is at the moment unsettled.

POWER, NAVIGATION, AND FLOOD CONTROL

Senator HILL. In addition to your power, it has the other features of navigation and flood control.

Mr. WAGNER. Yes; this is a vital link in the navigation channel. Unless very expensive repairs were made at Hales Bar, or this dam is built, there would be a break in the navigation channel between the mouth of the river and the head of navigation at Knoxville. That navigation channel is one of the primary purposes of the Tennessee River development.

LOCK AT GUNTERSVILLE DAM

There is also in the budget \$5,687,000 essentially to complete construction of the second lock at Guntersville Dam, which is scheduled for service in June of 1965. Traffic continues to increase on the Tennessee River. Last year, there was a total of 14.4 million tons, which is a new record, and traffic has increased about 100 percent in the last 10 years. The Tennessee is one of the fastest growing rivers in the United States from the standpoint of its use by commercial traffic.

CHEMICAL PLANT AT MUSCLE SHOALS, ALA.

Our appropriation request includes \$6,300,000 to continue rehabilitation of the chemical plant at Muscle Shoals, Ala. You will recall that much of the equipment there was originally built during World War I, and is now antiquated. In order to operate efficiently and to produce the modern fertilizers which TVA's program requires, much of the plant has to be rehabilitated. This program has been going on for a couple of years, and \$6,300,000 will continue rehabilitation of some of those facilities.

FERTILIZER RESEARCH AND DEMONSTRATION AND AGRICULTURAL ACTIVITIES

Also, there is \$7,300,000 for chemical fertilizer research and for the fertilizer demonstration and agricultural development activities.

TRIBUTARY AREA DEVELOPMENT PROGRAM

There are also funds for continuing our tributary area development program, including a little over \$3 million for continuing construction of the multipurpose water control system in the Beech River watershed.

Senator HILL. Let me ask you this before you leave the fertilizer.

SALE OF FERTILIZERS

You have some income from the sale of fertilizers?

Mr. WAGNER. Yes; we do and the income is used to operate the plant which produces TVA fertilizers. The \$7,301,000 is required in addition to this income because of the fact that this is also a research and demonstration activity. It is not a commercial operation although, as we distribute the fertilizers in educational and demonstration programs, we do get payment for them which helps defray the cost of the entire program.

Senator HILL. I believe you distribute now in some 42 different States.

Mr. WAGNER. Yes, sir.

Senator HILL. Demonstration projects.

Mr. WAGNER. Fertilizer is distributed in most of our States now in cooperation with a great number of private fertilizer distributors and dealers and in programs that are concurred in and arranged in many instances with the land-grant colleges.

Senator ELLENDER. What is the difference between the fertilizer that you make and the commercial fertilizer that is purchased by farmers?

FERTILIZER PRODUCTION AND DEVELOPMENT

Mr. WAGNER. Generally, Senator Ellender, the fertilizers that we produce are more concentrated than are generally available. Some of them have special qualities to be used on certain soils. There are also new process developments; the processes which we develop are patented, and those processes are available at no cost to the private fertilizer manufacturers.

As we introduce new fertilizers in demonstration programs, farmers come to understand their use and develop a demand for them; and ultimately that demand is met by private industry. After a new fertilizer is accepted and produced in this way, TVA moves on to something more advanced.

Senator ELLENDER. I notice here your estimate for that, 6 million—

REHABILITATING THE PLANT

Mr. WAGNER. Six million three. That is for the work in rehabilitating the plant which I mentioned earlier.

Senator ELLENDER. You say the operation—

RESEARCH FACILITIES AND DEMONSTRATION EDUCATION ACTIVITIES

Mr. WAGNER. The estimate is \$7,301,000 for research activities and the cost of the demonstration and education activities over and above the receipts from the sale of fertilizer.

Senator ELLENDER. But how much did it cost the Government over and above what you received?

Mr. WAGNER. The operating cost is \$7,301,000. The capital cost this year which will provide some new facilities is an additional \$6,300,000.

Senator ELLENDER. Out of Federal funds?

Mr. WAGNER. Yes, sir.

PLANT REHABILITATION

Senator HILL. But you don't contemplate this \$6,300,000 as an annual cost? That gets your plant renovated or rehabilitated or modernized. That is the end of that expense?

Mr. WAGNER. That is correct.

Mr. SMITH. They were built in World War I.

Senator HILL. Yes.

TRIBUTARY AREA DEVELOPMENT PROGRAM

Mr. WAGNER. There are funds for continuing our tributary area development program, including a little over \$3 million to substantially complete construction of the water control facilities in the Beech River watershed. This program is proceeding very well with substantial local participation and a very nice improvement in the economy of that area.

LOCAL PARTICIPATION

Senator HILL. You speak of local participation. What are they doing locally?

Mr. WAGNER. The local participation includes work on improving the agriculture and forest resources, the development of industry and industrial sites, and developing income from recreation. As to the water control system in the Beech River area, local interests will, as the benefits from this project develop over a period of time, pay back to the TVA and we in turn to the Treasury about \$2 million of the cost.

WATER CONTROL SYSTEM DESIGN, BEAR CREEK, ALA.

There is \$215,000 to begin the design of a water control system for Bear Creek in northern Alabama, and there is \$1,724,000 to continue construction of a couple of small flood control reservoirs which will help protect Bristol, Tenn. and Va. Those cities are also committed to participate in this program in a number of ways, and private interests are going to do some work to help floodproof some of the buildings in the two towns.

LAND BETWEEN THE LAKES RECREATION AREA

There is also an item of \$6 million for continuing the development of the Land Between the Lakes recreation demonstration project. I described our plans for this project for your committee in considerable detail last year. I think I would only repeat now that we intend to develop this area so as to provide a new kind of recreational resource suited to the needs of our people as the Nation becomes more and more industrial. As more and more people live away from the land and earn their incomes in the factories and offices and municipalities, I think it is generally recognized that we are going to need more opportunities for them to get into the out-of-doors for recreation and for relaxation.

This facility is located relatively near to our large population concentrations. About 70 million of our people live within 500 miles of Land Between the Lakes.

OUTDOOR CONSERVATION CLASSROOM

We would propose also to operate this area as a great outdoor conservation classroom. We believe that as the Nation becomes more and more industrialized and people's ties with the land become less direct, unless we deliberately create opportunities for them to see trees planted, to participate in the planting of trees, to see a forest managed by modern methods, to see erosion scars healed, and to see and understand wildlife in its natural habitat, then we will in a relatively short time lose understanding of our dependence on the land.

So, for this reason, we propose to try a number of new ideas in this area to help foster a better understanding on the part of our people and of coming generations of their dependence on the land. This is a project of national importance and national scope.

Senator ELLENDER. How much land is involved?

Mr. WAGNER. A little over 170,000 acres in total.

TUITION OR ATTENDANCE CHARGES

Senator ELLENDER. You conduct that in the nature of a school. Are the participants paid anything for attending?

Mr. WAGNER. Well, the funds for this project were made available to us only the first of January this year, so we have been working only 6 months. As to the educational activities, we would expect to develop areas to which people could bring classes from schools in the neighborhood or from schools from over the Nation. People have told us they would bring groups from as far away as New York, to study the botanical and biological sciences, or to get training in the managing and operation of outdoor camp facilities and recreation facilities of this sort.

DEVELOPMENT PLANS OF USE OF AREA

We have, Senator, a statement which we prepared which describes rather completely our plans for development of the use of this area that I would like to file with the committee if you would like to have it.

Senator ELLENDER. I notice last year you were requesting \$4 million and you are asking for \$6 million this year. Would this be a continuous appropriation, or are you using this money that you are asking for this year to prepare for what you intend during the future?

DEVELOPMENT COST

Mr. WAGNER. The developmental cost of this project is estimated at between \$32 and \$35 million, Senator.

Senator ELLENDER. Does all that come from the Treasury?

Mr. WAGNER. Yes, sir; that would be appropriated funds.

Senator ELLENDER. What is the value of this?

Mr. WAGNER. This is an idea which the TVA proposed to the President in 1961. The President referred it to the Department of the Interior for study, and in 1963 the Department of the Interior recommended that TVA undertake this project. The President so recommended to Congress and requested an appropriation for \$4 million for 1964 and the appropriation was made by the Congress.

BARKLEY RESERVOIR

Now, work is well underway. It is proceeding well, we believe. One of the problems here is that the area lies between the Barkley and the Kentucky Reservoirs and Barkley Reservoir will be filled some time next year so we must complete construction that needs to be done in the dry before the Barkley reservoir is filled.

FAMILY CAMPING

We also have completed one area for family camping accommodating 250 families. It was opened the first of June, and people are now using it.

Senator ELLENDER. This camping: Will this camping be free of charge to the people who come there, or will they have to pay a stipend?

CHARGES

Mr. WAGNER. We contemplate, Senator, that where facilities are provided for exclusive use there would be a charge. This year, we are still constructing in the area, so we have not made charges. We contemplate that ultimately there will be charges for exclusively used facilities.

Senator ELLENDER. You think this is in keeping with what we intended to have when TVA was established?

Mr. WAGNER. Yes, sir. This project, besides providing a recreational outlet—

Senator ELLENDER. We have them all over the country, you know. We build them in every dam that we have. Every place where water is retained or wherever there are dikes, why, we have facilities for the people to use. It costs quite a bit of money, for a project of this kind, merely to show things off. Why—

Mr. WAGNER. It is more than to show things off. It tries some new ideas.

PAYMENTS FROM PROCEEDS OBTAINED FROM TVA

Senator ELLENDER. I know it is new ideas, but it strikes me as though new ideas ought to be paid out of the proceeds that you obtain from TVA. That was our intention way back, as I understood.

We are spending now how much at TVA? What money are you asking us to allocate?

Mr. WAGNER. We are asking for a total appropriation of \$50.9 million.

Senator ELLENDER. Yes.

Now, how much will you spend aside from that from moneys that you will obtain through the sale of bonds?

EXPENDITURES, SOURCES OF EXPENDITURES, AND POWER PROCEEDS

Mr. WAGNER. Our total expenditures including payments to the Treasury will be about \$450 million; about \$372 million will come from borrowings and power proceeds, about \$53 million from appropriations, and about \$25 million from nonpower proceeds.

Incidentally, Senator, we will pay into the Treasury from our power proceeds somewhere between \$52 and \$53 million.

Senator ELLENDER. That is the money you owe the Government?

Mr. WAGNER. That includes both a return on the investment in the power facilities and a return of part of the investment.

Senator ELLENDER. That is what I mean.

Mr. WAGNER. Yes.

Senator ELLENDER. It is payment of interest and payment of principal.

Mr. WAGNER. It is payment in accordance with the 1959 amendment to the Tennessee Valley Authority Act.

STEAMPLANT REPAYMENTS

Senator ELLENDER. Yes. And that includes repayments for steamplants that were constructed and purchased, as I remember.

Mr. WAGNER. Yes; and the power investment in the hydro, too.

Senator ELLENDER. I understand. The power from the hydros is what, about 28 percent of your output?

Mr. WAGNER. Now about 27 or 28 percent; that is correct.

Senator ELLENDER. And the rest of it is generated from the steamplants?

Mr. WAGNER. That is correct.

Senator ELLENDER. Financed by the Government?

Mr. WAGNER. Originally, appropriations were made for steam-generating plants but the appropriations made on that account are being repaid, as you said, with interest. We would say with a dividend because the Federal Government continues to own the system. Future expansions except as the Congress might appropriate funds for them, will be financed through the sale of bonds and from power revenues.

SELF-SUSTAINING FACILITIES

Senator ELLENDER. That is a mighty big facility down there and I hope some day to come that it will be self sustaining.

Mr. WAGNER. We believe that it is now self sustaining.

Senator ELLENDER. Not if you spend \$50 million a year of the Government's money.

Mr. WAGNER. The power program sustains itself, Senator. The appropriation we are requesting is for navigation, for flood control, forest development, and for agricultural work. These are the kinds of programs that are supported by appropriations all across the Nation. It happens that in this area they are performed by TVA.

It was never intended, to my knowledge, that the power program should pay for the cost of the other programs.

BENEFITS OF PROPOSED RECREATION AREA

This Land Between the Lakes project is being undertaken under the provisions of section 22 of the Tennessee Valley Authority Act which authorizes demonstrations which will be of use and interest to the surrounding States and the Nation. One of the purposes of the project is to provide the kind of recreational facility, which will serve the requirements of industrial workers. We find more and more people who are interested in locating new industries in an area are concerned about a recreational outlet for their employees.

Senator ELLENDER. In other words, these will be an added attraction to bring industry to the area; is that it?

Mr. WAGNER. It will utilize the unique opportunity created by the two Federal reservoirs in the area and will benefit the employees of the industries which will develop and which are developing in the region because of their need for water and so on, and accessibility to markets. As this area becomes more prosperous, its markets increase and the growth of industry is stimulated by that expansion.

WILDLIFE HABITAT

We have had a number of discussions and consulings with the Fish and Wildlife Service. A part of this area is now under their jurisdiction and we have talked with them about arrangements to increase the usefulness of the area for wildlife habitat, and to expand the areas for waterfowl feeding. This is on the flyway for geese and ducks. We plan to make arrangements with the Fish and Wildlife Service for the transfer of this land to TVA for operation as part of the total area next year.

We have been in communication too, with groups from many parts of the Nation to find how they can use this kind of an area to meet their requirements. Just last week, for example, we received about 40 faculty members from schools in the surrounding States and from the Midwest. Their official organization is the American Association of Health, Physical Education & Recreation, and we wanted them to see the area. We wanted their ideas, as to how this development might help them to convey to their students some of the ideas that I mentioned and some of which are in this statement which I have given you.

LAND ACQUISITION

Our land acquisition is moving along rapidly. This has been a major occupation during the brief time that we have been working. As you will readily recognize, there is a great deal of preliminary work that has to be done before an agency can buy an area of this kind, this size. There is surveying to be done; maps have to be prepared; records of ownership have to be sought out and there is the problem of contacting the owners, and so on. We have worked at that as diligently as we could.

We have now bought about 150 tracts in this area which is the extent of the funds that we had available for land purchase. We have not been able to keep up with the demand of land owners who have come to us to say, "We would like you to complete negotiations with us and to buy our land as quickly as you can." We have, as a matter of fact, about 400 unfilled requests of this sort from landowners in the area and we are getting more each week.

RELOCATING SELLERS

I am sure you recognize that buying an area of land this size, whether it is for a reservoir project, or a housing development, or a recreational project, presents some very difficult problems, and some that are extremely painful to us as well as to the landowners. In many instances, people do not want voluntarily to sell their land and we can all understand that. At the same time, we will compensate these people fairly for their land. We will give them as much help as we can in finding new locations suitable for their use.

Now, these people who have come to us and asked that we buy from them as quickly as we can have said that they want to get new locations to which they can move and get reestablished. We shall buy their land and pay them as soon as the transaction is completed. If they are unable to find other land immediately or want to postpone moving, most of them can continue in possession of their land and live in their homes until 1968. We will be as considerate as we can. If they want to move their homes, they can. If they want to move parts of them, they can. We will be just as flexible as we possibly can be.

Senator ELLENDER. When did you start this land purchase program?

Mr. WAGNER. On the 1st of January, we received the first appropriation this year.

NEED FOR LAND ACQUISITION

Senator ELLENDER. Is that land necessary to operate your facility now?

Mr. WAGNER. The land is part of the area to be—

Senator ELLENDER. I understand that, but it is not necessary to your facility.

Mr. WAGNER. Yes, sir.

Senator ELLENDER. In what respect?

Mr. WAGNER. Well—

Senator ELLENDER. You have easements on all of the property that you own, don't you?

Mr. WAGNER. No; we don't. We generally purchase the land that we overflow in fee. If this is to be an area in which the public has general use of the land and if it is also to be operated as a wildlife refuge the land would have to be in one single ownership.

Senator ELLENDER. I thought that was the function of the Interior. Now you are taking that over in that area?

Mr. WAGNER. As I say—

CONTEMPLATED LAND PURCHASES

Senator ELLENDER. How much land do you contemplate purchasing? I was not here when this thing started. I am sorry. I had other appointments.

Mr. WAGNER. In this map, Senator, the blue area nearest to you is the Kentucky Reservoir. The water area here will be Barkely and the land area between them is the area that we are talking about. It is a unique piece of land, almost entirely surrounded by water, it has 300 miles of shoreline and it is quite heavily wooded now. This dark area is an area which the Fish and Wildlife Service now owns.

Senator ELLENDER. You mean under the Interior Department?

Mr. WAGNER. Under the Interior Department; yes.

Senator ELLENDER. How many acres do you expect to purchase under this plan in addition to what you now have?

Mr. WAGNER. About 103,000 acres.

LAND COST PER ACRE

Senator ELLENDER. What does that land cost you per acre?

Mr. WAGNER. I don't have fully representative figures at the present time, Senator, because the land that has been bought to date has

generally been land on which people have built cottages or in areas where they had intended to build cottages. In fairness to them, when they came in and said they would like to find another location on the west shore of Kentucky or east shore of Barkley where they could build, we bought those areas first. So, dollars per acre do not mean very much when you are buying an acre lot or half-acre lot.

We estimate that the total cost of the land will be about \$12 million.

Senator ELLENDER. Then, all that will come out of the Treasury?

Mr. WAGNER. Yes, sir; there will be an appropriation requested.

Twelve million dollars would buy 100,000 acres, so this is \$120 an acre, if my arithmetic is correct.

PURCHASES FROM LANDOWNERS WANTING TO SELL

The \$6 million that is requested in the budget before you for fiscal year 1965, is the minimum needed to do an adequate job, particularly if we are to try to buy these tracts as rapidly as the people want to sell. We estimate that we can buy about 720 additional tracts with that, as well as do necessary construction work. We made this estimate of our needs in this budget quite early in our planning activities. If we were to make it today, we would estimate an amount more than \$6 million in order to meet the needs we now see. I think that the least that can be done for the landowners in that area is to get their land purchased as quickly as we can so they have the money and have time to make plans for moving to other sites.

BARKLEY RESERVOIR FILLING

Another problem, of course, is that the Barkley Reservoir will fill next year and construction that needs to be done in that area on developments of certain kinds can be done at a great saving if it is done before the reservoir fills. For both these reasons, the million-dollar reduction that was proposed in the action of the House would be detrimental. I think that it would be especially detrimental to those landowners who would like to be able to sell their land promptly and to make plans for relocating.

Senator HILL. You mean for the landowners?

Mr. WAGNER. For the landowners, themselves; yes, sir, because the reduction would mean that we could buy less land; some purchases would have to be deferred, and the landowners would be uncertain as to when they would have funds to relocate.

Now, we have done our very best to keep the people of the area informed as to what our plans are and we will continue to do our best. We recognize that there are problems here. We have met with local officials; members of our staff have met with the county judges and others and I met with the county judges a few weeks ago, and we have met with many other people who have direct and substantial interests.

PRESBYTERIAN CHURCH CAMPSITE

For example, the Presbyterian church has a campsite. In 1963, before the appropriation had been made to begin work, we inquired of them as to how they would be affected. We have a letter from the

administrator of the Presbyterian Conference Center in that area at the time. If I may read a couple of sentences:

We do not want to expand the facilities there if it is to be included in the development program of TVA. However, we would not object to any plans that you may have in the development of this area and we will be happy to concur in your plans, because we can secure a camp and conference center in some other place that will not be surrounded by many commercial interests that have developed since we began the development of our own center. We are not as private as we would like to be; so you can understand why we would be in favor of your development of this area into a recreational area and stop some of this unplanned commercial development. We are in favor of your plans whether we stay or whether we have to leave. In your proposed plans would a church camp and conference center be allowed to remain a private interest within the park or recreational area? This is my main question. If not, we will not object.

RELOCATING IN ANOTHER AREA

Just last week we talked with the gentleman who is chairman of the committee designated by the Presbyterian Church Conference Center to handle negotiations with TVA in this connection. He advised us that the conference did not wish to retain or remove any improvements. He advised us that they would like to see TVA make use of these facilities if they could, and we will do that if we can.

He has told us that the church has not by any official action opposed the land between the lakes project and that the opinions of individual church members in opposition would not represent official action or position of the church.

Now, we are proceeding as fast as time and funds will permit to purchase this conference center in order that the church can have the funds to do some definite planning for another facility which I believe they intend to get in the nearby area, and we will help them in any way we can with their plans.

ESTABLISHING OFFICES TO KEEP LOCAL PEOPLE INFORMED

I am afraid that some of the people in the area think we have not tried hard enough to talk with them, but we have tried to let the people know what our plans were as soon as we have any definiteness about them. For instance, beginning early this spring, we set up offices in the area, first temporary offices and then permanent offices. We advised the people through the press that we would have representatives there to answer their questions if they would like to come in and about 300 of them did come in with questions which were answered to the extent of our ability to do so.

We have within the last 3 days completed a survey of the families in the entire area. Twelve schoolteachers from nearby the area did this for us. We found there are 866 households in the area. This is an area that is 40 miles long and 6 or 8 miles wide, so you can see it is rather thinly populated; 154 of those 866 households are occupied only seasonally. We got a better understanding of what the problems of the people are in the area, and this will give us a better opportunity to see if we can help them in any way in their relocation problems.

LETTER TO PROPERTY OWNERS

Now, in addition to that, early this spring the head of our land-buying organization sent a letter to each property owner that he could find a record of and explained our land-buying procedure so

they would know what to expect. We have also made about 30 news releases in the area and we have visited with the editors of local papers and county papers. Members of the Board and members of the staff have met and talked with over 40 groups in the area, civic clubs and other citizens' groups in the surrounding area. We have not had meetings with civic groups and so on within Land Between the Lakes, because there are no such groups in the incorporated towns of the area. But we have done the best we could.

We have tried to get information out by word of mouth and by meetings in the surrounding areas.

COMPLAINTS AND EXPRESSIONS OF APPROVAL

While some complaints about the job we are doing have been indicated, we have also had some warm expressions of approval both for the project as a whole and for the efforts we have made to use consideration in dealing with people. I want to assure you we will continue to give them every consideration we can.

The House also reduced the total appropriation to TVA by an additional \$2 million. The committee report reads:

A general reduction of \$2 million has also been made which should be readily offset by unobligated balances at the end of the current fiscal year.

CARRYOVER OF FUNDS

We have just completed a very careful reexamination of our position with respect to funds, and I can assure you there will not be any large carryover of funds at the end of this year. We will have about \$700,000 unspent but this is committed to work now underway and which will have been completed in 1965 and is in addition to the work provided for by the \$50.9 million appropriations request. For example, \$600,000 of that \$700,000 is being used to complete some dredging on the Hiwassee River. We had hoped that that would be spent during fiscal 1964, but there were some problems about the availability of equipment, and, consequently, we got started a little late, but it will be completed in 1965, and we will use those funds.

UNOBLIGATED BALANCE

The other \$100,000 also is needed for projects that are underway, and it is not surplus. Consequently, the \$2 million reduction which is proposed can only impair work on vital projects. The assumption that there will be a \$2 million unobligated balance just has not materialized. There may have been some uncertainty about this in April at the time of our House hearings, but if there was, then there certainly is not now as we reach the end of the fiscal year.

Senator HILL. In other words, you do not have that unobligated balance left?

Mr. WAGNER. No, sir; we will not have a large balance. The assumption on which the reduction was made by the House has not materialized.

There is one additional item that I would like to mention.

Senator HILL. Let me ask you this: To go back to your Land Between the Lakes, have you had any expression from any officials of Kentucky on that?

KENTUCKY AND TENNESSEE ENDORSEMENTS

Mr. WAGNER. Yes, sir. The Governor and the Legislature of Kentucky have expressed their approval of the project and have adopted resolutions endorsing it.

The then Governors of both States endorsed the plan before we submitted the report to the President in 1961.

Senator HILL. You say both States. You mean Tennessee and Kentucky?

Mr. WAGNER. That is right; Tennessee and Kentucky.

Senator ELLENDER. You would not expect him to do otherwise, would you?

Mr. WAGNER. Senator, this is a good project for the Nation.

Senator ELLENDER. Certainly, it is.

Mr. WAGNER. And for the State.

Senator ELLENDER. Certainly, it is.

Mr. WAGNER. We would not propose it if we did not believe it to be a good project.

Senator ELLENDER. There is no doubt about it being a wonderful project, but I think you are trying to expand too much.

You have got how many acres that is owned by the Government now?

Mr. WAGNER. About 75,000 acres, sir.

Senator ELLENDER. Is that shown in the area of the map?

Mr. WAGNER. Yes.

PROPOSED PURCHASES

Senator ELLENDER. And you propose to buy where? Here?

Mr. WAGNER. From the water area here on down.

Senator ELLENDER. I think it would make a wonderful area with the land you have got there now. You could make it very attractive. You have all the waterfront you want but why you should do this at Government expense is something I can't fathom, particularly with the condition of our Treasury now.

Mr. WAGNER. The need for this kind of area will be in the future—not next year—some years ahead. The population is expanding. Industrialization is increasing. Unless we deliberately take areas of this kind now and make them available for places where city dwellers can get to the land and have some understanding of its importance, I am afraid we are going to lose something very precious.

ROAD CONSTRUCTION

Senator ELLENDER. We are building now any number of dams in Kentucky. I am sure that wherever we retain water we have facilities that the public can utilize. This huge area that you are trying to obtain now, as I said, is not so accessible. The purchase of that land is just a beginning. You are going to have to build roads through this and I suppose you are going to come to the Government for that purpose, won't you?

Mr. WAGNER. The construction of roads will be financed by appropriations.

Senator ELLENDER. Sure.

Mr. WAGNER. However, Senator—

Senator ELLENDER. It is a very severe and ambitious program. Very ambitious.

Mr. WAGNER. Those who have studied the needs of the Nation, the Outdoor Recreation Resources Review Commission, for example—

Senator ELLENDER. We have millions of acres throughout this country.

UNIQUE GEOGRAPHIC PROPERTIES

Mr. WAGNER. The problem which the Commission has pointed out is that most of the area that is available for recreation is not where the people are. The large open areas are in the west; the population is in the east. This area has particular attraction because of its unique geographic properties. It is isolated by water and at the same time easily accessible by highways.

As I pointed out, it is within 500 miles by modern expressways of 70 million people. Now, this will make this kind of facility available in a region where it is badly needed. It takes a considerable amount of land, if you visualize the number of people who will use the area and the kinds of uses that are envisioned for the area. As I indicated earlier, for example there will be wildlife in its natural habitat.

The area is wooded and is very sparsely populated. There is some cultivated land, but very little.

While I am sure that it is home to the people who live there, at the same time there are few places in the east where you can find an area this large, particularly with its unique qualification, that is thinly populated and with so few people to discommode.

Now, Mr. Chairman, there is one other item that I would like to mention unless there are further questions.

Senator HILL. Any further questions, Senator?

Senator ELLENDER. No.

REQUESTED AUTOMOBILE PURCHASES

Mr. WAGNER. Our appropriation request included funds for 258 automobiles—208 for replacement and 50 for addition to our fleet. Now, the bill as it was passed by the House provides only for the 208 automobiles to be replaced. The addition of 50 units to the fleet was eliminated by the House.

Senator ELLENDER. How many altogether?

Mr. WAGNER. We now have about 800 automobiles in the fleet.

The elimination of 50 additional units will cause an increase in our operating cost and we hope that it can be reconsidered. The size of the present fleet has been the same since 1958. In the 6-year period since 1958, the amount of work that we do and the area in which we work has increased.

INCREASED PROGRAMS

For example, our generating capacity has increased about one-third in those 6 years and we have some new plants to be operated and our people have to go back and forth to them. We have added the Melton Hill multipurpose project to our system. The Land Between the Lakes project is new. I mentioned our tributary area

development program. In 1958, we were working intensively in three areas, we are now working in 13.

RENTAL AUTOMOBILES

As a consequence, this requires more travel by automobiles. We are now utilizing our automobiles about 9 percent more intensively than the average Government agency. The only way we can presently carry on our work is to use automobiles, to rent them if we are unable to buy them. Rental automobiles cost us 10 cents more a mile to operate than our own vehicles. In the year ahead, it would cost us \$70,000 more to rent cars than it would if we were adding 50 units to our own fleet.

Looked at another way, we could buy the needed 50 additional automobiles for \$75,000. At the end of the year, they would be worth, after normal depreciation, about \$64,500, so we would spend \$75,000 and have \$65,000 worth of automobiles at the end of the year.

If we don't make this addition to our fleet, we will spend \$70,000 and have a bunch of receipts for rentals. Now, I know that suggestions to reduce fleets are often made in the interest of economy. I bring these figures to your attention to point out that in this instance the result of the reduction of 50 units would not be economy but a waste of funds.

AUTOMOBILE PURCHASES FROM TVA FUNDS

Senator ELLENDER. Could you tell us how many of these 800 automobiles that you own were purchases from funds of TVA?

Mr. WAGNER. These automobiles are all purchased with funds appropriated to TVA. As they are used in the power program, power funds are used to pay a rental into our general fund so that those automobiles which are used in the power program are fully paid for by the power program.

PAYMENT OF COST OF OPERATING AUTOMOBILES

Senator ELLENDER. The next question would be how much of the cost of operating these 800 automobiles is paid for by the TVA and not the Government.

Mr. WAGNER. From power funds?

Senator ELLENDER. Yes.

Mr. WAGNER. I don't have that figure but we can supply it.

Senator HILL. Would you get that figure for us?

Mr. WAGNER. It would be a fairly substantial percent. In fiscal year 1963 the operating costs of the automotive fleet totaled \$759,527. Approximately 50 percent of this total was charged to the power program and paid for from power funds.

ALLOCATING COSTS OF DAMS AND RESERVOIRS

Senator ELLENDER. Could you tell me who evaluates the portion of the construction of the multipurpose dam where you charge so much for flood control, so much for navigation and so much for the development of the water? Who evaluates that?

Mr. WAGNER. The TVA makes the original allocation and submits it to the President for his approval.

Senator ELLENDER. Well, does the Corps of Engineers have anything to do with that?

Mr. WAGNER. No, sir. I would say, however, Senator, that the method which TVA has used in allocating the cost of the dams is essentially the same as the corps uses.

Senator ELLENDER. Since you have been authorized by the Congress to construct facilities for the generation of electricity, how many dams have you constructed?

MELTON HILL DAM

Mr. WAGNER. Melton Hill is the only one built since the 1959 bond amendment was adopted. Since 1933 TVA has constructed 21.

Senator ELLENDER. Now, have you, for the record, the amount discharged to navigation or for flood control and to power development?

Mr. WAGNER. The costs of Melton Hill will be allocated as part of the system, Senator, but roughly \$20.2 million is to be allocated to power and about \$17.8 million to nonpower purposes.

Senator ELLENDER. So that, of the \$38 million cost of this dam, you get out of the Treasury \$17.8 million and the rest out of bonds that you propose to sell or you have sold.

Mr. WAGNER. Yes; or from power revenues.

Senator ELLENDER. Yes.

CONSTRUCTION OF STEAMPLANTS BY BOND SALE

Now, in the construction of your steamplants, how many have you built since you were authorized to sell bonds? Do you know?

Mr. WAGNER. Since we were authorized to sell bonds, we have started two new steamplants. The new ones are Paradise and Bull Run. In addition we have added some units at other plants.

Senator ELLENDER. The cost of all those additions as well as the new ones were paid out of moneys that you obtained from the sale of bonds?

Mr. WAGNER. Bond proceeds or power revenues.

Senator HILL. You better check and furnish that for the record.

Senator ELLENDER. I am sure he will do that.

Mr. WAGNER. The figures are correct.

USE OF REVENUES

Senator ELLENDER. A while ago, in answer to a question, you said that aside from the \$50,915,000 that you had budgeted for 1965, you had \$400-some-odd million more.

Mr. WAGNER. Actually about \$397 million, from revenues and borrowings.

Senator ELLENDER. What will that money be used for?

Mr. WAGNER. For the construction of power generating and transmission facilities and for operation of the power system. Included in that also is some of the money that would be used from revenues from the sale of fertilizer to operate the fertilizer program.

The total would also include the \$52 million for payments to the Treasury.

AMORTIZING PAYMENTS

Senator ELLENDER. Amortize your payments to the Government?

Mr. WAGNER. Yes, sir.

We will pay \$10 million a year for 5 years, \$15 million for another 5 years and thereafter \$20 million a year. Within a little over 50 years \$1 billion will have been repaid. Dividends would be in addition to this.

Senator ELLENDER. What is the interest rate? Is it the going rate?

Mr. WAGNER. We pay a return at whatever rate the Federal Government has to pay on all of its marketable obligations as of the end of the preceding year.

Senator ELLENDER. That is the going rate; yes.

Mr. WAGNER. Mr. Chairman, there is one other item.

PROPOSED STEAMPLANT CONSTRUCTION

Senator ELLENDER. How many more plants, if any, do you expect to construct, steamplants?

Mr. WAGNER. Our loads are growing at the rate of 800,000 kilowatts per year and this demand for power will have to be met. I can't say how many plants we will ultimately have to build, Senator.

Senator ELLENDER. You must have plans to construct some in the future?

Mr. WAGNER. We have purchased some additional sites and will build on them as the demand develops. Some of it can be met by adding new units to existing plants. In other cases, we will have to build new plants.

FINANCING CONSTRUCTION

Senator ELLENDER. And all of those can be financed, sale of bonds on the TVA?

Mr. WAGNER. That is correct.

Senator ELLENDER. Do you contemplate constructing any new dams from which electricity would be generated?

Mr. WAGNER. Yes, sir; over a period of years, we would expect to build some.

Senator ELLENDER. You don't have any as of now?

NICKAJACK PROJECT

Mr. WAGNER. The Nickajack project which I mentioned earlier is under construction now. This is a replacement for the existing Hales Bar project and does not add to our power supply.

Senator ELLENDER. This Nickajack is a dam and reservoir. Now, you are asking for \$4,215,000 and that you asked last year.

Mr. WAGNER. Our estimate for 1965 is \$9,800,000.

Senator ELLENDER. How much of this do you pay? When I say "you," I mean TVA.

Mr. WAGNER. A decision regarding financing the total cost of the project has not been reached yet.

Senator ELLENDER. As to the proportion?

Mr. WAGNER. That is right; as to the source of funds to be used after 1965.

DAM AND RESERVOIR COST

Senator ELLENDER. Have you an estimate of what that dam and reservoir cost?

Mr. WAGNER. What it will cost?

Senator ELLENDER. Yes.

Mr. WAGNER. The total cost of Nickajack is estimated at \$70 million, including dual navigation locks.

Senator ELLENDER. \$70 million. All right. How much of that will be allocated to power?

Mr. WAGNER. I do not know at this time.

Senator ELLENDER. You don't know?

Mr. WAGNER. I do not have an estimate.

Senator ELLENDER. But mostly it would be navigation?

Mr. WAGNER. I would be reluctant to give you a figure. We have not arrived at a firm estimate.

Senator ELLENDER. How do you come to ask for this Government money? I am wondering if we might not be giving a little more than we should. Don't you think that ought to be decided before we start?

Mr. WAGNER. Certainly before completion of construction.

Senator ELLENDER. \$9,800,000 is quite a chunk of money, you know.

Mr. WAGNER. Yes.

Senator ELLENDER. And you spent last year \$4,214,000, all Government money.

MONEY FROM SALE OF BONDS OR TVA REVENUE

Now, how much of that money that has been spent on this project came from the sale of bonds or from any TVA revenue?

Mr. WAGNER. None in 1964.

Senator ELLENDER. None at all?

Mr. WAGNER. None for 1964 or budgeted for 1965.

Senator ELLENDER. What you are doing now is all Government?

Mr. WAGNER. That is right.

Senator ELLENDER. Well, we better look into that a little bit, Mr. Chairman.

HALES BAR DAM

Mr. WAGNER. I should explain that this is a project which we have not much choice about building. The foundations under the Hales Bar Dam which the Nickajack project will replace were very poor at the time it was built at the turn of the century. The dam leaked badly from the time the reservoir was built and its private owners made extensive but unsuccessful efforts to stop the leaks.

RECONSTRUCTION ALLOCATION

Senator ELLENDER. In the reconstruction, I hope that whatever the cost is that there would be allocated to this dam that is paid by TVA whatever proportion—

Mr. WAGNER. I can assure you that this project will be allocated to it in proper proportion to its benefits, Senator.

Senator Ellender. I say it ought to be done now. In other words, in order to prepare yourselves for Congress, it seems to me an estimate

should be made of the entire cost of this and that allocation should be made for navigation, for flood control and for power development before we even appropriate.

Mr. WAGNER. We will prepare such an allocation but I do want to make the point that all our projects, including those financed entirely by appropriated funds, are allocated to the purposes for which they serve. Nickajack is simply a replacement for Hales Bar and we believe that it should be financed entirely from appropriations. The investment will be allocated to navigation, flood control, and power, and if the power part is financed from appropriations, TVA will of course pay a return to the Treasury on this part of the investment.

Senator ELLENDER. It ought to be done if you stand on firm ground.

BONDS SALE

Now, I wonder if you would get for the record the amount of bonds that you have so far sold?

Mr. WAGNER. \$145 million.

Senator ELLENDER. And the most of that has been used to construct steamplants?

Mr. WAGNER. Yes, sir; steamplants and additional generating units in existing steamplants and hydroplants.

Senator ELLENDER. Anything that you are doing on the TVA grounds—

SHORT-TERM LOANS

Mr. WAGNER. Mr. Jones points out we also have outstanding \$120 million in short-term loans in addition to the long-term revenue bonds.

Senator ELLENDER. That is \$260 million?

Mr. JONES. \$265 million altogether.

Senator ELLENDER. Now, are the expenses of it, TVA power operation rather than the amortization of bonds, paid out in your operations of the entire TVA setup?

POWER REVENUES

Mr. WAGNER. Out of the power revenues, we pay all of our power-operating costs and part of the cost of financing the construction program.

Senator ELLENDER. And it is restricted solely to power?

Mr. WAGNER. Yes.

Senator ELLENDER. And you are able to allocate that?

Mr. WAGNER. Yes, sir. The power program is shown separately in our accounting records.

Senator ELLENDER. And the rest of it comes from development?

REVENUES FROM NONPOWER OPERATIONS

Mr. WAGNER. In addition to power revenues we have some income from nonpower operations, the largest source being from the sale of experimental fertilizer materials.

Senator ELLENDER. Where do those funds go? To the treasury of TVA, or to the U.S. Treasury?

Mr. WAGNER. We are permitted to use them in our operations and they appear as a part of the financing structure of the total budget program. If we were not permitted to use our revenues from the sale

of fertilizer, the appropriation-financed estimate for operating the fertilizer program would have to be larger.

Senator ELLENDER. All other Government agencies, whenever they do sell that way, pay the funds into the Treasury so that the Congress can keep up with what is going on.

Mr. WAGNER. We hope that the Congress can keep up with what we do, sir. We spell out in detail in these documents which are submitted to you the complete financing picture and we are willing to supply whatever additional information you need.

Senator ELLENDER. The great trouble is that most of us are occupied here, particularly in my case, as chairman of the Public Works and chairman of Agriculture. Some of this stuff is new to me because I was not able to come here before. We had to depend on my good friend from Alabama here.

Senator HILL. Mr. Smith I think wants to say a word here.

POWER PROGRAM

Mr. SMITH. I would like to provide supplementary information concerning our power program.

This allocation of cost to power goes so far as to include a portion of the salaries of the Board of Directors. Every possible device that might save new construction is used. For instance, a new construction start on the equivalent of a new plant, perhaps even larger than any we have now, was made unnecessary by negotiating an agreement for expanding power-exchange agreements with power companies to the southwest, including companies serving parts of Louisiana. We are now building heavy transmission lines to points in Mississippi and on the Tennessee-Arkansas boundary in the Mississippi River to provide capacity for these exchanges.

LOUISIANA SERVICE

Senator ELLENDER. You won't extend in my State?

Mr. SMITH. Yes, sir.

Senator ELLENDER. Where?

Mr. SMITH. These exchanges increase the power supply available to the participating Louisiana public service companies, and—

Senator ELLENDER. You mean form a big grid?

Mr. SMITH. Yes. That saves us the cost of a new generating plant and also results in savings for the companies that belong to the interconnected system.

Senator ELLENDER. A privately owned company?

Mr. SMITH. Yes. I point out the savings as a result of this agreement.

REFORESTATION

Senator ELLENDER. Now, you stated a while ago that you were spending some money for reforestation. Now, that bill for reforestation comes out of the Federal Treasury?

Mr. WAGNER. Yes, appropriated funds are used to finance TVA's forest development activities.

Senator ELLENDER. Where do the proceeds of sale from timberland go to?

I was trying to make the point that sooner or later this whole TVA should be self-sustaining. That is the goal we ought to shoot for.

GOAL OF SELF-SUSTAINMENT

Mr. SMITH. Well, certain activities, Senator, like flood control and navigation that we perform in the Tennessee Valley are similar to what other agencies do elsewhere in the Nation using appropriations by the Congress.

Senator ELLENDER. Insofar as those two are concerned, that is all right. But for recreation and for timber development, for using it as a laboratory, for geese and ducks in their wild habitat, it strikes me that ought to be done by the TVA even though they have to charge a little fee for a person to go see a wild duck.

Mr. SMITH. Part of our experimentation will be in the direction of determining what charges should be made.

Senator ELLENDER. I imagine that this land is in time to produce enough timber to perhaps pay for itself.

FOREST LANDS IN HAND BETWEEN THE LAKES

Mr. WAGNER. We propose to operate the forest lands in Land Between the Lakes on a sustained-yield basis, not only to get a return from the forest, but as part of this feature of keeping people cognizant of the importance of lands and forests; they would see forests, see the harvest.

Senator ELLENDER. It would seem to me that the only portion of the money that is appropriated here by the Federal Treasury should be to do the two things that you have stated; that is, for flood control and for navigation. Those two features belong to all the people.

ASSET TO AREA

In respect to the management of the land and the purchase of it, some ways and means ought to be put forward to let TVA assume the cost because it will be an asset to TVA. That is what they said about TVA, you know. It is an asset to the area, to parts of Alabama, to parts of Mississippi, and to all of Tennessee which, of course, we like. I am not against that. As a matter of fact, I supported TVA until the TVA spread itself so that money was asked in order to construct steamplants far beyond the amount of electricity necessary to firm the power that was developed in 1951, and today, as you have just stated, about 47 percent of the electricity generated there is from dams and the rest of it from the steamplants.

Mr. WAGNER. You recall, Senator, that the Atomic Energy Commission program was very substantially expanded back in the early fifties and placed a heavy burden on us.

Senator ELLENDER. I know, but you know what my idea was, that the Atomic Energy Commission construct it. I lost out, so I have nothing more to say.

VALUES OF TVA

Mr. WAGNER. We would hope that TVA has substantial values for the whole Nation, Senator.

Senator ELLENDER. There is no doubt about that, but the recipients, of course, are about three or four States.

Mr. WAGNER. The Valley includes portions of seven States, but our program serves the Nation.

Senator ELLENDER. One thing that I didn't like very much was to have a lot of Louisiana money spent to develop industry in Tennessee.

Mr. WAGNER. I think we have industry developing in your own State and in the Tennessee Valley.

Senator ELLENDER. Not through Federal financing. That is water under the bridge.

Mr. WAGNER. There is just one other item, Mr. Chairman, in this power field that I would like to mention to you.

NORRIS CENTENNIAL RATE

You will recall very well, I believe, that you were present about 3 years ago at Senator Norris' 100th birthday, the 11th of July, when we were in the office of the President and TVA announced the availability to its distributors of a new lower resale power rate. In Senator Norris' honor, we called it the Norris centennial rate. I think you will be glad to know that since that time 63 of our 150-odd distributors have made one or more reductions in the rates for which they sell power to their consumers and 11 of them have gone to this lowest Norris rate. These reductions have produced annual savings of nearly \$4½ million dollars to the power consumers in the area. We believe that Senator Norris would have been pleased with this.

FINANCING POWER PROGRAM

Senator HILL. Now, as I understand it, Mr. Wagner, I want to make this clear, there is no money in this budget at all for power facilities. All the power facilities is coming out of your budget; is that right?

Mr. WAGNER. There is the unresolved question of Nickajack but essentially all of the funds that are used by the power program are from power proceeds and borrowings.

Senator HILL. Anything further you want to add?

INDUSTRIAL DEVELOPMENT IN TENNESSEE VALLEY

Mr. WAGNER. Perhaps I should not go on with this, Senator, but on the question of industrial development, in the Tennessee Valley one of the fast-growing complexes has been the chemical industries. These people get substantial amounts of raw materials from the gulf coast and Louisiana.

Senator ELLENDER. You see, that is what is happening. We give you the raw material and you produce it there and get the profit. That is what I have been complaining about. You are using a lot of Federal money to get our gas and our oil to produce this chemical industry which will make millions of dollars there, and we are just going to be the furnisher of raw products. That is what I have been complaining about and practically every Senator in Congress from other States has been complaining about it, also.

Now, you won't hear Senator Hill complain about it. Probably Kentucky remained mute on the subject. But when you get money from New York, from Pennsylvania, and take their raw products—why you see, we have a nice chemical industry growing in Louisiana because we have the raw products there. But it could grow by leaps

and bounds if it were not for the fact that the Government has created with its own funds areas like this that produce a lot of electricity very cheaply. We in the past have suffered a little bit from that, as you know, and the whole south has suffered, as you remember.

CHANGE OF ECONOMY OF AREA

Mr. WAGNER. The total change in the economy of the area will give you one measure of what is being accomplished in the Tennessee Valley, although more than TVA activities alone are responsible. In 1933, the per capita increase was 45 percent of the national average; it is now 67 percent of the national average.

Senator ELLENDER. I am surprised it is not more.

Mr. WAGNER. This has been an area of difficult problems, but the difference between those two figures means that people in this area now have \$3½ billion more to spend each year than they would have if we still only had 45 percent of the national income. A great deal of this is spent for products that are built or manufactured in many other parts of the Nation. We believe that both Louisiana and the Tennessee Valley States should be prosperous and have decent incomes for their people and plenty of jobs for the Nation.

Senator ELLENDER. I am not complaining now. Don't misunderstand me. That is all water under the bridge, as far as I am concerned. I had my chance to fight the matter before Congress and I lost out, so we all join together and hope that it will continue to prosper.

MAKING TVA SELF-SUSTAINING

My hope is that as the TVA develops and becomes more and more prosperous that you will be able to take from the revenues that are produced in that area the burden of paying for these things that you are now asking us to pay for. That is what I am saying.

Senator HILL. Mr. Jones, is there anything you would like to add?

Mr. JONES. I have nothing.

Senator HILL. Mr. Smith, anything you would like to add?

Mr. SMITH. No.

Senator HILL. You want to keep that Mississippi rolling, don't you?

Senator ELLENDER. Oh, yes.

Senator HILL. Anything else you would like to add, Senator Cooper?

Senator COOPER. Yes, Mr. Chairman.

Senator HILL. We are very happy to have Senator Cooper and Representative Stubblefield.

**STATEMENT OF HON. JOHN SHERMAN COOPER, A U.S. SENATOR
FROM THE STATE OF KENTUCKY**

LAND BETWEEN THE LAKES AREA

Senator COOPER. Congressman Stubblefield is from the First District of Kentucky, in which the Land Between the Lakes area is located, and there are some witnesses from that area which you very kindly agreed to hear.

Before that, if the chairman will permit me, I would like to make a short statement.

Senator HILL. Proceed.

Senator COOPER. The statement is directed solely to the project that falls between the lakes area. I will take just a few minutes to give some information about the background of this project, and I hope that Mr. Wagner and the other members of the Board will correct any necessary details, because I cannot have as much information about it as they do.

DEVELOPMENT OF AREA

This project came to my attention, and to the attention of Senator Morton, my colleague, about 3 years ago. At that time there was consideration being given in the Department of the Interior, and in consultations with the Tennessee Valley Authority and the Corps of Engineers, as to the development of this area.

As Chairman Wagner said, there were about 70,000 acres in this area between the Tennessee River and the Cumberland River, under the jurisdiction of the Department of the Interior in the wildlife refuge.

TVA JURISDICTION OF AREA

In March 1963, Secretary Udall recommended that jurisdiction be turned over to the Tennessee Valley Authority. Although discussions about that decision were held, I cannot compare the conferences with Members of the Congress with the meetings that were held between the TVA and the Department of the Interior and other agencies.

On several occasions meetings were held in which I was present, as were Senator Morton, Congressman Stubblefield, representatives of the Department of the Interior and TVA, and this proposal was discussed. I can say that I supported it; Senator Morton supported it; and I know Congressman Stubblefield can speak for himself, that he supported it.

In June of last year, President Kennedy made the decision to transfer jurisdiction from the Department of the Interior to the Tennessee Valley Authority. Some time after that, I began to receive communications from people in the area, raising questions with which I had not been acquainted before, though perhaps that was my own fault.

PURCHASE OF ADDITIONAL ACREAGE

The first question, the crux of the matter, was raised because evidently they were not aware, and I was not aware myself, that it was intended to purchase an additional 100,000 acres. Perhaps I was told, but I do not remember that I was aware that this much additional acreage would need to be purchased. I do not say that fact alone would change my opinion toward the project, because the TVA has testified that it needs this area to complete this project.

DISPLACED FAMILIES

Then other questions were raised about the affect on the approximately 1,000 families that live in this area, and the 3,000 people that would eventually be displaced, and about the 100,000 additional acres the TVA said it needed to acquire. I think I am correct in

saying that the greater part of that lies in Tennessee, in Stewart County, and the remaining part in two counties of Kentucky—Trigg and Lyon.

I think there should be information given by the TVA to the Congress respecting these questions, and respecting the concern of people in the area.

PAYMENTS IN LIEU OF TAXES

The officials of these two counties, Trigg and Lyon, in Kentucky, communicated with me and with Senator Morton and with Congressman Stubblefield, regarding certain problems with which they had to deal when the land in this area was acquired by the TVA. They dealt, of course, with such questions as roads, schools, and the loss of taxes. As I understand the situation, TVA does make compensation in the form of payments in lieu of taxes.

I was informed, however, by the officials of these counties, and by the former attorney general of Tennessee, that it was not clear whether these payments in lieu of taxes would be made to the State or to the county. That may have been cleared up by this time, but in my last communication, which was several weeks ago, I was informed that the question had not yet been settled.

INFORMATION TO COUNTY OFFICIALS ON PAYMENTS

So, my first proposition is that, if it is possible, the Tennessee Valley Authority should make known to the officials of these two counties just how this question of payments in lieu of taxes would be made. If the counties do want and need to receive these payments, I think they are going to be in a very difficult plight; land has been taken by the TVA and by the Interior, land taken by the Corps of Engineers; and this would be the third take.

DISPLACED FAMILIES

The second question arises about the individuals who will be displaced. Some of them, according to what they have told me, have been displaced before by takings of the TVA and of the Corps of Engineers, and for some this will be the third time. They have been moved, and on each occasion that the land was taken, they have been required to purchase new land, sometimes at higher prices, and build new homes.

EXCHANGES

In talks with the TVA and with Mr. Wagner, on one occasion I was told that, as the TVA owned land near this Between the Lakes area, it might be possible to make exchanges of land with these people so that they would not suffer loss. I do not know whether that is contemplated or not, but if it is, I think these people should know it.

Those two problems are the ones that concern me. As I said, I support this project but I believe these counties and these people have the right to have this information because it is a matter of life to them, and they should receive information and should be treated with justice.

DISCUSSIONS WITH OFFICIALS

I also want to say, because I have talked about this procedure with the TVA officials, that I recommended that before going into the area they meet with the officials to discuss these matters fully so that the facts would be known and questions could be answered. I understand that some steps in this direction were taken, but I also recommended that public meetings be held in these counties, so that the people would know what was intended, and I understand that they have not been held. I have come before this committee as one who has supported this project, but with the request, and I may say with the insistence, that these problems be worked out with the officials of these towns and with the citizens of this area.

DEVELOPMENT AREA

There is one other question about which I hope that the TVA will supply information. The people of this area had hoped to keep an area of about 8,000 acres for development which would mean a great deal to the area in the future. TVA says that it is important that they take this 8,000 acres. Some of the people of the area and some of the officials, whether justified or not I cannot say, have said that the TVA plans to hold this for long-range commercial development. If that is intended, I think they should say so, because it seems to me that if there is to be such a commercial development, it might be set aside and, under the proper conditions, be developed for the benefit of the people in the area and not only for the benefit of the TVA.

These are the questions about which I would like information to be supplied by the TVA. We all respect the TVA, and it is a big agency and an important agency, but people, too, have their rights to be informed and to be protected. I am here for that purpose.

Senator HILL. We will break here for a few minutes.

Senator HILL. The committee will come to order.

Senator, had you finished?

Senator COOPER. Yes.

STATEMENT OF HON. FRANK A. STUBBLEFIELD, A U.S. REPRESENTATIVE FROM THE STATE OF KENTUCKY

KENTUCKY INTERESTS

Senator HILL. Congressman Stubblefield.

Mr. STUBBLEFIELD. In the interest of your time, I think you spoke of Kentucky. I would like to say a word, with your permission.

Senator HILL. All right, proceed.

Mr. STUBBLEFIELD. I think Mr. Wagner had some comment he wanted to make. Are your people in a hurry?

Senator HILL. We would be happy to hear from them. Is that agreeable with you, sir?

Mr. STUBBLEFIELD. Yes.

TVA LAND ACQUISITION PLANS

Mr. WAGNER. Senator Cooper, concerning the several points that you have discussed, let me say, first, that if there has been any uncertainty in your mind as to what the TVA plans were for the amount

of land to be acquired, I am sorry. I think we made it quite clear in the report to the President in 1961 we were proposing to acquire the area generally as it is now defined and the approximate acreage figures were given at that time. There never has been any attempt on our part to do anything but make it very clear that the entire area in this peninsula generally north of Highway 79 would be purchased. Now, that was in the report that went to the President in 1961 and it has been a part of our plans ever since then.

INFORMATION ON TAXES AND SCHOOL SUPPORT

On the matters of tax replacement and support of schools, and so on, we can supply more information later if you would like to have it, but let me say at this point that it is an extremely complex question. We are working on this intensively with the officials concerned; some of them are Federal officials and some of them are State officials. We have been through this same kind of a problem many, many times in the acquisition of reservoir areas and we believe we have always been able to work them out satisfactorily.

I have assured the county judges that the TVA Board has determined that TVA will do everything within our power to see that no financial hardship is worked on the local government as a consequence of this acquisition. As a matter of fact, we believe at the moment that in relation to the remaining needs, the financial positions of the counties will be improved.

RELOCATION PROBLEM

On the question of finding other land which you mentioned, I do recall that we discussed the relocation problems of people who had bought lots on Kentucky Lake or on what will become Barkley Lake in the Land Between the Lakes Area, intending to build homes or summer residences. Some of them have already been built. I said that we would help these people to find alternate locations to the very best of our ability, on the west shore of Kentucky or east shore of Barkley if they wanted them. Many of them have pointed out that land values are going up in these areas. I pointed out the land values in the area are a factor in the appraisal process which determines what TVA will pay for land it buys.

For emergency cases, the cases of people who cannot find alternate places to build their summer cottages, I pointed out that TVA has some land which possibly we could subdivide so that there would be lots available if lots are not otherwise available. However, since I have talked to you we have made a survey of available lots in the area and find there are a thousand of them available for sale on the western shore of Kentucky Lake alone. That is probably more than are needed by people in the Land Between the Lakes Area.

INFORMATION IN AREA

On the matter of information in the area, staff people of the TVA have met the local officials in many ways. These have not been new employees of TVA; they are people who have had long experience with us and are in responsible positions. I mentioned earlier that we have talked with literally hundreds on an individual basis about

their problems in the area. I had one joint meeting, as you know, with the three county judges concerned. Admittedly I could not answer all their questions because we don't have answers to all their questions yet. I mentioned earlier this afternoon that we were authorized to go ahead with this project only 6 months ago. Since then we have met on some 30 or 40 occasions with public groups in the immediate surrounding area and in nearby cities to explain our plans for the area, and to answer questions. We have done as complete a job informing the people as we are able.

LAND PURCHASE AND RESALE FOR COMMERCIAL PURPOSES

Now the last point you mentioned, Senator, was that some people said that TVA intended to buy 8,000 acres of this land and then resell it for commercial purposes. Such a statement is just a plain lie, Senator Cooper, and let me say it irritates me very much. We have made it clear from the beginning that we thought that for this area, to fulfill the purpose which we believe it can serve to the benefit of the people of this Nation, it must be completely in public ownership and used for recreation within the boundaries that we have described.

We have never had any idea that we would resell any of that land for private use, or for industrial development as I have read somewhere. There is just nothing to this rumor at all.

Senator COOPER. May I ask a question there?

Senator HILL. Surely.

Senator COOPER. Mr. Wagner, I am glad you have come here and answered these questions because they should be answered, and now perhaps they have been answered.

Mr. WAGNER. Yes, sir. I hope they have, sir.

PURCHASE OF ADDITIONAL ACREAGE

Senator COOPER. As far as the area to be purchased is concerned, I said in my statement that if I didn't know the TVA was going to buy another 100,000 acres, it may have been my own failure, but I do know that in the meetings we held, Senator Morton and Congressman Stubblefield and others have also remarked that this figure was not known. I remember that, beginning with the first proposal made by TVA in 1961, the questions as to the exact boundaries to be set and the exact number of acres to be acquired were left open. I also remember in the hearings last year that nothing was said then about the purchase of all of the additional 100,000 acres between the lakes, although reference was made to using the whole area to benefit the demonstration project.

Mr. WAGNER. I think the hearings will speak for themselves, but I think the amount of land we proposed to purchase was mentioned.

PAYMENTS IN LIEU OF TAXES

Senator COOPER. If so, I will stand corrected.

Now, in lieu of taxes, have you worked out with the State whether the payments in lieu of taxes will be made to the States or to the counties?

Mr. WAGNER. In general, under the statute the bulk of the in-lieu taxpayments are paid to the States. A portion may then be redistributed by the States.

Senator COOPER. Have you discussed this matter with the Governor or the Attorney General in order to confirm to see if this goes forward that the State would be willing to distribute these payments to these counties?

Mr. WAGNER. We have discussed the matter with State officials. I would be glad to submit a further statement on that for the record rather than trust my memory, but let me say that this is a question which we have had under consideration and discussion. The whole question of in lieu payments and of tax replacement has not been completely worked out. We have looked at it enough to be satisfied that there is going to be no harm done.

Senator COOPER. If I recall correctly, the Tennessee Valley Authority does own acreage adjacent to the acreage proposed to be acquired, or to this area which is proposed to be developed.

EXCHANGE OR PURCHASE OF TVA-OWNED LAND

Mr. WAGNER. We own some strips of land along the Kentucky reservoir side; yes. They will become a part of the development.

Senator COOPER. That land is near this acreage, but not included in it?

Mr. WAGNER. It is included in the total 270,000 acres or so.

Mr. SMITH. I believe Senator Cooper is referring to the west side of Kentucky Lake.

Mr. WAGNER. Oh, on the west side of Kentucky, excuse me, Senator. I was talking about land we own on the east side of Kentucky Lake within the Land Between the Lakes area.

Yes, TVA owns some land on the west side of Kentucky Lake. Over years past, we have combed this over quite carefully and we have sold almost all that is surplus to our needs but there is one tract which if we should find it necessary can perhaps be subdivided and sold for lakefront sites.

Senator COOPER. The reason I raise that question is because we have received some queries on this subject. I must say that these queries may be based on rumors which may be untrue. We also have heard that people are coming in and purchasing land near this between the lakes area at very high prices, which are being driven up by speculation. If that is true, that would make it very difficult for the people being displaced to find places and sites to replace those that they sell.

That is the reason I ask if it is possible that arrangements could be made involving the acreage you already own near this area, in order to exchange or to make sites available to present residents facing the difficulties of moving and getting scalped by the rising prices.

FAMILY RELOCATIONS IN AREA

Mr. WAGNER. This is the question on which I have commented. Of course I am sure that you understand that we don't own 100,000 acres to replace all the acreage involved here.

Senator COOPER. I understand, but there are only around a thousand families, many of whom would not want to locate in the vicinity.

Mr. WAGNER. I think actually less than a thousand, Senator.

Senator COOPER. Several hundred of them might want to relocate.

Mr. WAGNER. We will try to help them find places that will suit, them.

Senator COOPER. I ask these questions because I represent these people and I want them to have that information. I want them to know that they can have it, and that they will be treated fairly and justly. I know that that is your purpose, but sometimes they have had other feelings.

OWNERSHIP OF LANDS BETWEEN THE LAKES

Senator ELLENDER. I have been studying this map which was given to me. I notice here that you have some lines to the Kentucky Woodlands Wildlife Refuge. That is the Interior, I assume, and then Tennessee Valley Authority. Will you give for the record the number of acres that are owned by each of these different departments of Government?

The Corps of Engineers, how many acres do they own between the lakes? Just between the lakes now?

Mr. WAGNER. In the Land Between the Lakes area, 11,850 acres are owned by the Corps of Engineers; 58,940 acres are owned by the Fish and Wildlife Service; and 4,112 acres by TVA.

Senator ELLENDER. Now the bulk of the land owned is in the shaded area.

Mr. WAGNER. Yes, sir. By the Fish and Wildlife Service.

Senator ELLENDER. Yes. Now is this land to the south farmland or just what kind of land is it?

Mr. WAGNER. It is generally wooded land, Senator. As you look at the map the green areas are forested, the white areas are cleared, so you can see it is mostly wooded area.

HIGHWAY 79

Senator ELLENDER. Now it is your intention to purchase the highway?

Mr. WAGNER. Our purchase line will generally parallel Highway 79, but leaving at this point [indicating].

Senator ELLENDER. I notice you have another highway bordering on the land that is owned by the Fish and Wildlife Service. Why would you not be so ambitious and let that be your boundary line and exchange lands that are owned by private individuals here and lands you own here and be satisfied with this amount? If you don't do that, you are going to have a little trouble I believe before the Congress. I am going to do all I can to try and do what I can about it. But here is an instance where you are taking away from property owners property that is worth quite a bit, put it in the hands of the Government, and the first thing you know somebody is going to make a lot of money on that.

Mr. WAGNER. Who?

Senator ELLENDER. The individuals who own it. You are never going to get that land for \$120 an acre. Now you said you sold a lot of land or sold some land—

SALE OF LAND BY TVA

Mr. WAGNER. The land we referred to is land along the west bank of Kentucky Lake.

Senator ELLENDER. How many acres of that did you sell? Do you know?

Mr. WAGNER. I don't recall how many acres were sold in that particular area.

Senator ELLENDER. Could you furnish it for the record?

Mr. WAGNER. Yes.

(The information requested is as follows:)

Land sold by TVA on the west side of Kentucky Reservoir totals 10,707 acres. Land transferred by TVA to other public agencies totals 9,577 acres.

Senator ELLENDER. Did you sell any in large blocks to anybody in this area?

Mr. WAGNER. We don't own any of that.

Senator ELLENDER. The only land you own—

Mr. WAGNER. The land we own over there was sold generally in small tracts. Much of it was sold in individual lots. It was sold at public auction.

LAND ALONG KENTUCKY LAKE

Senator ELLENDER. Now the land that is along this Kentucky Lake, that is along the lake itself, who owned that? Is it the Tennessee Valley?

Mr. WAGNER. The portion in the dark shading is owned by TVA.

Senator ELLENDER. What do you do with that land? What is the purpose of it?

PURPOSE OF LAND OWNED BY TVA

Mr. WAGNER. Parts of it are held for the needs of the navigation program, such as safety harbors. Some of it is for general reservoir operating purposes. You understand that the Kentucky reservoir is a key flood-control feature for protecting the lower Mississippi River.

Senator ELLENDER. The which?

Mr. WAGNER. The lower Mississippi.

Senator ELLENDER. I didn't know that.

FLOOD REDUCTION IN MISSISSIPPI VALLEY

Mr. WAGNER. We can reduce floods in the lower Mississippi Valley.

Senator ELLENDER. Of course, we do that with the construction of the dams from North Dakota on down.

Mr. WAGNER. Kentucky is a very important flood storage reservoir for that purpose.

Senator ELLENDER. Isn't that water used by you to develop electricity?

Mr. WAGNER. Yes. But the point I want to make is that this reservoir has 16 feet of flood storage above its normal level, so we own some land on which we can store water if needed to control floods.

PRIVATE OWNERSHIP OF LAND

Senator ELLENDER. I express the hope that some way can be worked out to do what you intended to do but not be so vulgar as to take all of this fine land out of private ownership and put it in the hands of the Government where you are going to have to pay taxes on it and deprive these people who own that now of what I would term a very

valuable piece of real estate. I just think the Federal Government now owns too much land. I have been saying that all the time. The military owns a lot and much more than they need. It proceeded and acquired more and more of this land, and all that ought to be left in the hands of the individual, in my opinion. I may be narrow about that, but it would seem to me you have over here—north with this road I am speaking of—probably you would have as many as 100,000 acres. Would that be about right?

Mr. WAGNER. Less than that.

Senator ELLENDER. How much? Take all this in from here to here [indicating].

Mr. WAGNER. I don't know. Just looking at the map, perhaps 75,000 acres.

Let me say that the feasibility of this project to perform the services—

Senator ELLENDER. I know, it is beautiful. The next thing you are going to do is build something on it that private enterprise ought to build.

DEVELOPMENT OF AREA

Mr. WAGNER. Let me say we think that the whole area is required for this kind of a project, and technicians in this field have looked at it and agreed with us. As far as private enterprise is concerned, we believe on the basis of our experience that there will within a relatively short period of time be \$25 million of private money invested on the shorelines opposite the west shore of Kentucky, and the east shore of Barkley. We think there will be industrial sites there which will be used and jobs in those plants for the people in the general area.

Senator ELLENDER. Why don't you let them develop it on this side, too?

Mr. WAGNER. It would make impossible the kind of project that we think can otherwise be accomplished.

VALUE OF LAND

Senator ELLENDER. I have just gotten interested because I didn't know a thing about it before now. I know I voted for it when it was brought up before, but in looking to this and studying it, I find I didn't. But I have been looking at this thing since I came in here, since you raised the question, and here is an instance where you are going to deprive a lot of people of very valuable property. If I had property in that area, you would not get it for any \$120 an acre, I can guarantee you. You would not get it for \$500 an acre.

Mr. WAGNER. The thing that has made that property unique and valuable is that the Federal Government has invested \$300 million in these dams and reservoirs.

Senator ELLENDER. Let them benefit by it, and keep the land.

Mr. WAGNER. We think the general public should have the benefit of using this unique area that they have created by this public investment.

Senator ELLENDER. They will have a unique facility to use as 75,000 to 100,000 acres which is now owned by the Government, won't they?

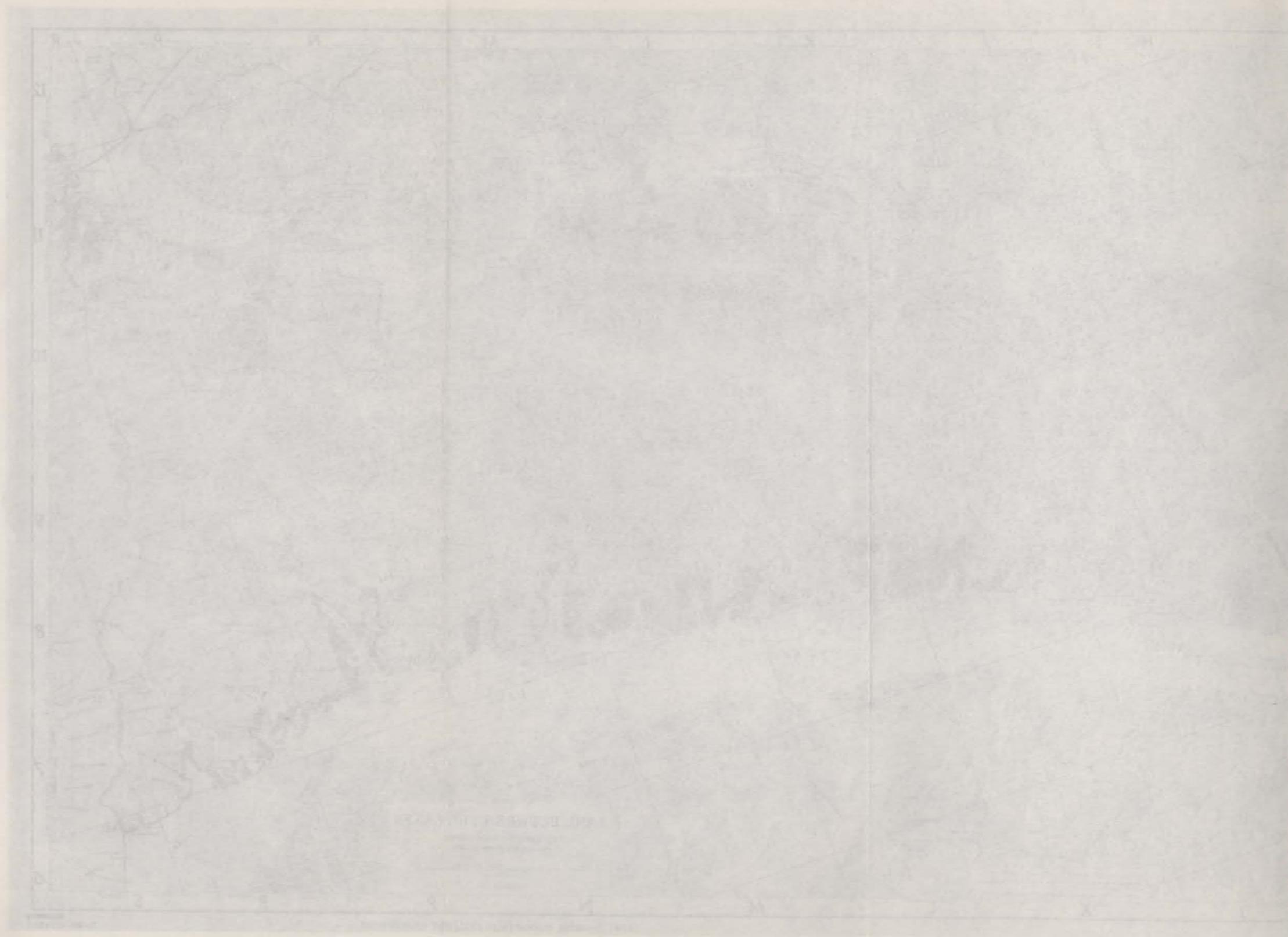
Mr. WAGNER. No, they won't.

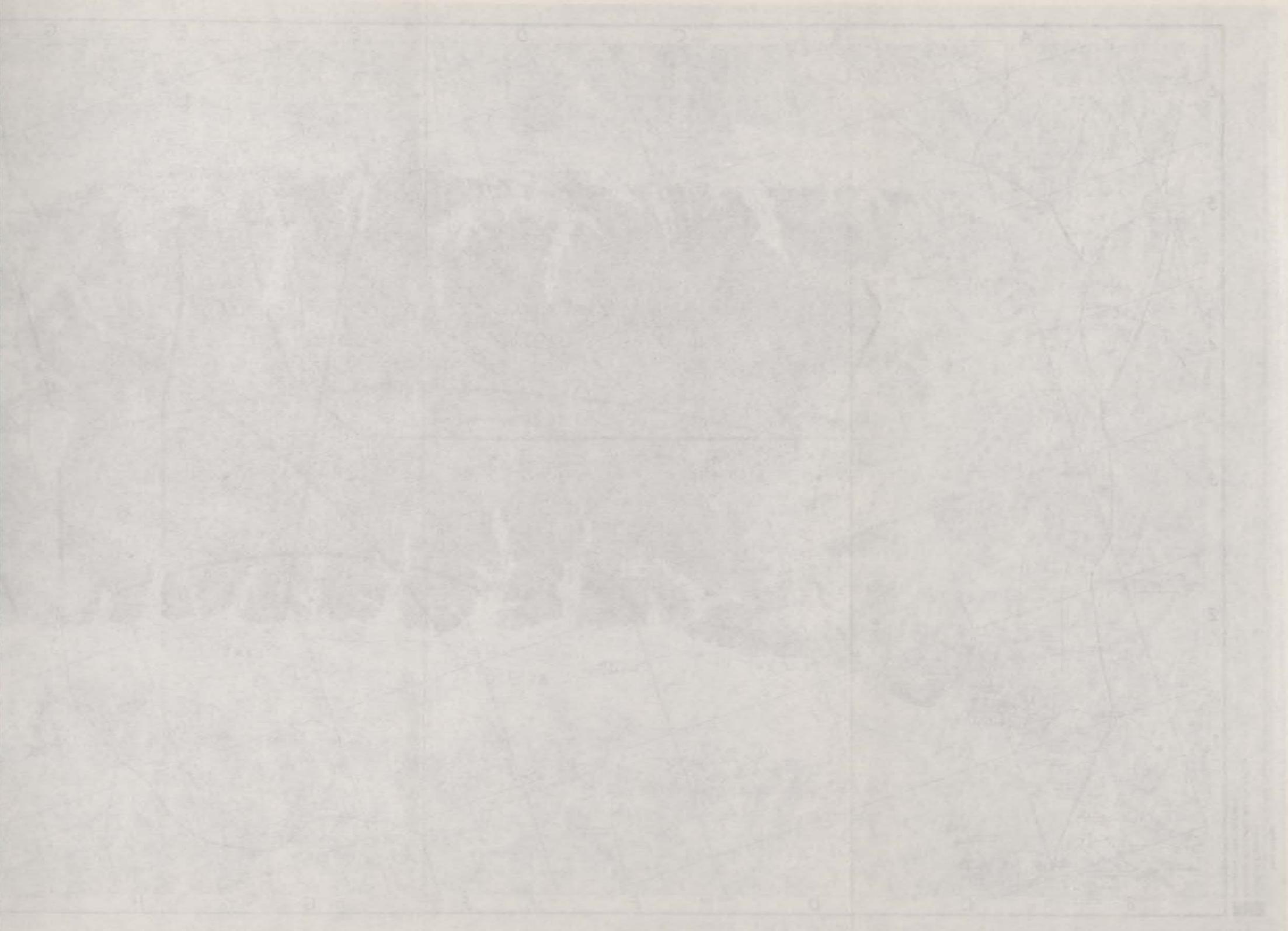


Land Holdings
 Copy of Plans
 Kentucky Windfalls Wildlife Refuge
 Tennessee Valley Authority



•7R1 Location marker (sign post) and identification





Senator ELLENDER. You want more. That is, the Government ownership.

That is all I have, Mr. Hill.

Senator HILL. Let's hear from Mr. Smith.

RECREATION AREA

Mr. SMITH. This is going to be a recreation area, primarily designed to serve young people, families. The whole purpose of trying to keep the recreation area exclusively in the ownership of the operating agency is to deny to that area the type of facilities that destroy the family-type recreational purpose. This is the same reason such facilities are not allowed in the public parks and in the national parks or anything like that. Unless the whole area is acquired it would be just a matter of time before you would have real estate developments, commercial establishments including honky tonks, springing up all over the recreation area. That would be the result.

Senator ELLENDER. The recreation area, Mr. Smith, is almost 100,000 acres surrounded by water. What else do you want? The 100,000 acres would take care of thousands of people. Then, as Mr. Wagner said, you have people that will have facilities across the lake. I really believe that you could do well by letting this road be a southern boundary and whatever line you have here exchange it.

ATTITUDE OF LOCAL PEOPLE

Mr. SMITH. If there were any change, I don't think this would be the change which is satisfactory to these people who are presently on the lake—this [indicating] is the area that is being talked about which local people want to take out so as to allow for commercial development.

Senator ELLENDER. You say you purchased most of this already.

Mr. SMITH. No, we have purchased some of it.

Senator ELLENDER. It seems to me that it would be reasonable for you to buy this so that you will own everything from the water's edge and then make this your southern boundary. Such land as you may have south of that boundary exchange it for land that you have here. That would be a little more reasonable, and keep the Government out of more landownership. That is what I am trying to do, leave it in private hands where it belongs, where it should be.

Senator HILL. Anything else you gentlemen would like to say?

Senator ELLENDER. Mr. Chairman, I ask that this map be filed.

Senator HILL. All right.

(The map referred to faces this page.)

GOVERNMENT OWNERSHIP OF LAND IN AREA

Senator ELLENDER. Now can you give us an accurate amount of land that is owned by these three agencies?

Mr. SMITH. We will check it.

Senator ELLENDER. That is in between those lakes.

Senator HILL. Give us that information.

(The information requested is as follows: Total land area owned by the Corps of Engineers, the Fish and Wildlife Service, and TVA in the Land Between the Lakes area is 74,902 acres.)

Anything else you want?

Senator ELLENDER. And, also, if you can, the accurate acreage of the land between that road that I mentioned on this map and clear on down to the water's edge, the north part.

(The information requested is as follows: 95,000 acres are within that part of the Land Between the Lakes area lying south of Highway No. 68.)

Senator HILL. Anything you want to add, Congressman Stubblefield?

STATEMENT OF HON. FRANK A. STUBBLEFIELD, A U.S. REPRESENTATIVE FROM THE STATE OF KENTUCKY

SPECULATION IN AREA

Representative STUBBLEFIELD. Senator, I would like to speak one word. As you know, my county is located adjacent to this project, particularly the southern end of it, and I happen to know something about the activities that are going on down there. There has been some speculation taking place. I understand the syndicate is located in Evansville, Ind. This is secondhand information and may be hearsay on my part, but I know people have been approached down there, the landowners, to purchase their whole farms, their whole tracts, and they want fancy prices for their acreage.

EXCHANGES

That is the reason I was hopeful, Mr. Wagner, that some exchange could be made where these syndicates are able to hold this land off the market. If some exchange could be made, that people within the area who would desire to relocate but were unable to on account of the inflated prices, it may be the land would even be unavailable to them.

Mr. WAGNER. As I have indicated, I think we can find either in private hands, or else in lands that we own, alternate locations for people who have lots and are planning to build. Now, as I also indicated, we cannot expect to replace 100,000 acres of land or to supply it by sale.

Representative STUBBLEFIELD. I was talking about reasonable exchange that maybe could be effected because if these people do acquire these large tracts, it is going to be very difficult for them to relocate because either the land won't be available or the price will be such that you can't pay.

I am hopeful that you really give that consideration because I know this activity is going on.

Senator ELLENDER. Congressman, where is this going on?

Representative STUBBLEFIELD. Buying at the periphery.

Senator ELLENDER. What?

Representative STUBBLEFIELD. The east side of Barkley Lake and the west side of Kentucky.

Senator ELLENDER. Not between?

Representative STUBBLEFIELD. No; not between, around.

Senator ELLENDER. Let me ask you this. Are you familiar with the land in that area?

Representative STUBBLEFIELD. I live there.

Senator ELLENDER. You live there?

Representative STUBBLEFIELD. Yes.

COST OF LAND

Senator ELLENDER. Would it be possible for the Government to buy this land for \$120 an acre?

Representative STUBBLEFIELD. I don't know, Senator. I don't know. It would not be possible in most cases. These people have to relocate at a good price. The other day, 60 acres of land, a fellow asked \$40,000 for it, and it was just farmland, no improvements on it.

Senator ELLENDER. How far?

Representative STUBBLEFIELD. Marshall, not even on the lake.

Senator ELLENDER. How many?

Representative STUBBLEFIELD. \$40,000 for 60 acres.

Senator ELLENDER. As I said a while ago, I have looked at this map, the land surrounding the dam. If I had it, I certainly would not sell it for any \$120 an acre, and I am sure you would not be able to buy it for that.

Mr. WAGNER. Senator, that is an estimate that was made—

Senator ELLENDER. I know, a few years ago.

LAND DESCRIPTION

Mr. WAGNER. The larger part of the acreage is just woodland with scrub timber on it and soil that is some of the poorest soil in the Tennessee Valley. For this land prices will be at one level. For the waterfront area the price is going to be higher.

Senator ELLENDER. There is no doubt it is a wonderful area but, as I said, I hate to see the Government get any more of this. We have enough lakes in your State, Senator Cooper, your State and not my State, because we don't have any, they are too level, wherein we are spending millions of dollars each year to construct facilities to afford recreational facilities for all the people.

HARDSHIP AND EMERGENCY CASES FOR RELOCATION

Senator COOPER. Mr. Chairman, I want to say that I hope it is clear that I was talking about exchanges of property on which people live. I know that you cannot exchange 90,000 acres or 100,000 acres, much of which is undeveloped land. I also understand the Corps of Engineers owns the areas on the waterfront, or part of it, which would make this interior section inaccessible without construction. I was talking about the 1,000 families which would find themselves in hard circumstances, and may suffer from or be subject to speculation. I would hope you could exchange lands for them, as closely as possible, and make the fairest deal possible. Also, I would hope that you would deal in the same manner with the counties, which are going to be in tough shape regarding revenues and their whole structure.

Mr. WAGNER. We will help those hardship and emergency cases to get relocated, I assure you, Senator.

Mr. JONES. I think it should be understood, Mr. Chairman, that we will do everything we can to help as Mr. Wagner says, but there are legal limitations on what we can do in exchange of property.

Senator HILL. Anything else?

Senator COOPER. No.

Senator HILL. Mr. Powell.

Mr. STUBBLEFIELD. Are you speaking for all?

Mr. POWELL. No; Judge Utley would like to speak and Mrs. Whitehead and Mr. Bleidt.

Senator HILL. Proceed in any order you wish.

STATEMENT OF JUDGE FRANCIS UTLEY, EDDYVILLE, KY.

INTERESTS OF LYON COUNTY

Judge UTLEY. I am going to make mine very, very brief. I am Francis Utley, county judge in Lyon County, Ky.

Here is a much more comprehensive map than I have seen. This is not blocked out.

I want to say this to you gentlemen on behalf of my county: I have no personal interest in any of this business at all. I am a real estate developer and promoter but I own all of my properties on the eastern side of Barkley Lake and I have never owned an acre of land or lot in Lyon County and I never will, because I am an old man.

Senator HILL. Where is your land?

Judge UTLEY. Right here, sir. This is on the east side of Barkley Lake; yes.

Senator, I would like to say this: I have a hundred acres of land there that I sold \$50 lots out of and I would not take \$100,000 for. The water is not in there. This land is extremely valuable. It is utterly priceless. My interest in this whole thing, as I say, is for my county. We have lost 53 percent of our land area in my county to various Government agency developers, every one of them legitimate until this thing came along, every one of them, and I was in favor of it. Naturally I was on the executive committee in getting this program developed, Barkley Lake.

LAND FOR PRIVATE ENTERPRISE

Now with that behind me, I want to say this to you: All this stuff about this having creeks bound by waters is an absurdity on the face of it, regardless of anything that could be argued. Here is an arterial highway running between the two lakes, East and West is a multimillion dollar road, there are multimillion-dollar bridges and that can not be closed. They are going to have these two built. There has got to be a fence built down to the south end of this thing somewhere and there is not the slightest reason why one could not be built here, put it right across there, for less money than you could buy part of that lake here. It is an absurdity on the face of it to let that out of Six Lakes and leave it to the deer and buffalo. It should belong to people, it should be in private enterprise.

Senator HILL. Is that all in private hands now?

Mr. UTLEY. It is all in private hands. I don't think there is any of it owned by the Government. TVA may have some small pieces down there.

KENTUCKY DAM INCREASING LAND VALUES

Actually I was at my clerk's office the day I got the call to come up here—I forgot what that was, 3, 4, 5, days ago—but I went into the clerk's office. They have a few spotted pieces in there and they have acquitted and paid for a total of about 43 pieces in there as of now. With a couple of exceptions they are all outside lot owners that come in there and some of them were overextended, got scared, bluffed out, but the natives down there don't want to leave, they want to stay there. This represents the original amount that was bought in WPA days and called resettlement administration. It was a pauperized country and it still is. That is your reservation. Those people out there moved down there and moved up over here, some of them, some out of county, some out of the State. Then when Kentucky Dam was built all this beautiful stuff here and absolutely gorgeous and utterly priceless, was bought by the TVA and kept off the market. TVA has retarded relatively that entire area 10 or 12 years.

FAMILIES MANY MOVES

I have been in the real estate business and I know it upside down and backward. These people moved down there. TVA bought this land here and they had to get up and go. They come over here and they went here or they went out of the county. That was their second move to come out of here.

When Barkley Dam was built people moved for the third time. So they moved, a great many of them, down here, and they are going to live down there. If this is bought, they are going to leave for their fourth time. They literally have their furniture loaded on trucks and lose money on every move. Now, another thing about that is this—

Senator HILL. Where is your home, sir?

SPECULATION

Judge UTLEY. My home is right in the middle, right here. I have never owned a dime's worth of property and I never will own a dime's worth of property there, never have and never shall. I know friends that are speculators in there. Speculators is a dirty word. I am a speculator and I have made a lot of money. I never stole anything from anybody and as a result that is tax money. I have to pay for those dams, everybody else has. This is an absurdity, the fact that the Government spent tax money building those things, that stuff belongs to the public. They have a water line all the way up and down that the public can use.

TAXES

Now I want to say just one little thing about taxes, and then I am going to stop. My county is a pauper county, it has always been a pauper county. For the first time in our lives we see an opportunity to become reasonably independent in spite of the fact we have lost every acre of river bottom. We have never had any industry, we have none there now. We have no industry in the county. For

example, we have a 160-people county school system. We have \$550,000 as a result of land acquisition by Government agencies in the Government where we didn't get enough money to replace so we could continue operation. So we are \$550,000 in debt on schools. We get \$1.50 a day for 180 days on 160 pupils that come to our schools from here down through here to into the main part of our county. Regardless of anything that is presented to you, and I know what I am talking about, we will lose at least 120 and I think 140 of those pupils, and when we do, we lose 5 schoolteachers out of the county, the operation of 3 school buses, the operators of those school buses, and gas and oil and maintenance of those buses that are a part of our small economy.

PAYMENT IN LIEU OF TAXES

I asked Mr. Wagner about that at a meeting and I got a negative answer. They had not even considered it. This is in lieu of taxes. That has not been considered and yet in our school system we are going to lose five teachers, we are going to lose three buses and the drivers. We have a fine school system there and we are credited. We lose your accreditation.

In lieu of taxes that does not mean anything in my case. I don't care what it said to the contrary, there is another law on the books in which the State is required to turn over any money to us in lieu of taxes.

Now the State of Kentucky only this last year took what little money came to us in lieu of taxes, TVA, and put it in the general fund. If the Governor had been a gentleman they would have kept it. All the Governors are not, and one of these days there is going to be one get a job up there and say we need the money worse, we are going to keep it, and they will keep it. The day they do that we are sunk completely.

This is an indecent thing to do with a bunch of people, it is indecent, immoral. We want this, at least that much.

PROPOSED BOUNDARIES

That is the line there that goes across from Barkley Lake and over to Moss Creek Ferry, over to right down here and into there. If we have that, we will have our 25, 35, 50 million potential and we will get along as a county. Those people will not be discouraged. That will take care of the people in this area.

Senator ELLENDER. Judge, have you any idea of the acres?

Judge UTLEY. Approximately 8,000 acres.

Senator ELLENDER. Eight thousand acres?

Judge UTLEY. Yes.

LAND VALUES

Senator ELLENDER. Can that be bought for \$120 an acre?

Judge UTLEY. If I owned it—well, here may I say this: On this side of this peninsula, I own that property and I would not even consider \$150,000 for the residue that I have got in 100 acres there. I would not even consider it. I would not consider it at all.

I have a piece of land along here, this same situation, paid \$400 an acre for it, but I paid the price that the man asked for it. He came

and asked for it and I said I paid for that. That is not a crime, it is not a sin. It is not here, it should not be.

Senator ELLENDER. Tell us about the land here from this road.

Judge UTLEY. I am going to leave that alone.

Senator ELLENDER. That 8,000 acres?

Judge UTLEY. That approximately 8,000 acres there that I want in my county because it is our birthright, and it is nobody's birthright but ours.

ACREAGE OWNED BY TVA

Senator HILL. How many of that 8,000 acres is owned now by TVA?

Judge UTLEY. Very little. It will show here, sir. Now they have got worked up a lot of it. Five days ago my county clerk told me there had been 42 or 43 parcels closed, or paid for in there and Mrs. Whitehead has a list, and with 2 exceptions they are all outside, the lots that people want. One or two people are happy to sell to the TVA or go bankrupt. Others sell to TVA and they are bankrupt and are going to be worse bankrupt after this.

I thank you, gentlemen, very, very much.

Senator HILL. Excuse me.

Mr. Wagner, you said you had a very important engagement and you had to catch a plane.

Mr. WAGNER. I do have to leave. Miss Owen will stay here, however. She is familiar with this project and can comment on it.

Senator HILL. Glad to have seen you, gentlemen.

All right. Now who is your next witness?

STATEMENT OF LEE F. POWELL, PADUCAH, KY.

VIEWS OF BUSINESSMAN

Mr. POWELL. Gentlemen, Mr. Chairman, I am Lee F. Powell, and I reside in Paducah, Ky. I own and operate the Old Hickory Clay Co. in Mayfield, Ky., and have some 45 employees working in Kentucky and Tennessee mining operations. My purpose for coming before this Committee on Public Works is to give my views as a businessman in the area in question.

I have never held a public office except I did serve 20 years on the Paducah Board of Education. I know some of the problems that you people have in solving and making decisions of this kind.

DEVELOPMENT OF RECREATIONAL AREA

We are not opposed to the development of the national recreational area by the TVA—I want to make that clear—however, we feel that the 103,000 acres now under their possession and control is completely adequate for all the recreational purposes that they want to satisfy. It will take a couple of generations to develop the 103,000 acres or approximately 100,000, as they say. What we are likewise concerned with is jobs for our people, industrial and commercial development for the people of the Jackson Purchase area, and private residence.

I was very interested a couple moments ago in Mr. Wagner's statement when he said that the development of this area would be an added attraction for industry, but, gentlemen, we are going to have to

leave some land for industry to develop if we are going to attract industry, and that is what we are asking you to do today.

EDUCATIONAL FACILITIES

I was interested in Mr. Wagner's discussion of the educational facilities that this recreational area would produce, and the more I think about it, it came to my attention a few days ago, someone, I am not able to say who, in the TVA has proposed a TVA university for the purpose of educating without cost boys and girls who want to study forestry, geology, engineering, anything that concerns TVA.

UNEMPLOYMENT

In regard to the unemployment—I just would like to cite each day when I go to my office there are people there wanting jobs. Just a few days ago—I would like to cite this because it will bring home what I am talking about—I had an individual who had been in to see me for about the fifth time. He came into my office one morning at work-time, and I said, "Sit down in my office a minute." He sat down and said, "Mr. Powell, do you have a job for me?" I said, "Well, I don't have." The man broke down and cried and said, "Mr. Powell, I have a 6-months-old baby that I can't buy milk for. I have a 2-year-old child. I can't pay my rent. All I want is a job."

I got on the telephone and I called my superintendent and said, "Can you take one more man? We have a man up here who is desperate, he wants to work."

I sent him down and put him to work. If you want his name for the record, I have that.

CREATING JOBS IN JACKSON PURCHASE

Now, not long ago our First Lady, Mrs. Johnson, personally viewed some of the area of eastern Kentucky. I believe, gentlemen, that this very, very thing could well apply to western Kentucky, and I believe it would be in line with President Johnson's poverty program. In other words, what we do, what we need to do is create jobs for our people in Jackson Purchase.

Now Mr. Wagner mentioned a few minutes ago that it was only a day's drive for some 60 or 70 million people to come into this area. We are happy to have these people, but I can say it is only a 20- or 30-minute drive for some of our people who want to build homes and who want to live in the area.

RELOCATING DISPLACED PERSONS

No. 3. Where are the 2,500 to 3,000 displaced persons going from within Trigg and Lyon Counties? That is a question that I want to propose. It has already been brought out that several syndicates are buying or have purchased land on the eastern shore of Barkley and on the western shoreline of Kentucky Lake even down to Blood River. We recited some of the people. I won't take time for that.

Now, Mr. Wagner is right, there are lots available. I suppose there are several hundred lots available on the western side of the Kentucky area and on the eastern side of Barkley Lake, but, gentle-

men, they are selling for \$5,000 and \$6,000 a lot. When these people get the money from their farms, they will be lucky to get \$120 an acre. If they have a 50-acre farm, they will be trading a farm for a lot.

PLANNING AND ZONING

No. 4. Proper planning and zoning would preclude interference with recreational area and would also provide adequate homes within the general area of Paducah, Mayfield, Murray, Benton, Princeton, and so forth. The development of industry and the construction of homes in the area would provide essential revenue for the operation of the county and municipal governments, as has been pointed out by our judge.

I would like to say, gentlemen, that there is very little revenue that is produced from campsites. If they are going to pay revenue in lieu of taxes, it can't come from campsites and from recreational areas.

SUMMER OR RETIREMENT HOMES

No. 5. I personally feel that the citizens of the Jackson Purchase should have the opportunity to build summer homes or retirement homes in this area rather than allocate all of the land for campsites. Gentlemen, I feel that the people north or south in the population areas who want to utilize the camping grounds would have adequate facilities within the 103,000 acres already under the TVA control. Likewise, we feel that the residents in the Jackson Purchase should be entitled to the remaining area for purposes of private homes, summer homes, and for the development of business and industry.

SEVEN TO EIGHT MONTH FACILITY

No. 6. Notwithstanding the contentions of the TVA, this area at the most would be utilized by campers possibly 7 to 8 months out of the year; the reason I say this, they propose to make it a 12-month facility. For the remaining part of the year the weather elements and the complete shutdown of all facilities at the Kenlake Hotel, the Village Inn at the Kentucky Dam, and Paris Landing, Tenn., and all other private facilities, definitely evidence the fact that this cannot be a year around operation.

In other words, if people are not going to stay in steamheated rooms, they are not going to stay in a sleeping bag or a tent. This year I have checked on several occasions at these hotel resorts, and expect for maybe Friday or Saturday night, there are plenty of facilities in the places I have named, even at this season of the year.

AGREEMENT ON DISCUSSING PROJECT

No. 7. I had a long telephone conversation this morning with Mr. Wagner, and he agreed that I am to write him or telephone him as per the discussion for an appointment whereby he and his Board will sit down with Senator Cooper and Judge Utely and Representative Stubblefield, along with some business people and people of the area and discuss this thing. He didn't promise anything, but I finally, after a great persuasion, got him to agree to let's sit down and talk about it over the table.

In accordance with the TVA release of February 6, 1964, TVA states:

TVA will offer help to sellers in finding suitable properties on which to relocate.

Gentlemen, in my conference with Mr. Lupfer, TVA representative at Paris, Tenn., he stated to me on May 1, 1964, that this policy of helping landowners and residents relocate on similar properties has been changed and that they no longer will sell or exchange any properties for the purpose of relocation of residents and landowners in the acquisition area.

Now, Mr. Wagner did assure me today that he would talk about this.

EXCHANGE PROPERTY

In the TVA office at Paris, Tenn., when I told him that several of us would like to exchange property, he said: "Mr. Powell," and he is very kind and very gracious, "all this land has been earmarked for TVA on the west side of Kentucky Lake." I said: "What do you mean?", and he said: "Well, you have some 29,000 acres of land." He said: "10,000 acres is available to other Federal agencies, 6,000 acres is earmarked for public recreation use not identified"—I don't know what that means—"12,000 acres is allocated for the TVA program such as navigation, steamplants, forestry," et cetera.

WILDLIFE REFUGE

Now, on down they talk about the wildlife, Mr. Wagner did a few minutes ago. There are still some 10,000 acres on the west side and on down below Paris Landing in Tennessee there are some 10,000 acres that is in the wildlife refuge there that has not been mentioned.

Senator ELLENDER. You mean not connected?

Mr. POWELL. No. It is Highway 79, yes, some 10,000 acres; geese and duck. They have a crew of people watching after it, and I suppose it is a fine facility, but I was there the other day.

Senator ELLENDER. Who did you say owns that?

Mr. POWELL. The Wildlife people.

That is a lot of acres, 10,000.

PROPERTY IN BLOOD RIVER AREA OF KENTUCKY LAKE

Now I am still on No. 7. In the conference held in Knoxville on December 19, 1963, between Mr. Wagner, Chairman of the TVA, and his entire Board with our counsel, Michael Avedisian, Mr. Wagner stated that the TVA has several thousand acres in the Blood River area of Kentucky Lake, that is on the west side, and possibly in other areas which the TVA may open up for purposes of exchange with displaced residents and landowners in the Between the Lakes area. However, according to Mr. Lupfer's statement this policy now has been changed. On May 1 he said, "that is earmarked." I have tried to point that out to you.

CONVENIENT BOUNDARY

No. 8. Let us suppose the area that you have there, Senator, between the lakes, let us suppose that would stay 25 or 50 miles wide.

Would Mr. Wagner and his TVA Board still demand the entire 50-mile or 25-mile strip simply to have a convenient boundary?

May I ask you this question? Is this adequate justification for the entire acquisition?

Senator ELLENDER. You heard me offer the suggestion that there is a road here, No. 79, and another road here, No. 68. My idea would have been instead of trying to gobble all that up, just take from there to here, but the Judge states that this landing is very valuable.

Judge UTLEY. That is our sole—

Senator ELLENDER. I know. As I said before, the Government owns enough land now I think.

INFLATED COSTS

Mr. POWELL. Gentlemen, I would like to say this since I am in the line of business, that I used to buy a bulldozer or caterpillar tractor for \$9,000, and that same tractor today costs \$40,000.

Senator HILL. From \$9,000 to \$40,000?

Mr. POWELL. Yes, bought in 1939.

Senator HILL. From 1939 to now?

Mr. POWELL. Yes, same tractor. Now TVA proposes to buy our Land Between the Lakes. You can remember this, Senator, when this dollar bill right here was as big as a wagon wheel. Do you remember that?

Senator HILL. Off the record.

Mr. POWELL. Now we have this dollar right here, Senator. Mr. Chairman, this is the 40-cent dollar that we now use, but TVA proposes to buy our land with this dollar. The shrunk half of this dollar. Now does that point out what I am trying to get across?

Senator ELLENDER. I think you are mistaken there about the shrinking part. He wants to get it for much less than that. If I had property there, you would not get it for that.

Judge UTLEY. How would you keep it from him?

Senator ELLENDER. By not giving him the money.

CONFERENCE CENTER

Mr. POWELL. No. 9, gentlemen, don't be too sure that the conference center, which comprises 8,000 members, is willing to move its location between the lakes. I have just communicated with some of them, and I know that they are not unless they are forced to do it. If you want to refer to that, if you will refer back to the hearing before this committee on November 19, you will find an attorney represented that meeting November 19, 1963.

In my concluding statements I would like to conclude my testimony by quoting Mr. Wagner's statement in the St. Louis paper not long ago stating in essence that this project is so important that homes, businesses, churches, and schools must give way to the greater public need. We have a clipping if you want to see that.

Gentlemen, what is more important than homes and churches and schools and businesses? I thank you.

STATEMENT OF MRS. CORINNE WHITEHEAD, KUTTAWA, KY.

LEAVING LOCAL PEOPLE ALONE

Mrs. WHITEHEAD. Thank you, sir. I want to preface my statement by saying we are not opposed to the national recreation area. We do feel like really there should be room for the local people to be left alone.

Mr. Chairman, distinguished committee members, my name is Corinne Whitehead. I am a resident and property owner between the rivers in Lyon County, Ky. I respectfully request that you vote against the \$6 million appropriation for the Tennessee Valley Authority, for the purpose of developing a national recreation area between the Cumberland-Tennessee Rivers in Kentucky, or that any appropriation be restricted to exclude private lands north of Brandon Chapel Road in Lyon County and along the Highway 68 corridor in Trigg County from purchase by condemnation.

NATIONAL PARK SERVICE PLAN

We feel that TVA's decision to take all privately owned land between the rivers is unreasonable and unjust. The National Park Service plan published in 1961 met with the approval of the majority of the local people. That plan left the local committee and the county tax base intact. We know that in many areas of the United States communities have been left within the perimeter of national recreation areas to the mutual advantages of all concerned. Our people between the rivers have been moved two, three, and four times due to Federal projects. The projects have been (1) the Resettlement Administration, (2) TVA for Kentucky Dam, (3) the Department of Interior, (4) the Corps of Engineers for Barkley Dam, and now TVA again. Homes in many instances have been hauled over the roads until they are well worn. The current TVA acquisition for campsites and a playground for a 10-year period is, to most natives faced with displacement, a supreme in justice.

SELLING PRICE OF LOTS

In testimony before the House Subcommittee on Public Works, Mr. Aubrey Wagner, Chairman of TVA, on page 88 stated:

There are literally thousands of lots available on the opposite shores of Barkley and Kentucky Lakes.

The selling price for a nice lakeshore lot is approximately \$5,500 for less than 1 acre—without improvements such as paved roads, water, or in many instances even electricity. Marshall County at TVA's suggestion proposes to zone the west shore of Kentucky Lake from Kentucky Dam to Highway 68 for industry. Such action automatically eliminates miles of Kentucky Lake shore for homes. Some displaced individuals who have asked to swap land with TVA say they have been rebuffed.

A story written by Bish Thompson and carried in the Evansville Press, June 11, 1964, quotes a TVA official:

There are about only a dozen homes that are worth more than \$10,000; the rest are mostly places like that. It is probably worth \$200.

In the face of this attitude our most precious right—the right to trial by jury—is denied under the Tennessee Valley Authority Enabling Act.

INDUSTRIAL PLANT SITES

Mr. Wagner has just stated that the following information is completely untrue, and I certainly do not propose to contribute to untrue rumors, but we have been informed by Judge Utley and Mr. Bleidt and numerous other people who are interested in this area and by high officials in the State of Kentucky that industrial plant sites have been mapped and pinpointed by TVA in the north section of Lyon County. We are convinced that TVA proposes to take our land and homes under the guise of recreation and ultimately sell it for industrial use.

FEDERAL OWNERSHIP OF LAND

The land between the rivers is a narrow peninsula approximately 40 miles long by 8 miles wide. Approximately 100,000 acres of land is already in Federal ownership. I have for the Department of Interior a figure of 67,600 in Kentucky Woodlands National Wildlife Refuge. The balance is in TVA and Corps of Engineers ownership. Accounts in national newspapers indicated that July 1, 1963, Kerr-McGee Oil Industries, Tulsa, Okla., took over the ownership of 80,000 acres in Kentucky and Tennessee. County records show that the holdings are adjacent to Barkley Lake, adjacent to and within the proposed recreation area.

Senator ELLENDER. When was that purchased?

Mrs. WHITEHEAD. July 1, 1963.

Senator ELLENDER. 80,000 acres?

Mrs. WHITEHEAD. 80,000 acres.

Shown on the accompanying map is the concentration of people in Kentucky in two small areas. The map also designates TVA Corps of Engineers and Department of Interior holdings.

TVA subdivided land in Lyon County as did private interests several years ago. As a result, people from 36 States own property in Lyon and Trigg Counties. Some are willing to sell to TVA since they have no emotional or hereditary ties with the land between the rivers. However, hundreds of native residents, as well as others, are deeply and unconsolably disturbed and bitter.

CAMPING FACILITIES

We question TVA's projection of figures for the use of the camping area. Camping facilities within the immediate area are provided at Kentucky Dam State Park, Kentucky's Pennyryle Park, Lake City Camping and Trailer Park, Shawnee National Park is within 50 miles, Mammoth Cave National Park approximately 100 miles, as well as others such as Camp Currie on Kentucky Lake and the Scout camps.

TVA's argument that the land between the rivers is unique due to the expenditure of \$300 million in taxpayers' moneys for the development of Kentucky Dam and Barkley Dam and merits the \$35 million expenditure in the recreation area is not valid. The land between the rivers has been a green-timbered island for centuries surrounded by the waters of the Cumberland and Tennessee Rivers. TVA and the Corps of Engineers have only widened the rivers. Our people have been native to the area since long before the Revolutionary War days.

SPECULATORS

Much has been written, allegedly at TVA's behest, about life-long residents being speculators. It is ridiculous. We are plain people with no access to congressional lobbies. Surely TVA and Congress can distinguish between a native property owner who only has 1 to 100 acres to his name and national corporations that own and control thousands upon thousands of acres of land in the recreation area and on the opposite shores of Lake Barkley and Kentucky Lake.

PROPERTY OWNERS

I wish to submit a list of people who have been paid by TVA for property. There are 2 natives out of 40 sales. I also wish to submit pictures and a statement from a property owner who feels that TVA has been most unfair in their offer of compensation for his commercial resort property. May I submit for the record a statement by a property owner who resents the trespassing of TVA personnel upon his land; also I have clippings from newspapers pertaining to the national wildlife refuge.

The property owner who asks that the attention of the committee be brought to rest on residential property insists that there is a great disparagement between some of the prices paid on that list and the price offered him. Really he accepted TVA's offer to survey his property. These are newspaper clippings.

(The information referred to follows:)

Name	Plats	Acreage	Price
Jas. R. Tomerline.....	1	0.77	\$16,500
Thos. S. Smith.....	1	.36	8,000
Virgil Smith.....	1	.36	4,900
Richard L. Massamore.....	1	.21	6,500
Jess Riley.....	1	.44	3,650
Virgil Smith.....	1	.52	850
Raymond W. Ashby.....	1	.24	3,025
Malcolm Bugher.....	1	.25	7,250
Style Van Vactor.....	1	.22	2,500
Roy Lovell.....	1	.19	1,000
Lawrence Fugate.....	1	.30	1,000
Albert Williams.....	2	1.15	2,250
Maurice A. Lewis.....	2	.94	4,000
Marvin Pogrotsky.....	4	5.06	10,950
James A. Gillin.....	1	.20	2,500
Chas. E. Prothro.....	1	.20	3,200
L. W. Ingham.....	1	.26	8,200
Richard Johnson.....	1	.23	1,200
A. C. Alexander.....	1	.30	1,000
Nelson Ray Bowerman.....	2	.46	1,600
B. A. Davidson.....	1	.29	2,300
Everett B. Crensey.....	1	.24	1,750
Mabel Snow Williams.....	3	.72	4,500
Ruby Earl Kirkwood.....	1	.24	1,900
Chester E. Beck.....	23	.94	8,250
Jerald B. Manion.....	7	2.3	33,600
Leland C. Powell.....	1	.22	800
Geo. O. Davidson.....	6	5.10	60,000
Robert B. Derby.....	2	2.42	19,500
Rollie Henson.....	1	.24	5,000
Lloyd L. Whipkey.....	1	.36	1,075
Carl Watkins, local.....	3	.80	35,400
D. P. Evans.....	1	2.18	17,200
Jas. B. Conrad.....	2	.42	11,800
H. Paul Terry.....	3	.52	2,400
J. E. Layman.....	11	-----	11,200
J. E. Layman.....	1	-----	800
Marvin J. Hunt.....	4	3.78	22,250
W. H. Hubbard, local.....	-----	3.30	8,700
Lizzie Tiller.....	-----	1.06	6,300

NOTE.—As of June 17, 1964. Buying period will be over a period of 4 years. Only have 100 abstracts run ready to contact people and offer option. From County Court Clerk.

DOGWOOD LODGE RESORT, OWNER JAMES BECK AND WIFE

TVA tract No. 4DN-I-LB-I.

Contract for purchase and sale of land called for a total price of \$31,250.

The property consists of seven resort cottages—pumphouse and storehouse all were constructed in 1949. The property has 830 feet of frontage on a blacktop Highway Ky. 453; 7.95 acres of land all developed.

Facilities include 1¼-inch copper water pipes as well as a piped gas system.

Facilities include three State board of health approved sanitary facilities.

The cottages are constructed of sawed oak logs, planed on three sides. The interior is sheet rocked and some cottages have fireplaces and stone chimneys.

TVA time of occupancy until 1966.

EDDYVILLE, Ky., June 24, 1964.

This is to certify that on several occasions TVA surveyors and personnel have trespassed on my property after I have specifically asked them to stay off my land. I have removed TVA survey stakes from my property and marking ribbons from trees. Contrary to TVA's statements to congressional committees and to newspapers that only hardship cases have been surveyed or where property owners have requested TVA to survey their property, they have deliberately trespassed.

HOLLOWAY TRAVIS.

[From Courier-Journal, Louisville, Ky., Apr. 12, 1964]

TVA THREATENS LAST NATIVE TURKEY FLOCK

(By Burt Monroe)

The Tennessee Valley Authority is headed for some bad public relations. Its approach in acquiring all private properties between Kentucky Lake and Lake Barkley in Lyon and Trigg Counties was tactless enough to arouse the ire of many sportsmen and conservationists alike. As a result, these groups challenge some of the actions and statements of the TVA spokesmen.

For example, its treatment of the Kentucky Woodlands National Wildlife Refuge leaves much to be desired. One of the most important factors in this State's game restoration programs has been this refuge. The area is primarily an integral unit in an international system of waterfowl refuges within the Mississippi flyway providing a feeding area and sanctuary for migratory waterfowl. It has been the focal point for the waterfowl management program with 20,000 to 25,000 geese and 60,000 to 70,000 ducks using the refuge annually. The refuge is also managed for the production of white-tailed European fallow, and English red deer and wild turkeys.

When Lake Barkley is impounded, some wildlife habitat on the Kentucky Woodlands Refuge will be lost. The hardest hit will be the waterfowl when about 4,400 acres of refuge-owned, river bottomland is flooded. And it may be necessary to establish other similar areas along the shores of Lake Barkley to attract these geese and ducks.

With the impoundment, the unique fallow deer which prefers the wetter Cumberland River bottoms will be forced to higher ground. The same is true for the English red deer but there are those authorities who believe enough available acreage would be left in the refuge to take care of the current needs of these herds as well as those of the native white-tailed deer.

The Tennessee Valley Authority has announced that the U.S. Fish and Wildlife Service's 65,000-acre refuge "is going out of business as such." It has indicated that the wildlife program would be greatly expanded throughout the 173,000-acre recreation area but its method of doing so is far from convincing.

DEPORTATION PROGRAM INVOLVED

One part of the program involves trapping the present supply of wildlife and deporting it to Tennessee. Even if such a project was feasible (and that is highly questionable), it certainly would be undesirable. It would mean the complete deportation of the last remnant flock of Kentucky's native wild turkey. These famous gamebirds have been guarded religiously for more than 80 years, not only

by game authorities but by private families as well. The Nickell family, pioneer residents of Grand Rivers, watched over them closely prior to 1912.

Not only would the region lose many valuable forms of wildlife but it would lose also the finely trained and skillful personnel of the U.S. Fish and Wildlife Service, together with all of their years of hard work, earnest efforts, and exceptional accomplishments.

The TVA states that its plan for development of the area is a new concept for camping, nature studies, wildlife handling, and the like and that "this won't be one of those parks where the signs say don't do this and don't do that. It will be a spot where you can cut a tree if you need firewood, and pick a flower if you want to."

Such a philosophy is not only a new concept but an extremely shocking and dangerous one. This giant tourist-drawing development is within 500 miles of 70 million people and it is estimated that some 22,000 people will be camping overnight at prepared individual and group campsites and many more will be able to find tent space at more primitive sites.

If this vast horde of humanity begins to "cut a tree for firewood or pick a flower," not to mention the dead certainty that without restrictions of some sort such acts as breaking off redbud and dogwood limbs, pulling up shrubs, and a myriad other forms of vandalism are sure to follow, it wouldn't be long before the contemplated recreation area would look as if it had been devastated by a severe plague of locusts.

In June 1958, the League of Kentucky Sportsmen was interested enough in the area "Between the Lakes" to pass a resolution regarding the handling and disposition of wildlife to be affected by the creation of Lake Barkley. It should now be interested enough to reappraise that resolution in the light of what is happening today and to evaluate the situation before it is too late.

WILDLIFE REFUGE TO BE TAKEN OVER

The Tennessee Valley Authority today said the Fish and Wildlife Service's 65,000-acre game refuge in the Land Between the Lakes Recreation Area "is going out of business as such," but that the wildlife program would be greatly expanded by TVA throughout the 173,000-acre recreation area.

Paul Evans, Director of Information for TVA at Knoxville, told the Sun-Democrat that "our plan will provide many more things in the way of wildlife than the refuge now has."

He said the wildlife refuge restricted to acreage in Lyon and Trigg Counties simply would be expanded to "blend into the entire area."

Evans said the present holding by the Fish and Wildlife Service is being done away with because it could not exist as such in the area being developed by TVA.

TO BE EXPANDED

"We feel that our plan will actually expand it, on a much broader base," he said. "We think the refuge idea is a fine thing."

Evans said game areas would be accessible only by trail but that the wildlife will be "where people may see it."

Plans, he said, allow far more wildlife facilities than the refuge—the National Woodlands Wildlife Refuge—now offers on its 65,000 acres.

Some areas will be shifted, he said. Feeding grounds for ducks and geese which are the keys to congregation of waterfowl in the refuge area must be moved, for example, to Stewart County, Tenn.

This became necessary before TVA took over development of the huge recreation area between Barkley Lake and Kentucky Lake, Evans pointed out.

GROUNDS ELIMINATED

"This became necessary," said Evans, "after the Barkley Lake Reservoir eliminated choice feeding grounds in Kentucky."

The visitor center-museum being built on the wildlife refuge near the remains of old Center Furnace—a reminder of the days when an iron ore industry flourished between the Tennessee and Cumberland Rivers in Kentucky and Tennessee—will be used by TVA, but also in its own way, said Evans.

Technical equipment already purchased for use in the center-museum will be shipped to Mattamuskeet National Wildlife Refuge in North Carolina. The

equipment includes thousands of dollars worth of audiovisual equipment, display cabinets, projectors, and a public address system.

TVA will put its own plan into operation at the center. Evans said the program would be elaborate.

"The visitor center-museum will be even more useful than it would have been under the original plan," said Evans.

AROUSED IRE

Elimination of the Fish and Wildlife Service and transfer of refuge personnel into other areas has aroused the ire of some between-the-rivers people at a time when there is widespread dissatisfaction over TVA's plan for sweeping land acquisition for the area.

To be acquired is all of the privately owned land between the Barkley Lake-Kentucky Lake Canal and Highway 79 in Tennessee.

Wiped out as settlements will be Twin Lakes and Golden Pond in Kentucky and Model in Tennessee. The places have populations of about 100 each, but Twin Lakes is a mushrooming lakeside development.

(It was reported reliably this week, however, that the Golden Pond post office and another post office in the sprawling area will be maintained for use by the throng of tourists and campers who are expected to use the area.)

Said one Lyon Countian who has been fighting the land acquisition:

"BOILING MAD"

"Residents of the area between the rivers who are already boiling mad because TVA proposes to take over all of the private property and move them out, are further enraged at TVA's plan to also move the deer and turkey. Evidently TVA is catering to the Tennessee politician by moving our deer and turkey and the waterfowl down there."

The sources said the plan to "move the deer, turkey and thousands of waterfowl down there" was explained by TVA officials on a television program.

The last flock of wild turkey in the United States is the forebears of the present wild turkey population at Kentucky Woodlands National Wildlife Refuge.

The birds are native to the between-the-river area and have been protected by the U.S. Fish and Wildlife Service which took over the area in 1938.

LARGE DEER POPULATION

Kentucky Woodlands also has one of the largest English fallow deer populations in the United States. The fallow deer first were placed in the area by Hillman Land & Iron Co. many years ago.

The large herds of Virginia white tail deer also are native to the area. Uncontrolled hunting had reduced the number of native deer to less than 100 prior to establishment of the refuge.

For many years deer from Kentucky Woodlands have been trapped for stocking other refuges. A large herd of English stag or red deer is from the original stock of Kentucky Woodlands.

Hunters also have complained about moving of the ducks and geese within the refuge area to Tennessee.

MISSISSIPPI FLYWAY

As many as 30,000 Canadian geese and 80,000 ducks have wintered in the area in one season. Hematite, Honker, and Empire Lakes are seeded with aquatic foods for feeding the birds. The refuge is in the Mississippi flyway.

The museum to be vacated by the Fish and Wildlife Service will cost about \$100,000. The original plan called for display of historic items from the area. The building is veneered with aged brick from historic buildings in Lyon County—buildings which were torn down to make way for Barkley Reservoir.

Bricks are from LaClède Hotel and the William Kelly (inventor of what became known as the Bessemer process for steel) home in Eddyville, the Henry Lady home across the Cumberland from Eddyville and the home of Gov. Charles Anderson in Kuttawa.

Anderson founded Kuttawa.

TVA will spend \$35 million on the recreation area. Already 50 men—mostly veterans—are at work starting on the project.

The area is expected to rival the Great Smoky Mountains in drawing power—bringing some 5 million people a year to the carefully planned "wilderness" stretching from Barkley Lake, soon to be impounded, and Kentucky Lake.

DEVELOPMENT OF NATIONAL RECREATION AREA

Mrs. WHITEHEAD. We respectfully request that unless TVA agrees there is room for us to remain in our homes, that the development of the national recreation area be taken away from TVA and placed in the hands of the National Park Service and the U.S. Fish and Wildlife Service. Those agencies are eminently qualified to make such a development. They originated the project, did the original planning and command the respect and good will of the people in the area. They have been cognizant of the national and regional interest and at the same time showed respect for the welfare and interest of the local people and the county governmental units. We implore you on behalf of the hard-pressed people between the rivers to please be mindful of the grief and injustice which the heavy hand of Government can inflict. It should be the concern of every American when anywhere an American is treated unjustly.

NATIONAL PARK SERVICE PROPOSED PLAN

May I also submit a copy of the National Park Service proposed plan for this area, the planning begun in 1958. This plan was published in 1961.

Senator HILL. 1961?

Mrs. WHITEHEAD. Yes.

Senator HILL. All right, we will put that in with the other material you have supplied for the record.

(The TVA concept brochure has been retained in the subcommittee files.)

Mrs. WHITEHEAD. This plan was generally acceptable to all of the people in the area.

Senator HILL. Is that the National Park Service of the Department of the Interior?

Mrs. WHITEHEAD. Yes.

Senator ELLENDER. Has the TVA changed?

ACQUISITION OF ADDITIONAL LAND

Mrs. WHITEHEAD. Yes, sir. I assume that is the reason that our good Senator Cooper and Senator Morton and our Congressman were not aware that the extra land would be acquired because this plan has been discussed for years and they have known that the people were generally familiar with it and approved of it. We are sure that that is where the misunderstanding arose.

Thank you, sir, for the privilege of appearing.

TRI-COUNTY ORGANIZATION FOR CONSTITUTIONAL RIGHT

STATEMENT OF GEORGE BLEIDT, GOLDEN POND, KY.

ACQUISITION OF LAND BETWEEN THE LAKES

Senator HILL. Mr. Bleidt.

Mr. BLEIDT. Mr. Chairman and members of the committee, I am George Bleidt, secretary of the Tri-County Organization for Constitutional Right, which has concerned itself with opposing the arbitrary decision of the Tennessee Valley Authority to acquire all private property in the area known as Between the Lakes. I am a resident and landowner in this area and my home is in Golden Pond, Ky.

Senator HILL. Where is your home?

Mr. BLEIDT. It is over here on the map. My home is there. I own land down here and I own land up in this area here [indicating]. I have a subdivision here, subdivision down here, which was land that has been in my family for about a hundred years, so I am not a speculator.

Senator ELLENDER. How many acres have you altogether?

Mr. BLEIDT. Seventy-seven acres in one tract, sixty-five acres in another property. My wife and I have another tract of 200 some acres.

VALUE OF LAND

Senator ELLENDER. From your knowledge of the land in that area, do you think the TVA could buy it for \$120 an acre?

Mr. BLEIDT. They won't buy mine, sir, for that. However, I may be at a disadvantage because I have no recourse in court before a jury according to the TVA law, but I will battle it to the death before I will sell my land for \$120 an acre, any of it, anywhere, anytime.

Senator HILL. What are you?

Mr. BLEIDT. I am the postmaster.

Senator HILL. You have been appointed by the Senate?

Mr. BLEIDT. Yes, sir; I sure have. I have been postmaster 22 years.

On June 14, 1963, the announcement was made that TVA had been given the responsibility for the development of the recreation area.

At that time there was little opposition to this decision, because TVA enjoyed the respect and support of many people in the area and it was assumed that special care would be taken in their proceedings.

MEETING BETWEEN TVA REPRESENTATIVE AND LOCAL OFFICIALS

Last July the Cadiz-Trigg County Chamber of Commerce requested that TVA send a representative to meet with officials and citizens groups to discuss their plans. Mr. Wagner advised that someone would be sent. Now 11 months later, no meeting has been held.

Using TVA figures, this area is 40 miles long by 8 miles wide—a total of approximately 205,000 acres. Using TVA figures of 103,000 acres in private ownership, this leaves at least 100,000 acres under Federal management.

CAMPERS

According to TVA estimates, the area will accommodate 20,000 campers daily. This will provide each camper with 5 acres on which to pitch his tent or park his trailer, or double that if private property is acquired.

TVA feels that leaving private homes and lands in the area will spoil its "natural, unique charm."

LOSS FROM TAX ROLLS

Trigg County has lost from its tax rolls since 1930, due to Federal acquisition, 97,412 acres of land. The acquisitions have been by TVA, the Army Corps of Engineers, the Department of the Interior, Department of Defense, and Resettlement Administration.

Senator HILL. What was the activity of the Department of Defense?

Mr. BLEIDT. Fort Campbell.

The average tax yield on privately owned acreage is 72 cents per acre. The average yield on federally owned land is 0.065 cents per acre. This project is not only costly from a U.S. taxpayer's standpoint, it is costly in that 170,000 acres of land is to be irrevocably dedicated to nonproductivity. It has been estimated that \$10 million per year will be needed to operate the recreation area.

TVA ULTIMATUM AND QUESTIONING

One week after funds were granted, TVA issued the ultimatum that all privately owned property would be acquired. On the same day a representative of TVA began to call on residents of Golden Pond asking to be shown deeds and property lines.

The prime method of gaining information has been in insidious questioning of residents about their neighbors' business affairs. We have also been alarmed at other highhanded methods used. Entry was made on much of the property, not only without the owner's consent, but without affording him the courtesy of asking permission, and they are still doing that today.

The National Park Service, in its study, had agreed that private property left in the area would not be a hindrance to the successful operation of a recreation area. If this project is to be ultimately turned over to the Department of Interior, we know that it will be a total and direct violation of a commitment made to the people of Lyon and Trigg Counties by the Department of Interior in 1957, and which is of record.

Senator HILL. What was that commitment?

Mrs. WHITEHEAD. The commitment was in the replacement of lands for those lands furnished by Barkley Reservoir.

NOVICE IN FIELD OF RECREATION

Mr. BLEIDT. Since TVA is a novice in the field of recreation, we respectfully request that the appropriation of funds be restricted to the development of land already under their management. Our people and counties can ill afford to be the subject of an experiment of TVA for a purpose which is not vital.

We are intensely interested in the welfare of our area, the regional and national interests; however, we feel that those interests can be magnificently served and still accommodate the destiny and happiness of the residents between the rivers.

We subscribe to the theory that this arrogant decision by TVA is nothing more than a land grab accomplished behind the cloak of the enabling act that denies property owners a trial by jury.

I would like to show you the area we have discussed just a moment ago.

AREA PURCHASED BY SYNDICATES

Senator ELLENDER. Would you be able to point up the area that has been bought by some syndicates, a lot of the land around there? Is that in this area here?

Mrs. WHITEHEAD. Some of it is.

Mr. POWELL. Some of that was last year.

Senator ELLENDER. Just a minute. All four of you are talking at one time.

Mr. BLEIDT. They have not purchased any land between the lakes.

Senator HILL. Why?

Mrs. WHITEHEAD. In Stewart County, Tenn. Also on the east bank. I would not call it a syndicate, the 80,000 acres. The 80,000 acres is in several tracts or blocks. There is 4,191 acres in our county on the east side of Barkley Lake. There are 800-some acres in Trigg County on the east side of Barkley Lake. There is 57,000-some-hundred acres listed in Stewart County, Tenn.

Senator ELLENDER. How much of it is in between the lakes, any?

Mrs. WHITEHEAD. Yes, sir. I cannot give you the exact acreage.

Senator ELLENDER. 86,000 acres?

Mrs. WHITEHEAD. 80,000 acres. Some of it, sir, is south of Highway No. 79, but they are not the only large holders.

PURPOSE OF LAND PURCHASE

Senator ELLENDER. Was that purchased for the purpose of developing oil?

Mrs. WHITEHEAD. I have no idea, sir.

Senator ELLENDER. How long have they had it?

Mrs. WHITEHEAD. Since July 1, 1963, according to the newspaper.

Senator HILL. Is there any oil in there?

Mrs. WHITEHEAD. I don't know.

Judge UTLEY. I think not.

BUILDING A CITY

Mr. BLEIDT. We would like to retain this area right along here to here, an area that comes back here and an area right in here. We have a syndicate in Illinois who would like to come here and build a city. We figure that this city that they would build would return to the county an assessed valuation of \$5 to \$10 million. We also say that this area left here an assessed valuation of \$25 million.

Senator ELLENDER. What would those people do there?

Mr. BLEIDT. This city here would be built, and they were figuring on bringing two industries there; one was an industry to manufacture posts, the other was to manufacture skis. They were planning

to use some timber. They were planning this city to take care of people who wanted to come there and live away from their jobs. We have about 1,200 people living in this area. I live there. I serve those people from my post office. If anybody knows how many people live there, I do.

LAND VALUE

Now, this price situation, this is a unique area, as they say, and they say that \$120 would be their average. The first price they had was \$150. It has come down \$30 an acre in the last 2 months. That was on the first appropriation, they figured out \$150. The question in my mind is, If that is a unique area—and they say it is, and it is not known, there is nothing in the world like it—how in the world are they going to arrive at any fair price on the thing? They don't have any more like it.

I say to you that if that land is going to bring an average of \$120 an acre, somebody is going to get about \$20 an acre because they have purchased land in an area that has brought more than a thousand dollars an acre already.

There is only one other question I would like to present to you.

Senator HILL. All right, sir.

PROPOSED LAND ACQUISITION AND DEVELOPMENT

Mr. BLEIDT. TVA made the statement it would take 5 years to acquire this land, take 5 years to develop it, it would be 10 years. At the end of the 10 years, they have no need for it. What are we going to do with it? That is their statement. Who are we going to give that to?

Senator ELLENDER. You want to preserve that, raise a lot of turkeys and geese.

Mr. POWELL. It is a lot of campsites, gentlemen.

Mr. BLEIDT. Gentlemen, thank you very much.

Senator HILL. The subcommittee and individual Senators have received several communications with reference to this subject which will be placed in the record at this point.

THE PADUCAH SUN-DEMOCRAT,
Paducah, Ky., July 3, 1964.

Senator LISTER HILL,
Senate Office Building,
Washington, D.C.

DEAR SENATOR HILL: The Governor of Kentucky, Edward T. Breathitt, Jr., asked that we make known to you his wholehearted support of the Tennessee Valley Authority's Between the Lakes National Recreation Area development.

Governor Breathitt felt that the best expression of his views was stated in a story carried in this newspaper during the Governor's visit here April 10, 1964. A copy of that article is enclosed.

Sincerely,

BILL POWELL, *Executive News Editor.*

[From The Paducah Sun-Democrat, Apr. 10, 1964]

BREATHITT IS FULLY BEHIND TVA PROPOSAL

Gov. Edward T. Breathitt, in a statement to the Sun-Democrat today, threw the support of his administration behind development of the Between the Lakes area as a national recreation area.

He urged TVA to give the landowners concerned in the 103,000-acre acquisition "complete consideration" in determining "equitable" prices for their land and

pledged that State officials will work with the people in encouraging TVA authorities to be "as hopeful to the people as is possible."

Breathitt noted that both houses of the State legislature have approved resolutions in support of the project and said the Kentucky congressional delegation is on record as being for the program.

"The benefits we will receive in all western Kentucky will be so great to all the people we would be derelict in our duties if we did not support this project," he said.

The Governor was in the city for ribbon-cutting ceremonies this afternoon to dedicate the new Market House "Knotte Hole" gift shop to aiding the State economy. He also is scheduled to address the annual Jackson-Jefferson Day dinner here tonight.

During a visit to the newspaper office, he said:

"We must not lose sight of the fact that full development of western Kentucky would never have been possible without TVA.

"I believe that responsible officials of TVA should continue to meet and work with the landowners of the area Between the Lakes in order to acquire the land in the most equitable manner.

"One of the unfortunate aspects of any public acquisition of land is the effect it has on the people of the area.

"It is the responsibility of all government officials to do everything possible to assist these people by seeing that they receive a fair price for their property.

"I feel that complete consideration must be given the landowners in determining that price.

"Their lives are inconvenienced certainly by the acquisition of their homes and their businesses. I want to assure the people of the area that I will cooperate with them and I will encourage the TVA authorities to be as helpful to these people as is possible.

"I am directing all agencies of State government to assist the people in the area during this transition period.

"The benefits we will receive in all of western Kentucky will be so great to all the people we would be derelict in our duties if we did not support this project."

Breathitt pointed out that both the State senate and house of representatives passed resolutions in support of the project. He also noted that Kentucky's congressional delegation is in support of the development of the area.

Breathitt noted that real property value in Marshall County alone has increased 10 times in the past decade, in large part because of TVA's Kentucky Dam.

"And certainly all other counties in western Kentucky have benefited."

At 1:30 p.m. the Governor participated in ribbon-cutting ceremonies for the grand opening of the Market House gift shop. The shop will feature handmade products of Kentucky, especially those produced in the economically depressed Appalachian Mountains region.

The Governor was accompanied at the dedication ceremony by Miss Katherine Peden, State commissioner of commerce.

The grand opening was preceded by a luncheon in the Governor's honor given by the chamber of commerce and civic beautification board at the Cobb.

The shop will be managed by the junior woman's club with proceeds going for various charities of the club.

Items to be placed on sale include pieces of furniture, and smaller items such as handwoven baskets, stoles, baby scarves, etc.

Many of the articles are made by students at Berea College.

Paducraft, local ceramics producer, also is a supplier of some of the merchandise.

Breathitt will come back to western Kentucky next Tuesday for a speech at the annual membership meeting of the Associated General Contractors of Western Kentucky. The meetings will be held at Kentucky Dam Village Park's theater building.

STATEMENT BY HON. EDWARD T. BREATHITT, GOVERNOR OF THE STATE
OF KENTUCKY

RECREATION CENTER IN LAND BETWEEN THE LAKES

Mr. Chairman and members of the subcommittee: The Commonwealth of Kentucky is vitally interested in the TVA proposal for establishing a national recreation area in the land between Kentucky Lake and Barkley Lake and I

would like to put my administration on record as endorsing strongly the action of TVA in this operation and as urging an appropriation that will enable it to proceed with all possible speed in making this area a reality.

It is my belief that this national recreation area will draw visitors from throughout America. Because of its central location it will be of special benefit to the eastern two-thirds of the Nation, a large part of which is less than a day's driving distance from the two lakes.

As our Nation grows within the next few years and as the recreation time and the recreation money of our people increase, space for recreation is going to be a crying need. The Between the Lakes recreation area not only offers vast acreage for outdoors lovers and for those who prefer to vacation away from the trappings of civilization, it offers it at a convenient place for most Americans.

Ease of travel to the area has been increased greatly during the last few years by highway improvements in the western part of Kentucky and it will be increased even more under plans now being made.

Last year Kentucky opened the Western Kentucky Parkway—a 127-mile superhighway from Elizabethtown to Princeton. The parkway, which ties into the Kentucky Turnpike at Elizabethtown, is another link in a system that will make it possible to travel the entire length of Kentucky on modern, safe, high-speed highways within a short while.

Next year the Central Kentucky Parkway, a 76-mile link between Elizabethtown and the Versailles-Lexington area will be opened. This parkway will be linked to eastern Kentucky by the Interstate System and by the Mountain Parkway, a turnpike that provides fast, easy transportation into the Appalachian area of Kentucky.

Less than a week ago the Kentucky Turnpike Commission voted to study the feasibility of a toll road in far western Kentucky that will run from the Western Kentucky Parkway at its present terminus near Princeton to the Tennessee line near Fulton.

This highway would greatly ease travel from the Memphis area into the lake region and it would provide easy access from the entire Southwest once a new bridge across the Mississippi north of Memphis is opened as a part of the Interstate System.

I would like to point out that the turnpikes I have mentioned: the Western Kentucky Parkway, the Kentucky Turnpike, the Central Kentucky Parkway, the Mountain Parkway and the proposed turnpike through the Jackson Purchase area of Kentucky are entirely State projects—no Federal money has been used in them and they are dependent on tolls paid by users to retire the bonds that paid for them.

The State has made other investments in the area around Kentucky Lake and Barkley Lake and is prepared to invest even further. Kentucky has three State parks on Kentucky Lake, where recreation facilities of a high type are maintained and a major park costing well in excess of a million dollars is planned for Barkley Lake.

I believe that this is evidence that Kentucky has no idea of leaving the entire job of providing recreational space up to the Federal Government.

An orderly approach to utilizing the area around Barkley Lake is planned by the State of Kentucky working with TVA and the recreation area immediately west of the lake is an integral part of this plan. Other sections of the land around the lake will be zoned for private ownership and for industry under a zoning program which is shortly to get underway.

The TVA has done a commendable job in western Kentucky and it is my sincere belief that it will do an equally outstanding job in developing the Between the Lakes area. I confidently predict that if TVA is given the means to proceed we will shortly have a vacation and recreation spot in which all Americans will be interested and in which all America will take pride.

RESOLUTION IN SENATE OF LEGISLATURE OF THE STATE OF KENTUCKY RELATING
TO NATIONAL RECREATION AREA BETWEEN THE LAKES

IN SENATE REGULAR SESSION, 1964

SENATE RESOLUTION No. 33—MONDAY, MARCH 2, 1964

Senator Tom Garrett introduced the following resolution, which was ordered to be printed.

A RESOLUTION requesting and petitioning the Tennessee Valley Authority and the Governors of Kentucky and Tennessee to proceed with the establishment of a national recreational area Between the Lakes,

Whereas the President of the United States has announced that the Tennessee Valley Authority will develop a national recreation area in the 170,000 acre area between Kentucky Lake and Barkley Lake, two-thirds of the land being in Kentucky and the remainder in Tennessee; and

Whereas much of the area is already owned by the Federal Government; and

Whereas the Tennessee Valley Authority has indicated an expenditure of approximately thirty-five million dollars during the next five years on development of the area; and

Whereas it has been indicated by the National Park Service and Bureau of Outdoor Recreation that development of this area would provide one of the finest internal recreation areas in the United States; and

Whereas development of the project will demonstrate how an area with limited timber, agricultural, and industrial resources can be converted into an asset that will stimulate economic growth of the region and provide for the prosperity of the inhabitants therein,

Now, therefore,

Be it resolved by the Senate of the General Assembly of the Commonwealth of Kentucky:

SECTION 1. That the Tennessee Valley Authority and the Governors of Kentucky and Tennessee are hereby urged to proceed immediately with all actions necessary to assure development of this area as a national recreation area as directed by the President of the United States.

SECTION 2. The clerk of the Senate of the General Assembly is directed to transmit copies of this resolution to the Tennessee Valley Authority and the Governors of Kentucky and Tennessee.

TELEGRAMS RELATING TO LAND BETWEEN THE LAKES PROJECT

PADUCAH, KY., July 6, 1964.

Senator LISTER HILL,
Senate Office Building,
Washington, D.C.:

We request your earnest consideration for support of the Between the Lakes Park appropriation bill as supported by the Tennessee Valley Authority.

WALTER B. BROWN,
President, Local 3550, Oil Chemical & Atomic Workers International Union.

PADUCAH, KY., July 6, 1964.

Hon. LISTER HILL,
Senate Office Building,
Washington, D.C.

RESOLUTION

"Whereas the program for development of the Between the Lakes area as announced by Tennessee Valley Authority is being attacked by certain individuals and groups who purport to speak on behalf of "citizens" organized for various purposes, etc.; and

"Whereas such opposing individuals and groups and the purposes by which they are motivated do not represent the interests and will of the vast majority of the people of western Kentucky; and

"Whereas such facts should be communicated to the appropriate interested individuals, bodies, and agencies; Now be it

Resolved by the Paducah-McCracken Development Council, Inc., as follows:

"1. The program for development of the Between the Lakes project should proceed according to the plan announced by Tennessee Valley Authority;

"2. The entire area should be owned or controlled by TVA and developed exclusively by it;

"3. While the council champions private enterprise and development on private property it is believed that such independent development within the confines of the Between the Lakes area would not be in keeping with the spirit and purpose for which this vast public project was originally conceived and designed;

"4. Tennessee Valley Authority and/or other appropriate Government agencies should make every effort to deal fairly and justly and to adequately and justly compensate owners whose property is taken for this project and to assure that they get all assistance and benefits authorized or permitted by law;

"5. This resolution shall be forwarded to appropriate persons and agencies and widely publicized."

The foregoing resolution was adopted by the Paducah-McCracken Development Council on the 6th day of July 1964.

RALPH "PETE" WATSON,
Executive Director.

HOPKINSVILLE, KY., July 8, 1964.

HON. LISTER HILL,
U.S. Senator, Washington, D.C.:

Strongly urge your support of inclusion of bill Between the Lakes acreage in the TVA budget. This land necessary if the project is to provide its full potential without distracting influences of joints and motels.

F. ERNEST LACKEY, *Mayor.*

PADUCAH, KY., July 8, 1964.

HON. LISTER HILL,
Senate Office Building, Washington, D.C.:

The members of the Electric Plant Board of the City of Paducah, Ky., wish to notify you that they collectively and individually favor the development of the Between the Lakes area by TVA, in its entirety as originally planned, and urge your support in this to afford the fullest development of western Kentucky.

LEON T. SEARLES,
Chairman.

ERNEST MITCHELL.
JEROME HARRIS.
JOHN OEMLSCHLAEGER.
RALEIGH BROCKMAN.

HARRIS FUNERAL HOME,
Paducah Ky., July 8, 1964.

HON. LISTER HILL,
Senate Office Building, Washington, D.C.:

I respectfully urge your support for the fullest development of the Between the Lakes area by TVA in its entirety as originally planned.

H. JEROME HARRIS.

PADUCAH, KY., July 8, 1964.

HON. LISTER HILL,
Senate Office Building, Washington, D.C.:

I respectfully urge your support for the fullest development of the Between the Lakes area by TVA in its entirety as originally planned.

LOYD C. EMERY, *Attorney.*

MITCHELL MACHINE SHOP,
Paducah, Ky., July 8, 1964.

HON. LISTER HILL,
Senate Office Building, Washington, D.C.:

I respectfully urge your support for the fullest development of the Between the Lakes area by TVA in its entirety as originally planned.

ERNEST P. MITCHELL.

PADUCAH POWER SYSTEM,
Paducah, Ky., July 8, 1964.

Hon. LISTER HILL,
Senate Office Building, Washington, D.C.:

I respectfully urge your support for the fullest development of the Between the Lakes area by TVA in its entirety as originally planned.

ARTHUR P. BRAZELTON, *General Manager.*

Hopkinsville, Ky., July 3, 1964.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.:

Your efforts to save Land Between the Lakes TVA project are appreciated. If we can be of help to you in gathering any information please call on us. Your continued support urged.

HOPKINSVILLE CHAMBER OF COMMERCE,
W. W. BRYAN, *Executive Secretary.*

BENTON, KY., July 3, 1964.

Hon. LISTER HILL,
U.S. Senate, Washington, D.C.

Ninety percent of people in Marshall County support TVA acquisition of Between Lakes Area as planned.

JOHN RAYBURN, *County Judge, Marshall County.*

MURRAY, KY., July 2, 1964.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.

The city of Murray has a vital interest in the complete and speedy development of the Land Between the Lakes. Our economy has become dependent upon the tourist business. A stoppage of this project will do damage beyond repair. We urge you and your committee to give full support to this project. All but a few are in favor of this vital development.

HOLMES ELLIS, *Mayor.*

MURRAY, KY., July 2, 1964.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.

As a lifelong resident of west Kentucky I strongly urge the development of the Between the Lakes Recreation Area. The impact of TVA on this section of America has been great. We feel that the proposed project will be of even greater importance. The great majority of the people in this area are excited about the project. Any opposition is localized and is selfishly motivated.

WILSON GANTT.

MAYFIELD MESSENGER,
Mayfield, Ky., July 2, 1964.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.:

Strongly solicit your support of bill financing Between the Lakes Recreation Area. Loss of project would be tremendous blow to area.

JESS G. ANDERSON, *Editor.*

PADUCAH, KY., July 2, 1964.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.:

Marshall County, Ky., favors appropriation for purchase of land by TVA for recreational area in western Kentucky and west Tennessee.

W. J. BRIEN, JR.,
Clerk, Marshall County Court.

MURRAY STATE COLLEGE,
Murray, Ky., July 2, 1964.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.:

No doubt the development of the area between Kentucky Lake and Barkley Lake will improve the economy of the entire Southland. This will afford millions of people in mid-America recreational advantages. We cannot afford to let pressure or minority groups hinder progress in this area.

CHARLES L. ELDRIDGE,
Director of Field Services.

PARIS-HENRY COUNTY CHAMBER OF COMMERCE,
Paris, Tenn., July 2, 1964.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.:

Development of the Land Between the Lakes project is vital to our full community development in furthering our tourist business. We urge your full support of this project.

JAMES HUFFMAN, President.

MURRAY, KY., July 2, 1964.

HON. LISTER HILL,
Senate Office Building, Washington, D.C.:

Failure to appropriate funds for Land Between Lakes development will be serious economic catastrophe. Respectfully urge favorable support for worthwhile project.

R. H. WOODS,
President, Murray State College.

MURRAY, KY., July 2, 1964.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.:

It has been called to my attention that an attempt is being made to cut down the national recreation area between Kentucky and Barkley Lakes. We feel that this would be detrimental to this area and the entire Nation. The recreational area is within a day's drive of half the population of the United States. We hope you will do the best you can for us in this area and the entire Nation. Best regards.

HIRAM TUCKER.

PADUCAH, KY., July 2, 1964.

U.S. Senator LISTER HILL,
Washington, D.C.:

Please support TVA fund appropriation for Between the Lakes Wilderness Park as planned.

GARE McCANDLESS,
County Court Clerk, Livingston County, Ky.

PADUCAH, KY., July 2, 1964.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.:

I strongly urge continuance of the TVA's program for development of the land Between the Lakes Wilderness Area as presently planned by TVA. It would be a shame to allow commercial activities to remain in the park area and most of the criticism of the TVA'S plan has come from speculators who hope to become rich at the taxpayers' expense. For the interest of future generations the entire area between the lakes should be developed for public use only.

E. J. PAXTON, Jr.,
Editor, the Paducah Sun Democrat.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.:

PADUCAH, KY., July 2, 1964.

Urge your support of TVA appropriation for development Between the Lakes Recreation Area. Failure to gain approval of funds for continued development would be a serious blow to western Kentucky and the Nation as a whole.

WILLIAM EDMONDS,
County Judge, Christian County.

Senator LISTER HILL,
U.S. Senate Office Building, Washington, D.C.:

MURRAY, KY., July 2, 1964.

Consider the development national recreation center between Kentucky and Barkley Lakes essential to the welfare of the people of the United States.

H. GLENN DORAN,
President, Peoples Bank of Murray.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.:

MAYFIELD, KY., July 2, 1964.

We respectfully urge that you do all within your power to facilitate the Land Between the Lakes project.

JOE WOOD,
Executive Vice President,
Mayfield, Graves County Chamber of Commerce.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.:

MAYFIELD, KY., July 2, 1964.

We respectfully urge that you do all within your power to facilitate the Land Between the Lakes project.

JOHN EDD WALKER,
Manager, West Kentucky Rural Electric Co-op Corp.

Senator LISTER HILL,
U.S. Senate Office Building, Washington, D.C.:

MURRAY, KY., July 2, 1964.

We hope that you can support the appropriation for TVA for the Between the Lakes area.

GEORGE HART,
President, Bank of Murray.

Senator LISTER HILL,
U.S. Senate Office Building, Washington, D.C.:

MURRAY, KY., July 2, 1964.

Strongly urge you to support appropriation for Land Between Lakes for recreation and wildlife area.

P. W. ORDWAY.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.:

MURRAY, KY., July 2, 1964.

The full development of the Land Between the Lakes project is urgently needed by this entire area. Of course some will suffer some inconvenience by relocation, but the advantages to the entire State cannot be placed beneath the selfish motives of a few who desire great profits. The help of your committee is vitally

important at this point. We urge you to fully restore the requested appropriation as soon as possible.

WEST KENTUCKY PRODUCTIONS, INC.,
MAX B. HURT, *President.*

MURRAY, KY., *July 2, 1964.*

Hon. LISTER HILL,
Senate Office Building, Washington, D.C.:

We urge you to provide all assistance to the TVA appropriations bill. The Land Between the Lakes proposal is absolutely vital to this community. Please do not bow to the wishes and half-truth as advanced by the handful of objectors who have opposed everything progressive. We are pulling ourselves from a depressed area to a stable economy, based largely upon the travel trade. We will appreciate your helping us.

MURRAY CHAMBER OF COMMERCE,
JAMES L. JOHNSON, *Executive Secretary.*

MURRAY, KY., *July 2, 1964.*

Senator LISTER HILL,
Senate Office Building, Washington, D.C.:

The complete development of the Land Between the Lakes will mean much to America. Selfish interests should not be permitted to cripple or destroy this project.

MURRAY STATE COLLEGE,
M. O. WRATHER, *Public Relations.*

STATE AUTOMOBILE MUTUAL INSURANCE CO.,
Princeton, Ky., June 27, 1964.

Re Land Between the Lakes, western Kentucky.

Hon. LISTER HILL,
Senator from Alabama, Washington, D.C.

DEAR SENATOR HILL: I am Kelsey Cummins, former mayor of Princeton, Ky., who during his administration helped inaugurate the proposed recreational area between Kentucky Lake and Lake Barkley. I have a small cabin in this area which is used by our four families and which affords much pleasure to us during the summer months. However individual rights must yield to public rights and thus I helped promote the program.

For 4 years I supervised schools in the area. They are all gone now. I know the physical setup. Most of the land is hilly, some barren, and will not ever "sprout peas." During prohibition days it was a rendezvous for moonshiners and bootleggers. However the scattered population is a fine people.

Only yesterday I went through its entire length of the subject area and was agreeably surprised to find that the recreational program was acceptable to most of the natives. I also found that very few of them approved of the dissension that is led largely by Judge Utley and Mrs. Korine Whitehead, whose motives many question.

This letter is written to you following a report by Robert Riggs, from Washington, that a hearing was held with your subcommittee yesterday and that you perhaps were concerned about the project.

Since we are on wheels and recreationally inclined we are interested in the development of the subject property. We feel that because of its location and its proximity to the heart of America that millions of visitors will be brought our way yearly and consequently a boosted economy.

Sincerely yours,

KELSEY CUMMINS.

P.S. Gene Williamson, my personal friend, and who is chairman of the Princeton Electric TVA Plant Board tells me that there is only one Lister Hill, I am thusly writing you this letter.

KENTUCKY NEW ERA,
Hopkinsville, Ky., July 3, 1964.

Senator LISTER HILL,
Senate Office Building,
Washington, D.C.

DEAR SENATOR HILL: Information reaching us is that the Land Between the Lakes recreation project between Kentucky and Barkley Lakes is in serious danger of being sabotaged.

As a public official with your experience must know, it is possible for a vociferous minority opposing any project to make more noise than a numerically greater force favoring the same program. This seems to be happening in the Land Between the Lakes situation.

Only 1 percent of the people in the First Congressional District of Kentucky live in the proposed area to be taken over by the Government. It is doubtful if many of these would be hurt to any great extent, since marginal land would have more value as a national park than it could ever have under present use.

The project would offer great benefit to other residents of west Kentucky and west Tennessee.

Chief opposition to the project appears to be coming from speculators who have bought up land in the area between the lakes in the hope of making big financial killings. We fail to see how their quick-profit ideas can be allowed to jeopardize a project with such a terrific potential.

The loss would be an economic blow to an area that sorely needs development, for the park would create a tourist industry that would be the biggest west of Louisville. If the handful of land speculators have their way, the area will be ruined by cheap commercial joints and tourist courts.

The Nation needs your support to make this project a reality.

Sincerely yours,

A. WALKER WOOD, *Copublisher.*

OFFICE OF COUNTY JUDGE, LYON COUNTY,
Eddyville, Ky., July 1, 1964.

Senator LISTER HILL,
Senate Office Building,
Washington, D.C.

DEAR SENATOR HILL: On behalf of Mrs. Whitehead, Mr. Powell, Mr. Bleidt and myself, I want to thank you and each member of the subcommittee for your patience, courtesy, and understanding in permitting us to appear in opposition to the proposed TVA campsite acquisition.

To boil this down to the issue, on one side you have from 3,000 to 5,000 people who reside in the area who would be forced to seek residence elsewhere against their will. Property is not available in the area, for since this acquisition has been proposed speculators have optioned or purchased all available property in the area hoping to sell to these displaced persons at a greatly accelerated price. This acquisition also upsets the fiscal policy of mine and other counties by removing thousands of acres of taxable land and other properties from the tax rolls.

The other side of the picture is what we think is a wild dream on the part of Chairman Wagner and TVA to acquire an additional 100,000 acres of campsites. The cost of this would be excessive and the upkeep would be more excessive. Mr. Robert Howes, the project manager, in the attached newspaper story says that the TVA is not in the recreational business and admits that it is experimental and might take 16 years to develop. Chairman Wagner testifies that this land could be acquired at an average cost of \$120 an acre. The record shows that the first 40 tracts consisting of a total of less than 100 acres purchased in Lyon County by TVA cost \$344,700. On one side you have Government economy and on the other side you have Government extravagance for experimental purposes. Chairman Wagner himself has stated that in the destruction of countless churches, schools, and businesses, it is his view in a quoted newspaper statement that churches, schools, and businesses must give way to the greater need. It is inconceivable that there is greater need in our civilization than churches, schools, and businesses.

We think this sums up minutely his general philosophy, and we hope you share our views in the matter. The hearings before your subcommittee and particularly Senator Ellender's comments are very timely. Presently, there are in excess of 30 States and National parks available in Kentucky for camping

purposes, which does not include hundreds of commercial campsites; nor does this include approximately 100,000 acres in the area involved and under control of the TVA in the immediate area between Kentucky and Barkley Lakes.

These are the unrefuted facts involved in this proposed appropriation. We rest our case on your sense of good judgment and fairness, and we are sure that you will base your final decision on what you consider best for the people involved and the economy of our State and Nation.

Very sincerely,

FRANCIS W. UTLEY,
County Judge of Lyon County.

KUTTAWA, KY., June 30, 1964.

HON. LISTER HILL,
Senate Office Building, Washington, D.C.

DEAR SENATOR HILL: I deeply appreciated the opportunity to appear before the TVA-AEC Subcommittee on Appropriations the 26th. In behalf of the people between the rivers may I thank you for your patience, your understanding, and cooperation in allowing us to present our side of the story with respect to TVA's recreation area.

We sincerely trust that TVA will be restricted in their objective of acquiring all privately owned lands between the rivers.

With kindest regards and best wishes.

Sincerely,

CORINNE WHITEHEAD.

THE TRIBUNE-DEMOCRAT,
Benton, Ky., July 6, 1964.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.

DEAR HONORABLE SIR: It seems somewhat alarming to notice the continued publicity being given the actions of a small organized group seeking to block the development of the Land Between the Lakes area. Of course, it is a known fact, at least in our area, that this is entirely a selfish interest.

The majority of Marshall County, the site of Kentucky Lake, feel that it will be a horrible mistake to even hinder the TVA development of this vast section of land. Geographically, this area is so centrally located that it is within a day's driving distance of something near a hundred million people who could enjoy something even better than this section has to offer. Being so nearby, and almost neighbors, it seems that those people could see the advantages that TVA development could bring along with the progress and revenue that will flow into that part of the country.

Very truly yours.

WILLIAM NELSON.

BENTON ROTARY CLUB,
Benton, Ky., July 6, 1964.

Senator LISTER HILL,
Senate Office Building, Washington, D.C.

DEAR SENATOR HILL: Being somewhat concerned at the continued publicity being given to the actions of a small organized group seeking, for reasons of their own, to torpedo the grand concept of a National Between the Lakes Recreational Area between Kentucky and Barkley Lakes, our members at our regular meeting held Friday, July 3, 1964, in Benton, Ky., unanimously voted in favor of the TVA concept for this area and instructed the writer to respectfully convey their sentiments to you.

We feel it would be a grave disservice to the taxpayers of the entire Nation (whose tax money created these lakes) and to the 80 million Americans living within a 1-day auto trip from this area, if narrow, selfish interests were permitted to obstruct or defeat the orderly development of the Land Between the Lakes as proposed by the Tennessee Valley Authority.

Respectfully yours,

F. E. RICHARDS, *Secretary.*

U.S. SENATE, July 8, 1964.

Hon. LISTER HILL,
 Chairman, Subcommittee on AEC and TVA,
 Committee on Appropriations,
 New Senate Office Building.

DEAR SENATOR HILL: Since the hearing of June 26 before the Appropriations Subcommittee for TVA and AEC, on the fiscal 1965 TVA budget requests, I have received a number of communications from individuals and organizations favoring the Between the Lakes project. Mr. E. J. Paxton, Jr., editor of the Paducah Sun Democrat at Paducah, and Mr. A. Walker Wood, publisher of the Kentucky New Era at Hopkinsville, have also written to state again their support of the project planned by TVA.

I am attaching some of the brief communications received, and I would appreciate it if the subcommittee will include them in the appendix of the printed record of testimony.

With kind regards, I am,
 Sincerely,

JOHN SHERMAN COOPER.

[June 29, 1964]

LAND BETWEEN THE LAKES—TVA TO TEST RECREATION CONCEPTS

(Some residents of Lyon and Trigg Counties, Ky., are fighting the Tennessee Valley Authority's plan to buy their property for Land Between the Lakes. This story sums up TVA's goals for the project.)

(Copyrighted New York Times)

GOLDEN POND, KY.—A 170,000-acre Federal laboratory testing new concepts in outdoor recreation is being developed by the Tennessee Valley Authority. (The Government owns 70,000 acres and TVA plans to buy the other 100,000.)

TVA's object is to open the outdoors to groups not served, or poorly served, by organized camps and to demonstrate how recreation and education can be effected at the same time.

The Authority expects completion in about 5 years. The area would be the first national park created expressly for recreation. Other parks, primarily for preservation or conservation, cater to tourists only as they fit in with the primary aim.

The new park, called Land Between the Lakes, would be a 38-mile-long and 6- to 8-mile-wide peninsula of rolling woodlands, open valleys, and cove-studded shoreline on the western Kentucky and Tennessee border.

It is bounded by Kentucky Lake on the Tennessee River and the soon to be completed Lake Barkley on the Cumberland.

FACILITIES FOR 20,000

Officials estimate that its facilities for 20,000 family campers and 2,000 group campers would be available to 70 million people living within a 500-mile radius—or a day's drive away.

The area of greatest innovation would be with group camping.

"Our ideas on new facilities," Roger M. Howes, project manager, said in a recent interview, "include adapting camping to specific groups—and, in some instances, providing them with facilities, programs, and direction."

In addition to Boy and Girl Scouts and other outdoor-oriented organizations, the special groups being considered include the elderly, school dropouts, delinquent youths, the handicapped, mentally retarded and emotionally disturbed children, and young diabetics.

"No one group would have exclusive use of the facilities," Howes said. "The object would be for local chapters or parent national organizations to come here and learn. And if the program works, they can decide whether they want to build their own camps on the basis of their experience here."

The group campsites will be constructed for use on a year-round basis.

In his remarks to the Board of the TVA, Milton A. Gabrielson, director of recreation and camping education at New York University, who is planning consultant on the Land Between the Lakes project, observed:

"It is in school camping that the project may best extend its program into year-round use. Literally thousands of schoolchildren could utilize the facilities

for enrichment of their education. Schools both locally and as far away as Philadelphia, New York, Chicago, and St. Louis could be served.

DIRECT EXPERIENCE

"Here," he continued, "the students would have the opportunity for direct learning experiences in nature's own classroom."

Innovation would not be limited to group camping, however. New facilities and new material for standard equipment will be tested in the family camp area.

There would be accommodations for trailer camping and added frills such as electric outlets and showers.

Primitive campsites would also be available.

For all, there would be controlled hunts of geese, duck, deer, and turkey; hiking, horseback riding, nature studies, fishing, swimming, boating, and water skiing.

IT'S EXPERIMENT

"The TVA is not in the recreation business," Howes said. "This is an experiment in outdoor recreation utilizing natural resources. It is a demonstration project that may take, including the 5-year construction period, 10 years to complete, maybe 8 or 12 or 16.

"At the end of the demonstration period," he went on, "Kentucky and Tennessee might set up an interstate agency to operate the park, or it might go to the National Park Service, or the U.S. Fish and Wildlife Bureau, or the Tennessee Valley Authority Act might be amended, putting us more actively in recreation."

TVA economists estimate that Land Between the Lakes, which would cost about \$35 million, would generate \$25 million in private investment and create as many as 1,500 new jobs.

GREATER PADUCAH INDUSTRIAL DEVELOPMENT ASSOCIATION, Paducah, Ky., July 6, 1964.

Senator JOHN SHERMAN COOPER,
Senate Office Building, Washington, D.C.:

"Be it resolved by the Greater Paducah Industrial Association Inc., consisting of 350 individuals and business stockholders, That (1) this organization which is dedicated to the promotion of industrial growth in this area ask your support in the effort of the TVA to develop the Between the Lakes Recreational Area in its entirety as now planned; (2) We know recreational facilities are important to industrial growth, therefore our organization supports the TVA in this development in this area."

R. E. FAIRHURST, *President.*

IBEW, LOCAL 816,
Paducah, Ky., July 6, 1964.

Senator JOHN SHERMAN COOPER,
Senate Office Building, Washington, D.C.:

Urge your support and influence for the development of the Land Between the Lakes as planned by TVA.

JOHN W. GILLIAM, *Business Manager.*

PADUCAH, KY., July 3, 1964.

Senator JOHN SHERMAN COOPER,
Senate Office Building, Washington, D.C.:

The mayor and city commissioners wholeheartedly support the TVA-proposed recreation area between Cumberland and Tennessee Rivers. We strongly urge your support of the project.

TOM WILSON, *Mayor.*

CITY OF HOPKINSVILLE,
Hopkinsville, Ky., July 3, 1964.

HON. JOHN SHERMAN COOPER,
U.S. Senator, Washington, D.C.:

Strongly urge your support of inclusion of bill Between the Lakes acreage in the TVA budget. This land necessary if the project is to provide its full potentials without distracting influence of joints and motels.

F. ERNEST LACKEY, Mayor.

PADUCAH, KY., July 2, 1964.

Senator JOHN SHERMAN COOPER,
Senate Office Building, Washington, D.C.:

Urge your support of TVA appropriation for development of Between the Lakes Recreation Area. Failure to gain approval of funds for continued development would be a serious blow to western Kentucky and the Nation as a whole.

WILLIAM EDMUND,
County Judge, Christian County.

MURRAY, KY., July 2, 1964.

HON. JOHN SHERMAN COOPER,
Senate Office Building, Washington, D.C.:

Hope you will use all your influence to see that appropriation is not cut for development of the Between the Lakes National Recreation Area of west Kentucky.

BUFORD HURT.

MURRAY, KY., July 6, 1964.

HON. JOHN SHERMAN COOPER,
Senate Office Building,
Washington, D.C.:

We urge that you give full support to the Land Between the Lakes proposal. This project is absolutely vital to the full and complete development of this area. Any slowdown now could mean a loss of this great asset to the Nation. We are counting on you to implement it in every way.

DON KELLER.
DONALD ROBINSON.
ED FENTON.
E. W. RILEY.
PRESTON PERRY.

PADUCAH, KY., July 2, 1964.

U.S. Senator JOHN SHERMAN COOPER,
Washington, D.C.:

Please support TVA fund appropriation for Between the Lakes Wildness Park as planned.

GABE McCANDLESS,
County Court Clerk, Livingston County, Ky.

MURRAY, KY., July 2, 1964.

Senator JOHN S. COOPER,
U.S. Senate Office Building, Washington, D.C.:

We hope that you can support the appropriation for TVA for the Between the Lakes area.

GEORGE HART,
President, Bank of Murray.

PADUCAH, KY., July 2, 1964.

JOHN SHERMAN COOPER,
House of Representatives, Washington, D.C.:

Employees of G. & O. Rexall Drugs and the Apothecary Shop urge you to do your utmost to make the Between the Lakes area available for recreation purposes. It will mean a great deal to us of Apothecary Shop.

JOHN H. OEHLACHLAEGER.
 ROBERT H. GREEN.

PADUCAH, KY., July 2, 1964.

Senator JOHN SHERMAN COOPER,
Senate Office Building, Washington, D.C.:

The entire Nation will enjoy the Between the Lakes Park. We strongly support TVA's efforts to acquire and develop all lands within the area free from islands of commercialism. We ask that you help prevent selfish interest from destroying this great opportunity for Kentucky.

CLYDE BOYLES.
 LANELLE BOYLES.
 BEULAH FUTRELL.
 FINIS PHELPS.
 NETTIE GILLISPIE.
 NANCY FUTRENN.
 PATRICIA TREVARTHE.

PADUCAH, KY., July 2, 1964.

JOHN SHERMAN COOPER,
Washington, D.C.:

For continued growth and support of western Kentucky area appreciate any support can give TVA project Between the Lakes. This appears greatest recreational program in our Nation at the present.

LAWRENCE ALBRITTON,
President, Paducah Association of Retail Druggists.

MAYFIELD, KY., July 2, 1964.

Senator JOHN S. COOPER,
Senate Office Building, Washington, D.C.:

Strongly solicit your support of bill financing Between the Lakes Recreation Area. Loss of project would be tremendous blow to area.

JESS G. ANDERSON,
Editor, Mayfield Messenger.

PADUCAH, KY., July 2, 1964.

Senator SHERMAN COOPER,
Senate Office Building, Washington, D.C.:

We are in full support of the TVA development of the Land Between the Lakes National Recreation Area in accordance with TVA's proposal and encourage full support for the development of the park.

PADUCAH RETAIL MERCHANTS ASSOCIATION,

PADUCAH, KY., July 6, 1964.

Senator JOHN SHERMAN COOPER,
Senate Office Building, Washington, D.C.:

We request your earnest consideration for support of the Between the Lakes park appropriation bill as supported by the Tennessee Valley Authority.

WALTER B. BROWN,
President, Local 3550, Oil Chemical and Atomic Workers International Union.

HON. JOHN S. COOPER,
Senate Office Building, Washington, D.C.:

PADUCAH, KY., July 6, 1964.

"RESOLUTION

"Whereas the program for development of the Between the Lakes area as announced by Tennessee Valley Authority is being attacked by certain individuals and groups who purport to speak on behalf of 'citizens' organized for various purposes, etc., and

"Whereas such opposing individuals and groups and the purposes by which they are motivated do not represent the interests and will of the vast majority of the people of western Kentucky, and

"Whereas such facts should be communicated to the appropriate interested individuals, bodies, and agencies, now

"Be it resolved by the Paducah-McCracken Development Council, Inc., as follows:

"1. The program for development of the Between the Lakes project should proceed according to the plan announced by Tennessee Valley Authority;

"2. The entire area should be owned or controlled by TVA and developed exclusively by it;

"3. While the council champions private enterprise and development on private property, it is believed that such independent development within the confines of the Between the Lakes area would not be in keeping with the spirit and purpose for which this vast public project was originally conceived and designed;

"4. Tennessee Valley Authority and/or other appropriate Government agencies should make every effort to deal fairly and justly and to adequately and justly compensate owners whose property is taken for this project and to assure that they get all assistance and benefits authorized or permitted by law;

"5. This resolution shall be forwarded to appropriate persons and agencies and widely publicized."

The foregoing resolution was adopted by the Paducah-McCracken Development Council on the 6th day of July 1964.

RALPH "PETE" WATSON,
Executive Director.

MURRAY, KY., June 30, 1964.

HON. FRANK A. STUBBLEFIELD,
House Office Building, Washington, D.C.:

The Murray Chamber of Commerce adopted the following resolution in January relative to the Land Between the Lakes Recreation Area and wish to make the following recommendations: 1. The Murray Chamber of Commerce endorses in full the concept of overall development of the area, for recreational purposes. 2. We recommend that provisions be made that would exclude any undesirable or detractive elements from the area. 3. We urge that each property owner of the area be treated fairly, and each owner be reimbursed in full for any losses incurred due to the establishment of this area. 4. We pledge our support to this program and full development of the travel program in Kentucky. We feel that this resolution is fully supported by the majority of people of this area, and urge that you represent us with this view in mind.

JAMES L. JOHNSON,
Executive Secretary, Murray Chamber of Commerce.

HOPKINSVILLE, KY., July 3, 1964.

Congressman FRANK A. STUBBLEFIELD,
New House Office Building, Washington, D.C.:

Indication that accelerated effort needed to save Land Between the Lakes. Your help appreciated.

W. W. BRYAN,
Executive Secretary, Hopkinsville Chamber of Commerce.

RESOLUTION

Whereas the Paducah Chamber of Commerce has long realized the importance of the tourist industry in general: and

Whereas the impact of the Kentucky Lake tourist industry, in particular, has stimulated business growth throughout all western Kentucky; and

Whereas the development of the Between The Lakes National Recreation Area will add tremendously to the economy of western Kentucky; and

Whereas a majority of the citizens of western Kentucky will benefit materially from its successful development; and

Whereas nationwide attention will be focused on the development; and

Whereas the area is destined to become the outdoor recreation area in mid-America; and

Whereas long-range benefits of the development will far outweigh the temporary inconveniences, loss of tax revenue and incomes of some persons living and doing business in the project area: Now, therefore, be it

Resolved, That the Paducah Chamber of Commerce contact all persons concerned with the project and urge its speedy completion; and

Resolved, That the Paducah Chamber of Commerce urge the Tennessee Valley Authority to bend over backward to be fair in its treatment of all who must relocate outside the area.

Passed by board of directors on April 20, 1964.

PADUCAH CHAMBER OF COMMERCE,
MARVIN ORGILL, *President*.

CROUNSE CORP.,
Paducah, Ky., July 3, 1964.

HON. JOHN S. COOPER,
U.S. Senate, Washington, D.C.

DEAR SENATOR COOPER: This is to urge you to use your influence to encourage the Public Works Subcommittee of the Senate Appropriations Committee to appropriate the entire amount requested by the Tennessee Valley Authority to carry out their plans in regard to the Between the Lakes Recreation Area in western Kentucky.

I feel that not only the people in this immediate area, but also over 50 million people within a 500-mile radius will ultimately derive great benefit from a recreation area of this type. I have just returned from a 6,000 mile trip through the Far West and know that recreation facilities such as we are discussing are providing the people of that area with a much needed opportunity for relaxation and pleasure.

I have sent the following night letter to Senator Ellender: "Urge your committee vote appropriation for Between the Lakes Recreation Area as outlined by TVA. Vast majority of people in this area are in favor of the proposal as presented. Several million people outside this immediate area would benefit greatly from such a recreation facility."

Very truly yours,

NEVILLE STONE,
Vice President.

(Additional information on Land Between the Lakes project appears on p. 113.)

SUBCOMMITTEE RECESS

Senator HILL. We will stand recessed.

(Whereupon, at 5:20 p.m., Friday, June 26, 1964, the subcommittee recessed subject to the call of the Chair.)

PUBLIC WORKS APPROPRIATIONS FOR 1965

WEDNESDAY, JULY 1, 1964

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to call, in room 1318, New Senate Office Building, Hon. John O. Pastore temporarily presiding.

Present: Senators Pastore, Hill, and Ellender.

U.S. ATOMIC ENERGY COMMISSION

STATEMENTS OF DR. GLENN T. SEABORG, CHAIRMAN; DR. MARY I. BUNTING, COMMISSIONER; JOHN G. PALFREY, COMMISSIONER; DR. GERALD F. TAPE, COMMISSIONER; A. R. LUEDECKE, GENERAL MANAGER; DR. SPOFFORD G. ENGLISH, ASSISTANT GENERAL MANAGER FOR RESEARCH AND DEVELOPMENT; BERTRAM H. SCHUR, ASSOCIATE GENERAL COUNSEL; JOHN P. ABBADESSA, CONTROLLER; R. L. FAULKNER, DIRECTOR, DIVISION OF RAW MATERIALS; FRANK P. BARANOWSKI, DIRECTOR, DIVISION OF PRODUCTION; BRIG. GEN. D. L. CROWSON, DIRECTOR, DIVISION OF MILITARY APPLICATION; DR. FRANK K. PITTMAN, DIRECTOR, DIVISION OF REACTOR DEVELOPMENT; DR. PAUL W. MCDANIEL, DIRECTOR, DIVISION OF RESEARCH; DR. JOHN R. TOTTER, ASSOCIATE DIRECTOR FOR RESEARCH, DIVISION OF BIOLOGY AND MEDICINE; DR. RUSSELL S. POOR, DIRECTOR, DIVISION OF NUCLEAR EDUCATION AND TRAINING; EDWARD J. BRUNENKANT, DIRECTOR, DIVISION OF TECHNICAL INFORMATION; EDWARD R. GARDNER, DIRECTOR, DIVISION OF SPECIAL PROJECTS; E. E. FOWLER, DEPUTY DIRECTOR, DIVISION OF ISOTOPES DEVELOPMENT; WILLIAM L. OAKLEY, ASSISTANT DIRECTOR, DIVISION OF PEACEFUL NUCLEAR EXPLOSIVES; MYRON B. KRATZER, DEPUTY DIRECTOR, DIVISION OF INTERNATIONAL AFFAIRS; ARTHUR L. TACKMAN, DIRECTOR, DIVISION OF PERSONNEL; J. A. DERRY, DIRECTOR, DIVISION OF CONSTRUCTION; VICTOR CORSO, ASSISTANT CONTROLLER FOR BUDGETS

PRESENTATION OF LETTER

Senator PASTORE. The subcommittee will be in order. I have a letter for the record dated June 30, addressed to Senator Hayden. The letter is as follows:

U.S. ATOMIC ENERGY COMMISSION,
Washington, D.C., June 30, 1964.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate.

DEAR SENATOR HAYDEN: The House of Representatives on June 16 passed H.R. 11579, a bill making appropriations for certain civil functions administered by the Department of Defense, the Panama Canal, certain agencies of the Department of the Interior, the Atomic Energy Commission, * * * for the fiscal year ending June 30, 1965, and for other purposes.

As passed by the House, the bill makes certain reductions in the appropriations requested for the atomic energy program. We have made a careful review of the areas affected by the House bill and propose an amendment thereto for consideration by your committee.

Transmitted herewith are 15 copies of the amendment proposed by the Atomic Energy Commission to H.R. 11579, together with the reasons therefor.

Sincerely yours,

GLENN I. SEABORG, *Chairman.*

Senator PASTORE. The amendment will be made a part of the record at this point.

(The amendment referred to follows:)

PROPOSED AMENDMENT TO THE PUBLIC WORKS APPROPRIATION BILL, 1965
ATOMIC ENERGY COMMISSION (H.R. 11579)

(As passed by the House of Representatives)

Estimate submitted to the House:

Operating expenses.....	\$2,323,000,000
Plant and capital equipment.....	370,000,000
Total.....	<u>2,693,000,000</u>

Bill as passed by the House:

Operating expenses.....	2,261,073,000
Plant and capital equipment.....	363,000,000
Total.....	<u>2,624,073,000</u>

Change by House:

Operating expenses.....	-61,927,000
Plant and capital equipment.....	-7,000,000
Total.....	<u>-68,927,000</u>

PROPOSED AMENDMENT TO BILL

(1) Page 22, line 1, strike out "\$2,261,073,000" and insert in lieu thereof "\$2,279,008,000".

H.Rept. 1479, PUBLIC WORKS APPROPRIATION BILL, 1965, ATOMIC ENERGY
COMMISSION

Operating expenses

Appropriation, 1964.....	\$2,342,669,000
Estimate, 1965.....	2,323,000,000
Recommended, 1965.....	2,261,073,000
Comparison:	
Appropriation, 1964.....	-81,596,000
Estimate, 1965.....	-61,927,000

Funds provided under this heading are distributed as shown in the following table:

Program	Budget estimate	Recommended by the committee	Change from budget estimate
Raw materials.....	\$267,455,000	\$267,455,000	
Special nuclear materials.....	401,500,000	395,000,000	-\$6,500,000
Weapons.....	771,747,000	765,000,000	-6,747,000
Reactor development.....	497,900,000	490,000,000	-7,900,000
Physical research.....	222,000,000	210,000,000	-12,000,000
Biology and medicine.....	80,000,000	78,000,000	-2,000,000
Training, education, and information.....	17,700,000	15,700,000	-2,000,000
Isotopes development program.....	10,300,000	9,300,000	-1,000,000
Civilian applications of nuclear explosives.....	11,000,000	11,000,000	
Community program.....	9,035,000	9,035,000	
Program direction and administration.....	76,780,000	76,000,000	-780,000
Security investigation program.....	7,000,000	7,000,000	
Cost of work for others.....	5,100,000	5,100,000	
Change in selected resources.....	-18,451,000	-21,451,000	-3,000,000
Revenues and reimbursements from non-Federal sources.....	-36,066,000	-36,066,000	
Unobligated balance brought forward.....		-20,000,000	-20,000,000
Total.....	2,323,000,000	2,261,073,000	-61,927,000

The total reduction of \$61,927,000 recommended by the committee includes a net reduction of \$7,965,000 made by the Joint Committee on Atomic Energy in its action on the authorizing legislation.

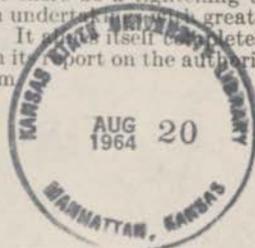
Special nuclear materials.—The reduction of \$6,500,000 made by the committee in this item is based on recent years' experience which show considerable underruns in costs as compared with the estimates in the budget presentation. For example, cost underruns were \$41 million in 1962, \$31,200,000 in 1963, and are estimated at \$8 million in 1964. The committee is confident that the reduction made here will not impair the program and can be reasonably anticipated on the basis of this underrun experience.

Weapons.—The reduction of \$6,747,000 made in this program is based on underrun experience similar to that in the special nuclear materials program. In the current year costs will underrun appropriations by \$9 million, or more.

Reactor development.—In its consideration of this program, the committee has effected all of the changes made by the authorizing committee which result in a net increase of \$35,000. A reduction of \$1,500,000 was made by the Joint Committee in the PLUTO program. The committee has applied an additional \$5,500,000 reduction in this program. The Atomic Energy Commission announced a successful full-powered ground test of the TORY II-C reactor, the second in the PLUTO program, on May 22, 1964. It is the committee's opinion that this amply demonstrates the successfulness of the ramjet propulsion reactor powerplant. Since there is still no military system or requirement for this powerplant and no engine system or vehicle to carry it has been developed up to this time, the committee sees no reason why further development and testing work is necessary. The \$1 million which has been allowed for this program is for the purpose of "mothballing" the project until such time as there is a military system and requirement for it. The additional reduction of \$900,000 made by the committee will be readily absorbed on the basis of past experience with estimate underruns.

Physical research.—The reduction made by the committee in this program includes \$4 million recommended by the authorizing committee and an additional \$8 million, representing approximately the increases in the budgeted programs not affected by the Joint Committee, exclusive of increases necessary for the operation of new accelerators and related activities. The amount provided includes the additional \$500,000 authorized by the Joint Committee for the Midwestern Universities Research Association.

This program has grown from \$121 million in 1960 to \$210 million allowed for 1965, approximately \$20 million per year. For the third consecutive year the committee would like to reiterate the admonition that there be a tightening up in the process of selecting areas and subjects of research under this heading and greater emphasis on overall usefulness of the potential results. It agrees itself completely with the position of the Joint Committee as expressed in its report on the authorizing bill with respect to the high-energy physics program.



Biology and medicine.—The reduction of \$2 million made by the committee in this program represents approximately one-half of the increases budgeted for actual program activities. It includes the \$1 million reduction made by the authorizing committee. The so-called cost-of-living increases have been allowed. Experience with cost underruns in the past would indicate that much of this reduction will be readily absorbed without serious effect on the program. This program has increased from \$45,700,000 in 1960 to \$78 million recommended for 1965.

Training, education, and information.—The reduction of \$2 million in the budget estimate for this program includes \$1,500,000 effected by the authorizing committee. In addition, the committee has made a reduction of \$500,000 including \$300,000 of the proposed increase for the information program and \$200,000 for the Argonne, Ill., school. The information program reduction is taken in light of the President's directive to all agencies to increase efforts to restrict and limit their reporting activities. The \$200,000 at the school is made on the basis of testimony that this is no longer an institute for training foreign nationals. Further it is the committee's opinion that the growing capabilities in our regular educational institutions are putting them in position to meet the requirements for training U.S. citizens.

Isotopes development program.—The reduction in this item includes \$500,000 made by the authorizing committee. The additional reduction of \$500,000 recommended brings the total reduction to approximately one-half of the increase requested. The committee is in complete accord with the position of the Joint Committee on Atomic Energy to the effect that there appears to be a number of projects of a continuing nature in the program which could well be carried out by private industry.

Civilian applications of nuclear explosives.—The funds provided for this program together with \$1,080,000 provided to the Corps of Engineers should be adequate to continue this program at a reasonable rate.

Program direction and administration.—The minor reduction of \$780,000 made in this item should be readily absorbed in a program of the magnitude being considered.

Change in selected resources.—The reduction in this item effects a \$2 million reduction made by the Joint Committee in the authorizing legislation and an additional \$1 million reduction made by the committee.

Unobligated balance.—The additional general reduction of \$20 million is based on the latest analysis of the anticipated fund situation as of the end of the current fiscal year.

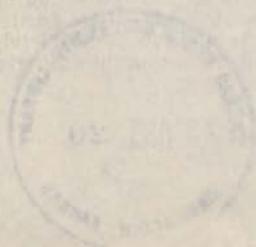
Plant and capital equipment

Appropriation, 1964.....	\$400, 000, 000
Estimate, 1965.....	370, 000, 000
Recommended, 1965.....	363, 000, 000
Comparison:	
Appropriation, 1964.....	-37, 000, 000
Estimate, 1965.....	-7, 000, 000

The reduction of \$7 million in this item includes a \$3 million reduction in the authorization bill which was based on the reductions made by the authorizing committee. The committee has applied an additional \$4 million in the item "Capital equipment not related to construction" to conform in general with the additional reductions it has made in the operating programs.

Amendment (1): Increase of \$17,935,000 in the appropriation for operating expenses

The Commission requests restoration of \$17,935,000 of the reduction made by the House of Representatives. The following table summarizes the reductions made by the House and the amount requested for restoration.



Summary of operating expenses

	AEC request	House change	Restoration requested
Raw materials.....	\$267,455,000		
Special nuclear materials.....	401,500,000	-\$6,500,000	\$3,500,000
Weapons.....	771,747,000	-6,747,000	
Reactor development.....	497,900,000	-7,900,000	6,435,000
Physical research.....	222,000,000	-12,000,000	8,000,000
Biology and medicine.....	80,000,000	-2,000,000	
Training, education, and information.....	17,700,000	-2,000,000	
Civilian applications of:			
Isotopes.....	10,300,000	-1,000,000	
Nuclear explosives.....	11,000,000		
Communities.....	9,035,000		
Program direction and administration.....	76,780,000	-780,000	
Security investigations.....	7,000,000		
Cost of work for others.....	5,100,000		
Change in selected resources.....	-18,451,000	-3,000,000	
Revenues and reimbursements from non-Federal sources.....	-36,066,000		
Unobligated balance brought forward.....		-20,000,000	
Total.....	2,323,000,000	-61,927,000	17,935,000

The reasons for the requested restoration are given below:

SPECIAL NUCLEAR MATERIALS

The \$395 million included in the House bill is \$6,500,000 below the Commission request of \$401,500,000. The House committee report recommended the reduction based on recent years' experience which shows considerable underruns. The committee believes that the reduction made would not impair the program and can be reasonably anticipated based on prior years' underrun experience.

Of the House reduction of \$6,500,000, the Commission is requesting restoration of \$3,500,000. In previous years, the special nuclear materials production complex has operated under a philosophy which placed primary emphasis on maximum production. In fiscal year 1965 the production complex will place less emphasis on maximum production which will result in greater economy of operations. A full year of special cost studies was devoted to developing the most economical modes of operations for the entire production complex and the studies resulted in operating cost reductions estimated at \$13,500,000 in fiscal year 1965 beyond the reductions directly attributable to the production cutbacks.

After the cost studies were completed, the Commission directed its operations offices, in December 1963, to implement an austere program under which costs would be held to a minimum consistent with production schedules and the requirements of public health and safety. The savings under this directive not only contributed to the cost underrun estimated at \$8 million in fiscal year 1964 but were taken into account in developing the fiscal year 1965 budget estimates. Thus, the AEC budget estimate of \$401,500,000 has already considered cost reductions that might otherwise contribute to underruns of the magnitude approved by the House.

Based on a recent comprehensive analysis of operating requirements for fiscal year 1965, it is felt that no more than \$3 million of the House reduction can be absorbed.

REACTOR DEVELOPMENT

The budget request for this program was \$497,900,000. The authorizing legislation would provide a total of \$497,935,000, with several changes in amounts for the various activities within the program. The House Appropriations Committee report indicated acceptance of the changes made in the authorizing legislation but made a reduction of \$7,900,000, bringing the program total to \$490 million.

Of the \$7,900,000 reduction, the House applied \$5,500,000 to the PLUTO program, allowing only \$1 million for "mothballing" the project until such time as there is a military system and requirement for it. It is the House committee's opinion that the successful test of TORY II-C, which took place on May 20, 1964, amply demonstrates the successfulness of the ramjet propulsion reactor powerplant. The committee further went on to state that there is no military system or requirement for the powerplant and no engine system or vehicle to carry it

has been developed up to this time and, therefore, the committee sees no reason why further development and testing are necessary.

The successful test conducted on May 20, which further demonstrated the feasibility of nuclear ramjet propulsion, was the beginning of a test series expected to continue into September 1964. Additional tests of the same reactor and full evaluation of results would have been conducted to realize the maximum benefits of the past 7 years of development effort. Tests to determine the reactor's ability to achieve fast startups and to operate at higher than design conditions were planned to determine the reactor's full capabilities.

In addition to the \$1 million provided by the House for "mothballing" the TORY II-C reactor experiment, the Commission is requesting restoration of \$4 million to provide for the investigation of special applications utilizing this very high temperature gas-cooled reactor technology and to permit a more orderly phaseout of personnel and resources of the project. Restoration is requested in light of the AEC investment of \$135 million¹ in PLUTO technology, the Commission responsibility for the design of new systems which show promise of bringing about major advancements in reactor technology and the continued utilization of trained talent at the Livermore weapons laboratory.

In addition to the reduction made in the PLUTO program explained above, the House also made an overall reduction of \$900,000, which is really an actual general overall reduction of \$2,435,000 after providing for changes made in the authorizing legislation. The Commission in its review of the reactor development program for fiscal year 1965 made reductions in many parts of the program, including naval and rocket propulsion, civilian and army power reactors, and merchant ship reactors, and reduced the fiscal year 1965 program total by \$10.4 million below the fiscal year 1964 level. Changes made in the authorizing legislation further reduced certain activities of the reactor development program and made it necessary to absorb \$14,600,000 in order to provide for a flight test of SNAP 10-A, leaving minimal increases in the nuclear safety and general reactor technology programs. It is the Commission's belief, in light of the reductions already made and a provision for a flight test of SNAP 10-A, that a generalized cost overrun of \$2,435,000 will not materialize in fiscal year 1965 as experienced in prior years when many of the activities in reactor development were expanding. The reduction would have to be applied to activities which have already been cut below the fiscal year 1964 level. Accordingly, restoration of \$2,435,000 is requested.

PHYSICAL RESEARCH

The budget submitted to Congress included \$222 million for the physical research program. The authorizing legislation provides \$218 million, a reduction of \$4 million. The House action would reduce the program by another \$8 million, to \$210 million, for a total reduction of \$12 million below the AEC request.

The House Appropriations Committee in its report, reiterated its position that there be a tightening up in the process of selecting areas and subjects of research undertakings with greater emphasis on overall usefulness of the potential results. The committee also aligned itself completely with the position of the JCAE as expressed in its report on the authorizing bill with respect to the high-energy physics program.

Restoration of \$8 million is requested. As stressed in previous years, the scientific investigations conducted under the physical research program are aimed at the discovery of knowledge. Physical research, then, is predominantly basic research. This program has contributed significantly to man's understanding of nuclear structure, the interaction of nuclear particles, and the very nature of matter itself. Thus by definition there are no clearly defined immediate practical applications emanating from the research efforts supported under this program. The Commission has been selective in the past, and the pressures generated by the need to operate the newer facilities, have made it necessary to be even more selective in acceptance of any new programs as well as in the process of evaluating existing programs.

If the reduction were to be applied to those areas not reduced by the authorizing legislation, the programs in low-energy physics, metallurgy, and materials and controlled thermonuclear research would perforce be reduced below the fiscal year 1964 level. Therefore, to maintain some degree of program stability and balance as well as to partially recognize commitments to operate new major research tools, the additional reduction of \$8 million would be allocated to high-energy physics, low-energy physics, chemistry, and metallurgy.

¹ Includes \$110,000,000 of operating funds and \$25,000,000 of facility funds.

In both high-energy and low-energy physics, the ability to make effective use and/or preparation for operation of such major facilities as the Stanford accelerator, the improved bevatron, the AGS at Brookhaven, the ZGS at Argonne, the Cambridge and Princeton-Pennsylvania accelerators, the Michigan cyclotron, the isochronous cyclotron at Oak Ridge, and the tandem Van de Graaff accelerators at the Universities of Texas and Washington would be materially reduced. Such action, while necessary to live with the House action, is inconsistent with the commitment to and investment made in these facilities as well as the need to vigorously support low energy physics, an area of research central to the interests of the Atomic Energy Commission.

The additional reduction in the chemistry program budget would have to be absorbed by the national laboratories, since the JCAE reduction has already materially reduced the university research programs. Expensive research facilities at the laboratories would not be available as needed by scientists because of lack of operating funds, and so would further increase the backlog of experimental programs. Specific facilities that would be affected include the new ANL hot laboratories, the Ames research reactor, the 88-inch cyclotron, and the HILAC at LRL. This reduction would cause further delays in meeting the established schedules for production of californium and other transplutonium elements needed for further research.

In metallurgy and materials research this reduction would also force less than optimum use of new research facilities such as the Ames research reactor and the high flux beam reactor and the dynamitron at Brookhaven. In addition, planned programs in important areas of research, including superconductivity, mechanical properties, radiation damage, plutonium metallurgy, cryophysics, and neutron diffraction and scattering, would necessarily be reduced or deferred. Expansion in these areas is essential to gain the understanding of materials necessary to the effective exploitation of nuclear technology. Further, the Commission's commitment to the support of the interdisciplinary laboratory program would be adversely affected.

GENERAL STATEMENT FOR OPERATING EXPENSES

ESTIMATE OF APPROPRIATION

This book contains the budget estimates for the appropriation "Operating expenses" for fiscal year 1965. The estimates provide for total obligations of \$2,359,066,000 to be funded by (1) a new appropriation of \$2,323 million and (2) an estimated \$36,066,000 to be received as revenues from non-Federal sources during the fiscal year.

ESTIMATES OF COSTS AND OBLIGATIONS

The budget estimates for this appropriation are stated in terms of accrued costs for each of the AEC's operating programs. "Accrued costs" denotes the actual application of labor, materials, and services to the program during the year, but excludes depreciation of facilities used in the operations. The AEC does, however, maintain accounts for depreciation for the purpose of determining total costs of production and for use in establishing prices for services rendered or products sold to others.

The costs of operation are reconciled to the total obligations to be incurred during the year by estimating the buildup or decrease during the year of the resources that are to be applied to future years' operations. These estimates are included in the section titled, "Increase or Decrease in Selected Resources" and include inventories and undelivered orders.

From total obligations are deducted the revenues estimated to be obtained from non-Federal sources in order to arrive at the amount of appropriations required. These revenues are obtained from AEC-owned community and housing operations, from the sale of products, from services performed for others, and from other miscellaneous sources. These revenues are identified and summarized under the tab "Revenues Applied."

The following table summarizes the accrued costs for each program, and the total obligations for 1963, 1964, and 1965, except that accrued costs and obligations pertaining to capital equipment not related to construction in 1963 have been omitted to provide comparability with 1964 and 1965, since the estimates for those years include such equipment under the appropriation "Plant and

capital equipment." The detailed justifications, beginning on page 12, present the programs in the same order as they appear on this summary table:

Summary of accrued operating costs by program reconciled to net obligations

	Actual, fiscal year 1963	Estimate, fiscal year 1964	Estimate, fiscal year 1965
Accrued costs by program:			
Raw materials.....	\$477,718,862	\$320,000,000	\$267,455,000
Special nuclear materials.....	477,925,734	475,440,000	401,500,000
Weapons.....	650,631,055	782,904,000	771,747,000
Reactor development.....	462,427,377	508,300,000	497,900,000
Physical research.....	182,833,050	197,337,000	222,000,000
Biology and medicine.....	65,106,642	71,350,000	80,000,000
Training, education, and information.....	13,995,196	16,165,000	17,700,000
Civilian applications of--			
Isotopes.....	6,142,665	8,360,000	10,300,000
Nuclear explosives.....	9,536,325	13,500,000	11,000,000
Community.....	8,905,115	9,655,000	9,035,000
Program direction and administration.....	64,987,263	72,625,000	76,780,000
Security investigations.....	6,930,130	6,950,000	7,000,000
Cost of work for others.....	5,571,573	5,800,000	5,100,000
Adjustment to prior year costs.....	-3,296,883		
Total accrued program costs.....	2,429,414,104	2,488,366,000	2,377,517,000
Increase or decrease in selected resources.....	119,982,629	36,305,617	-18,451,000
Total obligations for operating expenses.....	2,549,396,733	2,524,671,617	2,359,066,000
Less revenues applied.....	32,635,305	31,574,000	36,066,000
Net obligations (financed by appropriated funds).....	2,516,761,428	2,493,097,617	2,323,000,000

FINANCING OF OBLIGATIONS

The financing of the estimated total obligations of \$2,359,066,000 proposed in the budget estimates for 1965, together with comparable data for 1963 and 1964, is summarized in the following table:

Summary of financing

	Actual, fiscal year 1963	Estimate, fiscal year 1964	Estimate, fiscal year 1965
Funds available for obligations:			
Unobligated balance, beginning of year.....	\$17,697,504	\$150,428,617	
Appropriation.....	2,872,224,000	2,342,669,000	\$2,323,000,000
Transfer to "Operating expenses, Public Building Services," General Services Administration (76 Stat. 728).....	-193,273		
Revenues received from non-Federal sources.....	32,635,305	31,574,000	36,066,000
Comparability transfer to "Plant and capital equipment," Atomic Energy Commission.....	-222,538,186		
Total funds available for obligation.....	2,699,825,350	2,524,671,617	2,359,066,000
Less unobligated balance, end of year.....	150,428,617		
Total obligations incurred.....	2,549,396,733	2,524,671,617	2,359,066,000

EXPENDITURES FOR OPERATING EXPENSES

Expenditures from the "Operating expenses" appropriation for 1965 are estimated at \$2,300 million. The estimated amounts available for expenditure in 1963, 1964, and 1965, the expenditures for each year, and the remaining unexpended balances are shown in the following table:

Expenditure analysis

	Actual, fiscal year 1963	Estimate, fiscal year 1964	Estimate, fiscal year 1965
Funds available for expenditure:			
Unexpended balance, beginning of year:			
Obligated.....	\$836,726,453	\$1,068,729,772	\$1,053,046,342
Unobligated balance.....	17,697,504	150,428,617	-----
New appropriation.....	2,872,224,000	2,342,669,000	2,323,000,000
Transfer to "Operating expenses, Public Building Services," General Services Administration (76 Stat. 728).....	-193,273	-----	-----
Transfer of unpaid obligations for equipment to "Plant and capital equipment," Atomic Energy Commission.....	-----	-143,781,047	-----
Total funds available for expenditure.....	3,726,454,684	3,418,046,342	3,376,046,342
Less expenditures.....	1,250,729,295	2,365,000,000	2,300,000,000
Unexpended balance, end of year:			
Obligated.....	1,068,729,772	1,053,046,342	1,076,046,342
Unobligated balance.....	150,428,617	-----	-----
Unexpended balance, end of year.....	1,219,158,389	1,053,046,342	1,076,046,342

¹ This amount is not comparable to the expenditures estimated for 1964 and 1965 in that 1964 and 1965 expenditures do not include amounts related to obligations for capital equipment not related to construction which are now shown under the Plant and capital equipment appropriation rather than the Operating expenses appropriation as is the case for 1963. The amount of \$155,521,810 should be subtracted from the 1963 expenditures to arrive at an amount comparable with the 1964 and 1965 expenditures.

HIGHLIGHTS OF OPERATING PROGRAMS

There follows a brief description of each of the programs set forth in the summary on page 2.

1. *Raw materials program.*—Operating costs for the raw materials program are estimated at \$267.5 million in 1965, compared with 1964 estimated costs of \$320 million and 1963 actual costs of \$477.7 million. The raw materials program provides for procurement of uranium concentrates from foreign and domestic sources. The decrease in quantities of uranium concentrates to be procured in 1965 is principally the result of (a) reduced deliveries from Canadian and South African sources in accordance with the provisions of the contracts, and (b) deferral of domestic deliveries as a result of the stretchout program announced on November 17, 1962.

2. *Special nuclear materials program.*—Operating costs for the special nuclear materials program are estimated at \$401.5 million in 1965, compared with 1964 estimated costs of \$475.4 million and 1963 actual costs of \$477.9 million. Special nuclear materials are produced to meet weapons production schedules and requirements for other programs. Uranium concentrates are processed into feed materials from which plutonium and other products are produced in the reactors at Richland, Wash., and Savannah River, S.C., and the isotope uranium 235 is extracted in plants at Oak Ridge, Tenn., Paducah, Ky., and Portsmouth, Ohio. Production of special nuclear materials will decline somewhat in 1965. Work will continue on process improvements to assure continuity and safety of operation and more economical methods of production.

3. *Weapons program.*—Operating costs for the weapons program are estimated at \$771.7 million in 1965 compared with 1964 estimated costs of \$782.9 million and 1963 actual costs of \$650.6 million. The weapons program encompasses the production of atomic weapons; the maintenance of stockpiled weapons in a state of constant readiness; the design, development, and underground testing of new weapons types; preparation for and maintenance of a short-term readiness capability to resume atmospheric testing; and participation with the Department of Defense in the development of test detection methods.

4. *Reactor development program.*—Operating costs for the reactor development program are estimated at \$497.9 million in 1965 compared with 1964 estimated

costs of \$508.3 million and 1963 actual costs of \$462.4 million. Emphasis will continue to be placed on advancing power reactor technology in order to achieve large-scale generation of economic electrical energy from atomic reactors. Co-operative endeavors will be continued between the Commission and industrial groups, as well as with the European Atomic Energy Community (Euratom), Canada, and West German authorities.

The estimates provide for research and development in advanced systems such as direct conversion and high temperature reactor experiments, as well as in many current reactor designs and programs of reactor, environmental and aerospace nuclear safety.

Work will also be continued on developing reactors to propel merchant and naval vessels. Development of nuclear reactors for propulsion of rockets for space applications (ROVER program) will be continued. Also reactors are being developed for missile propulsion, to meet power requirements for remote areas, and to provide electric power and heat for satellites. Radioisotope power sources development will also be continued.

Operation of test facilities and experimental reactors will be continued at the National Reactor Testing Station in Idaho, and at other locations.

5. *Physical research program.*—Operating costs for the physical research program are estimated at \$222 million in 1965 compared with 1964 estimated costs of \$197.3 million and 1963 actual costs of \$182.8 million. The physical research program consists of theoretical and experimental investigations required to support the Commission's immediate and long-range objectives for utilizing nuclear energy. Advances achieved in the past can be traced back to similar laboratory investigations. In the atomic energy program, research plays a relatively more important role than in other industrial operations of comparable size. The phenomena dealt with are at the forward boundaries of scientific knowledge. Unusual materials are employed and their nuclear, as well as their chemical and physical properties, must be determined. The temperatures and radiation densities at which these materials are used are outside the range of previous experience in industrial technology.

6. *Biology and medicine program.*—Operating costs for the biology and medicine program are estimated at \$80 million for 1965, compared with estimated costs of \$71.3 million in 1964 and actual costs of \$65.1 million in 1963. Primary emphasis will continue to be placed on the protection of the health and safety of atomic energy plant workers and the general populace from the hazards of atomic energy operations. Research on radioactive fallout problems and related research in the biological hazards of radiation will be expanded with increasing attention given to large-scale studies of chronic effects of radiation. Continued emphasis will be placed on research efforts of pertinence in the field of industrial uses of atomic energy. Close liaison will continue to be maintained with other agencies performing functions interrelated with Commission biomedical interests. Research is carried on by Commission laboratories, universities and other independent institutions.

7. *Training, education, and information.*—Operating costs for the training, education, and information program are estimated at \$17.7 million in 1965 compared to 1964 estimated costs of \$16.2 million and 1963 actual costs of \$14 million. Primary program emphasis will be placed on broadening the base of nuclear technology at home and abroad. Program efforts are directed toward provision of assistance to colleges and universities in establishing nuclear curriculums; provision of assistance to States for training in radiation control; operation, through contract, of schools and the conduct of specialized courses; administration of cooperative program between universities and AEC laboratories; offering of graduate fellowships in the nuclear energy field; including a new traineeship program; presentation of international conferences, studies, and exhibits; and development and dissemination of technical information.

8. *Civilian applications of—*

Isotopes: Operating costs for the civilian applications of isotopes program are estimated at \$10.3 million in 1965 compared to 1964 estimated costs of \$8.4 million and 1963 actual costs of \$6.1 million. The program consists of research and development activities required to accelerate realization of the potentially vast uses of radioisotopes and radiation technology. The program will provide for expanding the technology and utilization of isotopes with particular attention to civilian applications; and developing, through research and development activities, application of high level or massive radiation, large-scale economic uses of fission product wastes, and methods and technology for preservation of foods by irradiation. An increasingly important area is the development of isotopic power and heat sources for space and terrestrial needs.

Nuclear explosives: Operating costs for the civilian applications of nuclear explosives program (plowshare) are estimated at \$11 million for 1965 compared to estimated costs of \$13.5 million in 1964 and actual costs of \$9.5 million in 1963. The 1965 program provides for the investigation and development of peaceful uses for nuclear explosives. Current emphasis is on the development and testing of "clean" devices for use in large-scale excavation projects and of high-flux devices for future use in scientific experiments.

9. *Community.*—Operating costs for the community program are estimated at \$9 million in 1965 compared to 1964 estimated costs of \$9.7 million and 1963 actual costs of \$8.9 million. Although legislation has been enacted to terminate Government ownership of the town of Los Alamos, N. Mex., over a period of the next few years, the program estimate of \$9 million includes \$6.7 million for the Los Alamos community, of which \$0.2 million is for assistance payments to the hospital and \$6.5 million is for operation of the town because the Atomic Energy Commission will continue to operate the community through 1965. The remaining \$2.3 million is for assistance payments to the former AEC communities of Oak Ridge, Tenn., and Richland, Wash., in accordance with the Atomic Energy Community Act of 1955, as amended. Operating revenues at Los Alamos (budgeted under revenues applied) are estimated at \$5.2 million.

10. *Program direction and administration.*—Operating costs of \$76.8 million will be incurred in 1965 for program direction and administration compared with 1964 estimated costs of \$72.6 million and 1963 actual costs of \$65 million. The estimates provide for maintaining employment in 1965 at the June 30, 1964, level of 5,469. Under the general heading of "Program direction and administration" are grouped together the salary costs and other expenses of Commission personnel engaged in general management, executive direction, and technical supervision of program operations; the negotiation and administration of contracts; other related administrative activities; and the discharge of regulatory functions.

11. *Security investigations.*—Costs of investigations performed by the Civil Service Commission and the Federal Bureau of Investigation, at the request of the Commission, of persons to be employed on work involving access to restricted data, under the provisions of the Atomic Energy Act of 1954, as amended, in 1965 are estimated at \$7 million compared with 1964 estimated costs of \$7 million and 1963 actual costs of \$6.9 million.

12. *Cost of work for others.*—Cost of work for others are estimated to be \$5.1 million in 1965, compared with \$5.8 million in 1964 and \$5.6 million in 1963. This program includes costs incurred by the Commission in furnishing materials and services to industrial organizations and other private parties apart from those which it provides normally for its own basic program. The costs are incurred only upon the request of others. Charges are made for these materials and services and the revenues derived are included under "Revenues applied."

13. *Increase or decrease in selected resources.*—This program covers changes in inventory stocks held by AEC and its contractors, collateral funds, and goods and services on order under contract. The appropriation requirements for these items are based on the changes in balances from the previous fiscal year. Balances at end of 1965 are estimated at \$912.2 million as compared with \$930.7 million at the end of 1964, or a decrease of \$18.5 million in 1965. Balances at the end of 1963 were \$894.4 million.

14. *Revenues applied.*—This program includes income from sale and lease of products and from services rendered, revenues from communities, and other miscellaneous income items. These revenues are applied against Atomic Energy Commission appropriation requirements. Revenues are estimated at \$36.1 million for 1965, compared to an estimate of \$31.6 million for 1964 and actual revenues in 1963 of \$32.6 million.

EXPLANATION OF PROPOSED LANGUAGE CHANGES—OPERATING EXPENSES

The proposed change in language is indicated as follows: Language enclosed in black brackets indicates proposed deletion; language in *italics* indicates proposed insertion.

1. "~~[\$2,342,669,000]~~ *\$2,323,000,000*, and any moneys (except sums received from disposal of property under the Atomic Energy Community Act of 1955 (42 U.S.C. 2301)) received by the Commission, notwithstanding the provisions of section 3617 of the Revised Statutes (31 U.S.C. 484), to remain available until expended."

To reflect the fiscal year 1965 appropriation amount.

EXPLANATION OF PROPOSED LANGUAGE CHANGES—GENERAL PROVISIONS

The proposed changes in the language for the administrative provisions are described below. Language enclosed in black brackets indicates proposed deletions; language in italic indicates proposed insertions.

1. "Any appropriation available under this or any other Act to the Atomic Energy Commission may initially be used subject to limitations in this Act during the fiscal year [1964] 1965 to finance the procurement of materials, services, or other costs which are a part of work or activities for which funds have been provided in any other appropriation available to the Commission: * * *"

This change makes the provision applicable to fiscal year 1965.

2. "Not to exceed 5 per centum of appropriations made available for the fiscal year [1964] 1965 for 'Operating expenses' and 'Plant and capital equipment' may be transferred between such appropriations, but neither such appropriation, except as otherwise provided herein, shall be increased by more than 5 per centum by any such transfers, and any such transfers shall be reported promptly to the Appropriations Committees of the House and Senate."

This change makes the provision applicable to fiscal year 1965.

GENERAL STATEMENT FOR PLANT AND CAPITAL EQUIPMENT

SUMMARY OF REQUIREMENTS FOR FISCAL YEAR 1965

The budget estimates for the appropriation Plant and capital equipment for 1965 provide for estimated obligations of \$370 million to be funded by a new appropriation. Of the estimated total obligations, \$151.3 million is required for construction projects for which authorization is being requested in the 1965 authorization bill, \$28.9 million is required for construction projects previously authorized, and \$189.8 million is required for capital equipment not related to construction.

A summarization of estimated 1965 obligations by program follows:

Summary of fiscal year 1965 obligations

	Funding for projects authorized in prior years	Funding for projects included in the 1965 Authorization Act	Capital equipment not related to construction	Total
Raw materials.....		\$45,000	\$25,000	\$70,000
Special nuclear materials.....		19,850,000	22,000,000	41,850,000
Weapons.....		46,120,000	72,630,000	118,750,000
Reactor development.....	\$1,500,000	29,100,000	47,400,000	78,000,000
Physical research.....	24,400,000	43,940,000	39,400,000	107,740,000
Biology and medicine.....		6,863,000	4,600,000	11,463,000
Training, education, and information.....		90,000	660,000	750,000
Civilian applications of:				
Isotopes.....			1,900,000	1,900,000
Nuclear explosives.....			400,000	400,000
Community.....	2,990,000	2,240,000	90,000	5,320,000
Administrative.....		90,000	667,000	757,000
Construction planning and design.....		3,000,000		3,000,000
Total obligations.....	28,890,000	151,338,000	189,772,000	370,000,000

SUMMARY OF OBLIGATIONS

The following table summarizes the total obligations for each of the programs for 1963, 1964, and 1965. The data for 1963 has been adjusted to include obligations by program for capital equipment not related to construction (budgeted under operating expenses in that year) to provide comparability with the data for 1964 and 1965. This comparability adjustment totals \$222,538,186 in 1963. The detailed justifications beginning on page 11 present the programs in the same order as they appear on this summary table.

Summary of obligations by program

	Actual, fiscal year 1963	Estimate, fiscal year 1964	Estimate, fiscal year 1965
Raw materials.....	\$53,036	\$37,000	\$70,000
Special nuclear materials.....	111,613,517	73,315,772	41,850,000
Weapons.....	125,601,304	140,903,000	118,750,000
Reactor development.....	115,215,093	186,117,000	78,000,000
Physical research.....	116,055,359	124,323,000	107,740,000
Biology and medicine.....	9,325,520	8,151,000	11,463,000
Training, education, and information.....	581,007	693,000	750,000
Civilian applications of—			
Isotopes.....	1,704,595	2,834,000	1,900,000
Nuclear explosives.....	385,535	292,000	400,000
Community.....	1,484,088	7,336,000	5,320,000
Administrative.....	749,116	670,000	757,000
Construction planning and design.....		5,000,000	3,000,000
Total obligations.....	482,768,200	549,671,772	370,000,000

FINANCING OF OBLIGATIONS

The financing of the estimated total obligations of \$370 million proposed in the budget estimates for 1965, together with comparable data for 1963 and 1964, is summarized in the following table:

Summary of financing

	Actual, fiscal year 1963	Estimate, fiscal year 1964	Estimate, fiscal year 1965
Funds available:			
Unobligated balance at beginning of year.....	\$135,722,786	\$146,296,772	-----
Recovery of prior-year obligations.....	8,059,000	3,375,000	-----
Appropriation.....	262,745,000	400,000,000	\$370,000,000
Comparability transfer from "Operating expenses, Atomic Energy Commission".....	222,538,186	-----	-----
Net amount available for obligation.....	629,064,972	549,671,772	370,000,000
Unobligated balance at end of year.....	146,296,772	-----	-----
Total obligations.....	482,768,200	549,671,772	370,000,000

EXPENDITURES FOR PLANT AND CAPITAL EQUIPMENT

Expenditures from the Plant and capital equipment appropriation for 1965 are estimated to be \$435 million. The estimated amounts available for expenditure in 1963, 1964, and 1965, the expenditures for each year, and the remaining unexpended balances are shown in the following table:

Expenditure analysis

	Actual, fiscal year 1963	Estimate, fiscal year 1964	Estimate, fiscal year 1965
Funds available for expenditure:			
Unexpended balance, beginning of year.....	\$382,905,733	\$395,002,970	\$503,784,017
Appropriation.....	262,745,000	400,000,000	370,000,000
Transfer of estimated unpaid obligations for equipment from "Operating expenses, Atomic Energy Commission".....		143,781,047	-----
Total funds available for expenditure.....	645,650,733	938,784,017	873,784,017
Less: Expenditures.....	1,250,047,763	435,000,000	435,000,000
Unexpended balance, end of year.....	395,002,970	503,784,017	438,784,017

¹ This amount is not comparable to the expenditures estimated for 1964 and 1965 in that 1964 and 1965 expenditures include amounts related to equipment obligations which are now shown under the Plant and capital equipment appropriation rather than the Operating expenses appropriation as is the case for 1963. The amount of \$155,521,810 should be added to 1963 expenditures to arrive at an amount comparable to the 1964 and 1965 expenditures.

HIGHLIGHTS OF PLANT AND CAPITAL EQUIPMENT

There follows a brief description of each of the programs set forth in the summary on page 2.

1. *Raw materials.*—Obligations for raw materials plant and capital equipment in 1965 are estimated at \$70,000. This includes \$45,000 for minor modifications and improvements to existing plant or installations and \$25,000 for capital equipment not related to construction.

2. *Special nuclear materials.*—Obligations for special nuclear materials plant and capital equipment in 1965 are estimated at \$41.9 million of which \$19.9 million is necessary to provide for new construction projects proposed for authorization, and \$22 million is estimated for capital equipment not related to construction. The \$19.9 million proposed for new construction projects includes \$9 million for an isotopes production plant at Richland, Wash., \$0.3 million for a radiosurgery facility at Richland, Wash., and \$10.6 million for general plant projects.

3. *Weapons.*—Obligations for weapons plant and capital equipment in 1965 are estimated at \$118.8 million of which \$46.1 million is necessary to provide for new construction projects proposed for authorization and \$72.7 million is estimated for capital equipment not related to construction. The new construction projects include \$30.1 million for additional production, development, and supporting facilities, and \$16 million for general plant projects.

4. *Reactor development.*—Obligations for reactor development plant and capital equipment in 1965 are estimated at \$78 million, of which \$29.1 million will provide for new construction projects proposed for authorization, \$1.5 million will complete funding on prior years' authorized projects, and \$47.4 million is estimated for capital equipment not related to construction. The new construction projects include \$8.1 million for a safety engineering power burst facility, \$3 million for a zero power plutonium reactor, \$3 million for a support project for Project Rover, \$3 million for a support project for modification to reactors, and \$12 million for general plant projects.

5. *Physical Research.*—Obligations for physical research plant and capital equipment in 1965 are estimated at \$107.7 million, of which \$43.9 million is for new construction projects requiring authorization, \$24.4 million is to complete funding on projects authorized in prior years, and \$39.4 million is for capital equipment not related to construction. The construction projects include \$25 million for an Argonne advanced research reactor, \$5.5 million for accelerator improvements at various sites, \$2.8 million for general plant projects, and \$10.6 million for other research facilities. Additional obligations of \$24 million for the Stanford linear electron accelerator and \$0.4 million for the University of Chicago high-energy physics building are included to complete the funding for these projects which were authorized in prior years.

6. *Biology and medicine.*—Obligations for biology and medicine plant and capital equipment in 1965 are estimated at \$11.5 million of which \$6.9 million is for new projects to be authorized, and \$4.6 million is for capital equipment not related to construction. The new projects include \$6 million for support of biomedical research projects in atomic energy and \$0.9 million for general plant projects.

7. *Training, education, and information.*—Obligations for training, education, and information plant and capital equipment in 1965 are estimated at \$0.8 million. This includes \$0.1 million for general plant projects at the Puerto Rico Nuclear Center, and \$0.7 million for capital equipment not related to construction.

8. *Isotopes development.*—Obligations for isotopes development in 1965 are estimated at \$1.9 million for capital equipment not related to construction.

9. *Civilian applications of nuclear explosives.*—Obligations for civilian applications of nuclear explosives will provide \$0.4 million for capital equipment not related to construction.

10. *Community.*—Obligations for Los Alamos community plant and capital equipment in 1965 are estimated at \$5.3 million. This includes \$2.2 million for new projects proposed for authorization in 1965, \$3 million for additional funding of a previously authorized community disposal project, and \$0.1 million for capital equipment not related to construction. The \$2.2 million estimated for new projects in 1965 will provide for the following: \$0.3 million for an additional water distribution system, \$0.3 million for additional junior high school classrooms, \$0.3 million for additional elementary school classrooms, \$0.6 million for a sewage disposal plant, and \$0.7 million for general plant projects.

11. *Administrative.*—Obligations for improvements and modifications of administrative facilities at the Commission headquarters in Germantown, Md., and for procurement of capital equipment to support the operating program in

1965 are estimated at \$0.8 million. This includes \$0.1 million for new general plant projects and \$0.7 million for capital equipment not related to construction.

12. *Construction planning and design.*—Obligations for engineering and design for complex construction prior to proposing projects for authorization are estimated at \$3 million in 1965.

EXPLANATION OF PROPOSED LANGUAGE CHANGES—PLANT AND CAPITAL EQUIPMENT

Proposed changes in language are indicated as follows: Language enclosed in black brackets indicates proposed deletions and italic indicates proposed insertion of new language.

1. "purchase [(] of not to exceed [four hundred and twenty-three] *five hundred and twenty-two of which three hundred and eighty-four are* for replacement only [.] (including [two] *three* at not to exceed \$3,000 each) and hire of passenger motor vehicles; and *purchase of one aircraft;*".

This change provides for authorization of the procurement in fiscal year 1965 of 522 passenger motor vehicles of which 384 are for replacement of older vehicles and 138 would be additions to the fleet. The change also provides authorization for the procurement of the aircraft being leased for research in aerial radiological survey measurements and for support of emergency operations involving a nuclear incident.

All vehicles to be replaced will meet or exceed the GSA replacement standards. The additional vehicles requested include 128 automobiles, 3 station wagons, and 7 buses. Of this increase, 120 automobiles will be required at the Nevada Test Site to offset a like number of commercial rentals in view of the continuing program at that location. In line with criteria recently established for Government agencies, one additional medium weight sedan will be required at headquarters to replace a rented heavy sedan. (Two other medium sedans for headquarters are included in the 384 replacements.) Also required are seven automobiles, four buses, and three station wagons for the National Reactor Testing Station to meet new and expanding program requirements. Finally, three additional school buses are required at Los Alamos to meet a projected increase in public school enrollment.

Contractors are assigned passenger motor vehicles as Government-furnished equipment and operate them in carrying out the Commission's program. With the net addition of 138, the passenger vehicle fleet will number 2,564 at the end of fiscal year 1965.

2. "*[\$400,000,000] \$370,000,000, to remain available until expended*".

This change provides for deletion of the amount appropriated in fiscal year 1964 and insertion of the amount of the fiscal year 1965 appropriation request.

3. "*Provided, [That the obligated balance as of June 30, 1963, of amounts included in appropriations to the Atomic Energy Commission for 'Operating expenses', for capital equipment not related to construction, shall be merged with this appropriation: Provided further, That the unexpended balance as of June 30, 1963, of the appropriation 'Plant acquisition and construction' shall be merged with this appropriation: Provided further, That not to exceed \$30,000,000 for a spectral shift power reactor may be transferred from this appropriation to the appropriation for 'Operating expenses', if the Commission determines such transfer to be necessary to carry out such cooperative power reactor demonstration program as may be authorized by law.]*"

This change provides for deletion of language not required in the fiscal year 1965 appropriation.

4. "*That not to exceed \$9,000,000 of the amount appropriated herein for an isotopes production plant may be transferred to the appropriation for 'Operating expenses', if the Commission determines such transfer to be necessary to enter into an arrangement for construction of all or a part of such plant by private industry.*"

This change provides for the transfer of funds for the isotopes production plant to the "Operating expenses" appropriation in the event the Commission enters into an agreement for private industry to participate in the construction and operation of these facilities with private capital.

PROGRAMS AND BUDGET ESTIMATES

Senator PASTORE. Do you have a prepared statement, Dr. Seaborg?

Dr. SEABORG. Yes, Mr. Chairman.

Senator PASTORE. You may proceed.

Dr. SEABORG. I am pleased to appear before your committee to discuss the Atomic Energy Commission's programs and budget estimates. With me are other members of the Commission and staff. We are especially pleased to have the newest member of the Commission with us at these hearings. Dr. Mary I. Bunting was just sworn in on Monday, June 29, so this is her first appearance before your committee; that is, this committee, as an AEC Commissioner. As you know, Dr. Bunting has been president of Radcliffe College and has a rich background of experience in science and administration. I take great pleasure in introducing her to this committee.

Senator PASTORE. If I may interrupt, I notice that Dr. Bunting was before the Joint Committee yesterday. I did not have an opportunity to welcome her. I do have that opportunity exclusively this morning.

Commissioner BUNTING. Thank you very much.

AUTHORIZING LEGISLATION

Dr. SEABORG. This year for the first time, our entire request for appropriations—operating expenses as well as plant and capital equipment—has required authorizing legislation. This legislation, reported out by the Joint Committee on Atomic Energy has been approved by both the House of Representatives and the Senate and was signed by the President yesterday.

The President's budget included an appropriation for the Atomic Energy Commission for the fiscal year 1965 in the amount of \$2,693 million—of which \$2,323 million is for operating expenses and \$370 million for plant and capital equipment.

The authorizing legislation would provide for an appropriation of \$2,682 million, of which \$2,315 million is for operating expenses and \$367 million is for plant and capital equipment.

The appropriation bill passed by the House on June 16 (H.R. 11579), would further reduce the amount of the appropriation to \$2,624.1 million, of which \$2,261.1 million is for operating expenses and \$363 million is for plant and capital equipment.

HOUSE ACTION

In total the amount recommended by the House is \$68.9 million below the amount proposed in the President's budget with \$61.9 million of the reduction applicable to the operating expenses appropriation and \$7 million applicable to the plant and capital equipment appropriation.

We have made a very careful review of our programs and the reductions made by the House. Taking into account the recognized need for reducing costs whenever possible, we are not requesting a blanket restoration but rather we have made a concerted effort to be highly selective in the items for which we are requesting the restoration of funds.

APPEALING REDUCTIONS

Thus, while we are not appealing the reductions made by the House in our biology and medicine, information, and isotopes programs, this decision did not come easily, since as you well know, the Commission

considers these activities of tremendous importance. However, we must emphasize the seriousness with which we view the reductions made in the operation of our special nuclear materials, reactor development, and physical research programs for which we are recommending restorations totaling \$17.9 million.

Senator PASTORE. As against a cut of how much?

Dr. SEABORG. Of about \$61 million.

Senator PASTORE. \$61.9 million.

Dr. SEABORG. \$61,927,000 to be exact. I would like to comment briefly on the major AEC programs and the budget estimates for these programs.

RAW MATERIALS

Raw materials program: The \$267.5 million requested for the raw materials program is \$52.5 million less than the budget approved for fiscal year 1964 and provides for procurement of 15,677 tons of uranium concentrates in fiscal year 1965.

Procurement of uranium concentrates from foreign sources continues to decline. Deliveries under the contracts with Canada and South Africa will be completed by the end of calendar year 1966. Procurement from domestic producers is also declining in accordance with contractual commitments. The domestic stretchout program is proceeding in accordance with announced plans.

Senator PASTORE. Insofar as the raw materials program is concerned, there is no question about the House action.

Dr. SEABORG. No question. They accepted the program as we presented it.

SPECIAL NUCLEAR MATERIALS

Special nuclear materials program: The Commission's budget for fiscal year 1965 included \$401.5 million in operating costs for the production of special nuclear and other special materials for the military programs and for peaceful applications of atomic energy. This amount is \$73.9 million below fiscal year 1964 operating costs for this program and reflects reductions in production of enriched uranium and plutonium together with other operating economies. The major facilities operated under this program include the production reactors at Richland, Wash., and Savannah River, S.C., used for the production of plutonium and tritium, and the gaseous diffusion cascades at Oak Ridge, Tenn., Paducah, Ky., and Portsmouth, Ohio, used for the production of enriched uranium.

HOUSE ACTION

The House appropriation bill reduces the amount requested for this program to \$395 million, a \$6.5 million reduction. In reporting out the bill the committee stated that the reduction is based on recent years underrun experience. The Commission is requesting restoration of \$3.5 million of the \$6.5 million cut. Based on a recent comprehensive analysis of operating requirements for fiscal year 1965, it is felt that no more than \$3 million of the \$6.5 million reduction can be absorbed.

There have been underruns in recent years. However, our budget reflects a decrease in this program thereby eliminating the likelihood

of underruns which occur in an increasing program resulting from lags and slippages. Moreover in this program, in almost every case the underruns were primarily the result of actions taken within AEC to reduce costs and increase the efficiency of operations. These efforts, as one example led to substantial employment reductions, especially in the U²³⁵ production plants.

REVIEW OF PRODUCTION PROGRAM

Each succeeding year it becomes more difficult to make further reductions in personnel and other costs; as noted above, additional reductions in cost of operations were assumed in the budget submitted for fiscal year 1965. In this connection subsequent to our determination to appeal for restoration of \$3.5 million of the House reduction, we have been reviewing further the production program in extensive detail with our field offices, particularly at Richland, and on the basis of these reviews I consider it essential that \$3½ million of the \$6½ million reduction be restored.

Senator PASTORE. Is this all in the weapons program?

Dr. SEABORG. This is all in the production of special nuclear materials, most of which goes for weapons.

Senator PASTORE. What would happen if you did not get the \$3.5 million that you are asking for? The argument that is usually made in conference is that after all the amount allowed is \$395 million after they cut you \$6.5 million and you are asking for restoration of half of that, \$3.5 million that very large amount of \$395 million. Especially in view of the experience of the underruns, why can't you possibly absorb the \$3.5 million and what would be the catastrophe if we didn't give it to you? That is what I would like to get dramatized and emphasized so that you will have some argument in conference in the event we have to go back. I think what you have to do, in view of the action of the House, is to point up what the result will be in the event this is not restored.

EFFECT OF HOUSE ACTION

Dr. SEABORG. It is an extremely tight budget. We reduced it \$73.9 million ourselves and considered it very tight at that point. I think that if we didn't have the \$3.5 million restored, and began to run short of funds, we would have to do something like shut down one of the Hanford reactors earlier than we had planned.

Senator PASTORE. In other words, in this category, you ran out of money it would necessarily mean you would have to shut down one of the reactors?

Dr. SEABORG. Yes, we would, perhaps, have to shut down one of the reactors earlier than we have now scheduled to shut down. We have scheduled the shutdown of three reactors at Hanford.

Senator PASTORE. What was the amount for this particular category in the fiscal year 1963? Can you give me that figure?

Mr. CORSO. Yes, sir, \$477,963,000.

Senator PASTORE. How much more than you asked for this year?

Mr. CORSO. That would be \$76 million more than we asked for fiscal year 1965.

1964 ESTIMATE AND APPROPRIATION

Senator PASTORE. What was it that you asked for in 1964 and what were you given in 1964?

Mr. CORSO. We were given \$475.4 million. I don't have with me what our original request was for fiscal 1964.

Senator PASTORE. Which is how much less than what you asked for this time or more?

Dr. SEABORG. The 1965 request is \$73.9 million below the 1964 budget.

Senator PASTORE. You have sharpened your pencil down to what?

Dr. SEABORG. That is what sharpening our pencil resulted in.

Senator PASTORE. \$401 million.

Dr. SEABORG. \$401.5 million.

RESTORATION REQUEST

Senator PASTORE. The House gave you \$395 million and you are asking for restoration of \$3.5 million?

Dr. SEABORG. That is right.

Senator PASTORE. If you can't absorb this it necessarily means that you will have to shut down some place?

Dr. SEABORG. Yes, earlier than scheduled. That is, probably.

POSSIBILITY OF SHUTTING DOWN HANFORD REACTOR

Senator PASTORE. That is all to do with military purposes?

Dr. SEABORG. Yes. This is primarily for the production of fissionable material for military purposes, for weapons.

Senator PASTORE. The fact of the matter is that is one of the alternatives that might result. It doesn't necessarily mean that you couldn't do something else. Let us not get into a position here that it necessarily means that you have to shut down the reactor sooner than you thought. You might have to do something else instead of shut down the reactor. Do I make my point clear on this?

Dr. SEABORG. Yes.

Senator PASTORE. In other words, I want to go into the facts. It might mean the shutting down of the reactor or it might mean something else, too.

Dr. SEABORG. There might be other ways of curtailing activity.

Senator PASTORE. Give me a rundown on what those other ways might be.

OTHER POSSIBLE ACTIONS

Mr. BARANOWSKI. As the budget is set up for 1965, we have taken a hard look and have taken a lot of cost reduction steps consistent with a minimum budget. The only way we see today in meeting the levels that would be established at \$395 million is to reduce personnel. Most of our budget is made up of personnel. Therefore, if we have to meet the proposed dollar level we would have to get involved in laying off personnel in the production system.

The only place that we see now that would not be a major change in our program would be to accelerate the shutdown of the reactors as approved by the President.

There are other places we can look at such as deferral of projects, but all of these cost reductions require personnel reductions.

Senator PASTORE. That is the answer I wanted. Thank you.

Dr. SEABORG. The \$398.5 million budget, assuming restoration

of \$3.5 million, is considered to be a minimum amount for carrying out this program.

WEAPONS

Weapons program: The budget estimate for weapons production, development and testing activities in 1965 is \$771.7 million. This program provides for production of the atomic weapons required to meet stockpile objectives recommended by the Department of Defense and approved by the President. It also provides for the operation of the laboratories engaged in the development of new weapons, continuation of the underground weapons test program, and the atmospheric test readiness activities, all of which are necessary to meet our responsibilities for the limited nuclear test ban treaty safeguards.

The House action would reduce the Commission's estimate by \$6.7 million. This reduction is not being appealed. We are now able to project savings as a result of recent favorable cost experience in certain activities in the weapons program.

OFFSETTING REDUCTIONS

On the other hand, as a result of a recent review of the fiscal year 1965 estimates, we find that the projection of \$186.3 million for weapons testing must be increased by approximately \$23 million. We can accommodate this increase because of the offsetting reductions in other activities of the weapons program resulting from the savings I mentioned above, without in any way reducing the scope of these activities.

Senator PASTORE. Therefore, you are ready to accept the House cut in this case?

Dr. SEABORG. Yes, sir; we are ready to accept the House cut in this case.

Senator PASTORE. Very well, sir.

REACTOR DEVELOPMENT

Dr. SEABORG. Reactor development program: The fiscal year 1965 budget estimate submitted to Congress for this program included \$497.9 million, a \$10.4 million reduction from fiscal year 1964.

The principal objective of this program is to develop nuclear powerplants for civilian, military, and space uses. Under the activities for civilian power reactors, cooperative power reactor demonstration program, and Euratom, the Commission together with industry is pursuing a program aimed at demonstrating that nuclear power reactors can be competitive with fossil fuel powerplants in substantial areas of the United States and other parts of the world.

In this budget and future budgets, these activities will be concerned primarily with the development of the advanced converter and breeder reactor technology to conserve the Nation's supply of fissile materials and to make possible more efficient use of our supplies of fertile material.

MILITARY AND SPACE USES OF NUCLEAR ENERGY

The military uses of nuclear energy for power are being developed under the activities for Army power reactors and Navy propulsion reactors.

The space uses of nuclear energy are being developed under the activities for rocket propulsion reactors (ROVER) and satellite and small power sources (SNAP devices). The activities for general reactor technology, advance systems research and development, nuclear safety, and operational services are not systems oriented but furnish basic technical data needed by the system-oriented civilian, military, and space programs.

Although the authorizing legislation approved the total amount for this program, \$497.9 million, the amount requested by the Commission, a number of changes were made in the JCAE report with respect to amounts for the various activities. The House Appropriations Committee report indicated acceptance of these changes but made a reduction of \$7.9 million, bringing the program total to \$490 million.

PLUTO

Of the \$7.9 reduction, the House committee report applied \$5.5 million to the PLUTO program, allowing only \$1 million for "mothballing" the project until such time as there is a military system and requirement for it.

All agree that the TORY II-C tests have been eminently successful in demonstrating the PLUTO reactor technology. In the absence of support of the DOD for a flight program under this joint undertaking, the Commission is not in a position to support a flight demonstration. However, the Commission is requesting restoration of \$4 million of this reduction to provide for the investigation of special applications utilizing this very high temperature gas-cooled reactor technology and to permit a more orderly phaseout of personnel and resources of the project.

Restoration is requested in light of the investment of \$135 million in PLUTO technology, the Commission's responsibility for the design of new systems which show promise of bringing about major advancements in reactor technology, and the continued utilization of trained talent at the Livermore weapons laboratory.

I consider that last to be very important.

MOTHBALLING

Senator PASTORE. The members of the Joint Committee have always been quite impressed with the work that has been done on this PLUTO activity. They use the word "mothballing," does that necessarily mean all they are allowing you is \$1 million to bring this to an end?

Dr. SEABORG. Yes, sir; that is correct.

Senator PASTORE. That would be really a major policy decision, wouldn't it?

Dr. SEABORG. Yes.

Senator PASTORE. Do we intend to bring this to an end? Does the AEC intend to bring this to an end?

Dr. SEABORG. We have no choice under the circumstances, but we would like to go in a more orderly manner and keep some of the technology alive.

Senator PASTORE. I would like to have you elaborate upon that because that is the point I am trying to make at this juncture. Sometimes, if you don't live with some of these programs, it is pretty hard to understand that something is going to die. What difference does it make if it takes a year or if it takes a day? If something is going to come to an end, the quicker the better. Why do you need the \$4 million? I would like to get the record very clear on this because this is going to be a hard one in conference.

HIGH-TEMPERATURE TECHNOLOGY

Dr. SEABORG. The Commission feels that this particular high-temperature technology has so much promise that we would like to continue to support it.

Senator PASTORE. Has promise in what regard?

Dr. SEABORG. Promise with regard to possible future use in some phase of military technology; promise in regard to possible future use in the civilian nuclear power program and various aspects of it; possibly, small portable reactors; and possibly more efficient high-temperature reactors.

Senator PASTORE. In other words, if this properly phased out in a more gradual fashion, we will get the advantage of very, very penetrating and basic research developments; is that correct?

Dr. SEABORG. That is right, upon which the \$135 million has been spent to date.

PERSONNEL

Senator PASTORE. How many people are engaged in this program at this time?

Dr. SEABORG. About 350 in the level of scientists and engineers in the direct effort.

Senator PASTORE. Let us get this accurately in the record, Doctor

Dr. PITTMAN. Mr. Pastore, the direct employment on the rolls as of today is a total of 321 people.

Senator PASTORE. How many of these are scientists?

Dr. PITTMAN. These are all of the direct scientific personnel.

Senator PASTORE. If you cut this back to \$1 million, what happens to this personnel?

CLOSEOUT OF PLUTO EFFORT

Dr. PITTMAN. The program we are asking for is to cut this back so that there would be 171 people remaining on the closeout of what is now called the Pluto effort. These would be the people that would be necessary to do the termination of the present Pluto experiment, and to carry out the studies and laboratory developmental programs that will show us how this technology can be applied to the future of these other programs the chairman is talking about. That number of personnel would go down during the year to approximately 135 at the end of the fiscal year for this particular effort.

Senator PASTORE. Are you saying, then, that unless we apply the technology that we have acquired, and the knowledge that we have acquired in this project and we do it in proper fashion that much of the investment that has heretofore been made might be lost?

PLUTO TECHNOLOGY AND COST

Dr. PITTMAN. I think so. The Pluto technology was developed for a highly specialized application. It was developed for the nuclear ramjet. No attempt was made during that developmental program, because of the urgency of that program, to determine how or where the technology involving one of the best high temperature moderators, used with a variety of gases, air, oxygen, CO₂, helium, neon, and other possible gases, in a very high temperature, very compact and hopefully cheap and long-lived reactor could best be exploited.

For instance, the cost of this reactor that we have developed for Pluto has been much higher than might be necessary if the conditions of operation were dropped down considerably. In other words, it was developed as a highly specific device.

Therefore, we do not know how it can be used in these other areas. If we don't expend this kind of effort during the next year, we will never know whether this \$135 million was lost.

Senator PASTORE. Plus \$60 million of the Defense Department.

Dr. PITTMAN. Yes, sir. However, \$135 million has been on the reactor itself. That is why I used that figure.

Senator PASTORE. There is no question at all but that there will be a mothballing of this project.

Dr. PITTMAN. Our proposal that we have presented to you today is to mothball the Pluto project and to do everything we possibly can to make that technology available.

APPLYING TECHNOLOGY AND KNOWLEDGE ELSEWHERE

Senator PASTORE. The restoration of the \$4 million is merely to apply the technology and knowledge we have gained from this project in other areas.

Dr. PITTMAN. To find out where it can apply. We think it is applicable in many different areas, sir. It is a very good technology.

Dr. SEABORG. In addition, we think to phase it out as fast as would be required under the \$1 million budget would have a very adverse effect on this laboratory. We would have to let scientists and engineers go overnight, which we feel might even react detrimentally to the weapons program, to hit a laboratory that hard.

FLIGHT TEST ELEMENT

Senator PASTORE. How about the flight test element of this?

General LUEDECKE. A number of systems or approaches to flight test have been examined, Mr. Chairman, ranging from some \$400 or \$500 million down to possibly \$230 to \$240 million, depending upon the objectives established for the flight test. I think it is indicated that it is feasible to do a limited flight test in a research vehicle and get information at least on the reactor and engine component for about \$225 to \$230 million. This is primarily, I think, a responsibility of the Department of Defense and I understand they have examined such a plan.

Senator PASTORE. They have ruled against it.

General LUEDECKE. Yes, sir; we have been informed that they do not plan to go forward with such a flight test program at this time.

MOTHBALLING

Commissioner TAPE. Mr. Chairman, before we leave this, I believe the word "mothball" needs a little discussion.

Senator PASTORE. I think so, too.

Commissioner TAPE. To me, the word "mothballing" was derived from the procedure of taking a finished product which had been in operation, a ship or an airplane, which was then excess to the needs, and putting it aside in such a condition that it could be reactivated for service at some future date. This is the reactivation of a piece of hardware. It is not a reactivation of technology. The technology here does not reside just in that particular reactor system which has been tested, not just in the hardware. To me, the technology resides in the laboratory, in the engineers, and so on.

If we try to implement the program as suggested in the House action, I think we could mothball the reactor. I do not think we can mothball the technology. It is in that connection that I would like to support Dr. Pittman's remarks. What we would like to do here is to carry out a program in which the technology is examined and preserved in a way in which we can have a technological option, not just on the military side, but for other applications in the future. This is not done by cutting a \$10 million effort on the 1st of July to a \$1 million effort for the fiscal year 1965.

Senator PASTORE. Then, on the other hand, what happens next year?

Commissioner TAPE. This is what we would have to determine, Mr. Chairman. But in the meantime, we will have examined the technology so that we will make a determination of future programs with the facts in front of us and not just an arbitrary cutoff.

Senator PASTORE. Very well.

OTHER REACTOR DEVELOPMENT ACTIVITIES

Dr. SEABORG. We are also asking restoration of the \$2,435,000 general reduction in the reactor program made by the House. The Commission in its review of the reactor development program for fiscal year 1965 made reductions in many parts of the program and reduced the program total by \$10.4 million below the fiscal year 1964 level. Changes effected in the authorizing legislation further reduced certain activities of the reactor development program for fiscal year 1965 and required the Commission to absorb \$14.6 million for a flight test of SNAP-10A. It is the Commission's belief, in light of the reduction already made and a provision for a flight test of SNAP-10A, that a generalized cost overrun of \$2.4 million will not materialize in fiscal year 1965 as experienced in prior years when many of the activities in reactor development were expanding.

Therefore, this reduction would have to be applied to activities which have already been cut below the fiscal year 1964 level.

MERCHANT SHIP REACTORS

I would like to call special attention to plans for our merchant ship reactor program. The authorizing legislation would provide \$1,935,000 for this activity in fiscal year 1965, of which \$235,000 would be for closeout costs associated with a new reactor concept, the

630-A, under development for the Commission by the General Electric Co.

The Commission now has under review a proposal submitted by the General Electric Co. for a cooperative program for a prototype reactor using this 630-A concept. In the interim period, it would be desirable to maintain the present research and development effort. The Commission, therefore, proposes to allocate within the operating appropriation amount provided for the merchant ship activity of the reactor program, \$970,000 for this work.

An additional \$230,000 for equipment would be allocated from within the equipment funds provided for the reactor development program, for a total of \$1,200,000. In addition, the General Electric Co., during this period, would expend \$300,000 on the project from its own funds.

This revised program plan has been approved within the past few days by the Bureau of the Budget.

BUDGET ESTIMATE AND REDUCTIONS

Senator PASTORE. What was the cut on this again? What was the budget estimate on the reactor development program.

Mr. ABBADESSA. In the original request, sir, for the merchant ship reactor?

Senator PASTORE. For everything.

Mr. ABBADESSA. \$497,900,000.

Senator PASTORE. What did the House give you?

Mr. ABBADESSA. The House gave us \$490 million, sir, a reduction of \$7,900,000.

Senator PASTORE. Did they specify where the cut would be?

Mr. ABBADESSA. Yes, sir. The language of their report accepts the changes that were made in the authorization bill, sir. In addition, they reduced the PLUTO program by \$5.5 million, on which we are appealing \$4 million. They also made an undesignated reduction in the amount of \$2,435,000, on which the Commission is requesting full restoration.

EFFECTS OF REDUCTIONS

Senator PASTORE. What happens if you don't get that?

Dr. PITTMAN. In general, of course, a discussion of how \$2.4 million out of \$490 million hurts you is a very difficult thing. But I would like to point out certain factors.

In the original request that was approved by the Joint Committee we were asked to absorb, and did absorb, \$10 million for the SNAP 10A flight test. When you take out all of those programs that we are committed to carry out for other agencies of Government, or in connection with other agencies of Government, such as the naval propulsion program where we really are budgeting to meet a rather specific request on the part of the Navy to do a job and to meet requirements, and when we look at the fact that a large fraction of our budget is for such things as the ROVER program where, again, it is a joint effort between two agencies and the program is geared to the activities of the two, any cut really has to be taken from those activities that are general in nature and necessary for the development of new information that is to be used for the future.

CIVILIAN POWER AND NUCLEAR SAFETY

Where the \$2.4 million cut would come would certainly, therefore, be in such areas as the civilian power program, where we have already gotten ourselves down to the point where the development of the advanced concepts and the breeders is at what we consider a bare minimum. Another area would be nuclear safety, because it is, again, not something that has to meet an end-date requirement. It is in those areas that we would have to take the cuts. In other words, those areas that are putting the Commission in a position to meet future requirements. The cut of \$2.4 million on top of the very sharp pencil that we have already applied to those areas, in each case somewhat below the previous levels of effort, is a rather severe blow, sir.

Senator PASTORE. The amount you sought originally in this program was \$497.9 million; is that right?

Mr. ABBADESSA. That is right.

Senator PASTORE. They cut you \$7.9 million?

Commissioner TAPE. \$497.9 million was without a SNAP 10A flight test at that time. So, as Dr. Pittman has indicated, there has been a reprogramming within the total where reductions have already been taken. So, when one looks at specific elements of the program, one finds that the net effect on these other elements of the program is more drastic than \$7.9 million.

RESTORATION REQUEST

Senator PASTORE. But the fact of the matter is that you are asking for \$4 million restoration on the Pluto project; is that right?

Dr. SEABORG. Yes.

Senator PASTORE. Plus \$2,435,000 on the reactor project?

Commissioner TAPE. Across the board.

Senator PASTORE. You are asking for an appropriation of a request of \$497,900,000, you were cut \$7.9 million and seeking restoration of \$6,435,000.

SNAP 10A FLIGHT TEST

Dr. SEABORG. That is right in the face of absorbing what amounts to a cut because of the reprogramming of funds for the SNAP 10A flight test.

Senator PASTORE. Did your original request of \$497.9 million include the flight test?

Dr. SEABORG. No, it did not. It included the allocation of funds for other purposes in the reactor program. So, in order to reallocate funds for the flight test, we, in fact, have the cut the program.

Senator PASTORE. I want to make that clear. In other words, the \$10 million, plus, for the flight test was not contemplated in the original estimate of \$497 million plus?

Dr. SEABORG. That is right.

Senator PASTORE. So, it is not a question of the difference between \$7.9 million and \$6,435,000. You have to add to that the flight test money, too.

Dr. SEABORG. That is right.

Senator PASTORE. Very well.

PHYSICAL RESEARCH

Dr. SEABORG. I will go on to the physical research program. The physical research program is directed toward discovering and understanding natural laws relevant to the Commission's responsibilities for the development, use, and control of nuclear energy.

It involves important basic research in the field of physics, chemistry, mathematics, metallurgy, and materials and controlled thermonuclear reactions. The program is aimed, not at quick specific results, but at providing a needed base of fundamental knowledge.

The budget submitted to Congress included \$222 million for this program. The authorizing legislation would reduce the requested amount by \$4 million, to \$218 million. The House appropriation bill reduces that amount by another \$8 million, to \$210 million, for a total reduction of \$12 million below the AEC request.

This reduction of \$12 million would require that the high energy physics, low energy physics, chemistry, and metallurgy programs be curtailed seriously. To reduce these programs below the level to which they were cut by the authorization legislation would necessitate a reduction in the planned operations of and the preparation for operation of many new facilities. Our ability to use these facilities effectively would be materially reduced. For example, the effective preparation for operation or utilization of the high energy machines, such as the Stanford accelerator, and the improved Bevatron, and the AGS at Brookhaven would be materially affected.

RESEARCH FACILITIES

Expensive research facilities, such as the new ANL hot laboratories, the Ames research reactor, the 88-inch cyclotron, and the HILAC at LRL, would not be available as needed by scientists because of lack of operating funds, and so would further increase the backlog of experimental programs.

This reduction would also cause further delays in meeting the established schedules for production of californium and other transplutonium elements needed for further research. This is not consistent with the investment of millions of dollars in these facilities.

We believe that these new facilities and the facilities of the national laboratories should be used in the most efficient way possible. This is particularly true since the backlog of necessary and worthwhile experimental programs continues to increase. We are therefore requesting that \$8 million be restored.

Senator PASTORE. Which would bring it up to the authorization amount?

Dr. SEABORG. That would bring it up to the authorization amount; yes, \$218 million.

PERSONNEL

Senator PASTORE. Would the loss of the \$8 million reflect itself in personnel?

Dr. SEABORG. I would like to call on Dr. Paul McDaniel to respond to that.

Dr. McDANIEL. Yes, sir. When the House action was made available to us about 2 weeks ago we were quite upset by this rather large reduction, so I made a very special review of its effect on our program. The review is not completed. It has only been 2 weeks

since the House action was made available to us. I have been dealing with the Oak Ridge National Laboratory, with the Brookhaven National Laboratory, and with the Argonne National Laboratory as well as with the people in my own office responsible for the off-site research programs in the universities.

CUTBACKS REQUIRED

We have meetings scheduled soon with the Oak Ridge people on the effect of the financial plan on personnel. The answer to your question is: The House reduction will result in some termination—unless there is a restoration. In order to meet the high-priority commitments which we have in some programs—the allowance by the House does not give us sufficient funds to take care of these high-priority items—we will have to cut back more on other items in order to take care of such programs as the Stanford linear accelerator at a minimum operating level; the transplutonium program at Oak Ridge, the high-flux reactors there and at Brookhaven, and the transuranium facilities at ORNL.

The answer to your question, then, is we will have to cut back. It is not known all the places where the cutbacks would be made, but in some areas there would be personnel reductions. In other areas, there are sufficient funds for the minimum operation. The overall allowance was only a 6-percent increase over last year. I could go into more detail, sir, on the actual impact in each of the categories, in each of the laboratories.

Senator PASTORE. How soon will you get that?

Dr. McDANIEL. I could submit it for the record today or tomorrow.

Senator PASTORE. That is fine. Will you do that?

Dr. McDANIEL. Yes, sir.

(The analysis referred to follows:)

TENTATIVE ANALYSIS OF THE IMPACT OF THE HOUSE OF REPRESENTATIVES
BILL ON THE PHYSICAL RESEARCH PROGRAM

I. INTRODUCTION

Immediately upon receipt of the report of the action taken on the fiscal year 1965 budget by the House of Representatives Appropriations Committee, an analysis of its impact on the fiscal year 1965 financial plan for physical research was initiated.

Table I shows the tentative allocation of the \$210 million allowed for fiscal year 1965 for physical research operations. (Current estimates of the costs for fiscal year 1964 are included for comparison.)

TABLE I

Operating expenses	Fiscal year 1964 estimated	Fiscal year 1965 allowed
High-energy physics.....	\$81.8	\$89.0
Low-energy physics.....	25.4	26.8
Math and computers.....	4.6	5.2
Chemistry.....	43.7	46.0
Metallurgy and materials.....	20.8	21.5
Controlled thermonuclear.....	21.0	21.5
Basic nuclear engineering.....	0	0
Total.....	197.3	210.0

In arriving at the specific allowances for the activities in table I, the expressed directives of the JCAE and the House Appropriations Committee, as contained in their respective reports, were followed. In addition—to the extent practical—the potentialities and capabilities of the individual scientists and laboratories involved and the need for additional costs to operate recently completed or soon to be completed research facilities are taken into account.

The laboratories were furnished with the restrictions implied by the House bill when the initial financial plans for fiscal year 1965 were prepared and they are in the process of evaluating the impact of these financial plans on their operations. Although their analyses are not completed, they have progressed far enough to realize that unless the \$8 million reduction by the House of Representatives is restored, there will be a serious and immediate impact on their research programs.

The following sections of this report include discussions of the current situation.

II. HIGH ENERGY PHYSICS

A. GENERAL EFFECTS OF HOUSE REDUCTION

The House bill, while allowing an increase of something over \$6 million, would require a reduction in this program of \$3.7 million from the amount approved by the Joint Committee on Atomic Energy. High energy physics is a relatively new program and the completion and construction of authorized accelerators requires a substantial increase in operating support. The JCAE authorization recognized this fact, but the House allowance would require us to adopt measures which will seriously affect the program. High energy physics is in the forefront of physics research and has great promise of exciting and important discoveries that will revolutionize our entire understanding of all the physical sciences. Most of high energy physics is carried out at energies above 1,000 million electron volts. The oldest high energy machine in this region (the cosmotron) has only been in operation 12 years and even it is an appreciably different and improved machine over what it was 12 years ago, or even 5 years ago.

The House allowance would be only an 8.4-percent increase above the fiscal year 1964 financial plan in a program where for the upcoming fiscal year:

1. *The ZGS will have its first full year of operation.*—The first experiment was started on June 22, 1964. This machine is expected to supply most of the data for the large and highly qualified group of capable high energy physicists in the Midwest.

2. *Preoperational buildup for the Stanford Linear Accelerator Center.*—Detailed studies of the prospective experimental use of SLAC have been made during the past several years. Fiscal year 1965 is next to the last year before scheduled completion of construction of the facility. The point has now been reached where the results of these studies should be translated into definite designs and fabrication and procurement of equipment—this involves large expenditures. In view of the very large investment in this facility, it would be most unfortunate, if not irresponsible, to be unable to proceed with the major experimental programs immediately at completion of construction.

3. *The Bevatron will have its first full year of operation after completion of the major Bevatron improvement program.*—This machine's capabilities and versatility, by virtue of the improvement program, have been greatly increased. Its present operating intensity, in terms of protons per pulse, is greater than that of any other multibillion-electron-volt machine anywhere in the world.

Budgetary limitations in fiscal 1964 kept this machine from going on a full 21-shift week operational basis until March 1964. Budgetary reductions which are required by the House action would again force a retreat in fiscal 1965 to fewer shifts. Unfortunately, as the level of activity is cut back with these machines, the loss in scientific productivity decreases considerably more rapidly than does the cost of operation.

4. *The Princeton-Penn accelerator will have its first full year of productive activity.*—The first set of experiments (seven) with this machine was begun in the middle of fiscal year 1964 and has just recently been completed. The machine is becoming more and more productive and useful as the minor "bugs" in the facility are being worked out.

5. The Brookhaven National Laboratory's AGS is still the highest energy accelerator in the world and research with it started out relatively slowly. The machine's capabilities have steadily been improved by increasing the intensity, adding new experimental areas, etc. This unique research facility would be operating considerably below its capabilities.

6. *The Cambridge electron accelerator will have its second full year of productive activity.*—This accelerator which has an especially active and capable group of experimenters has been producing data which is giving most interesting results. The demand on the services of this machine is very high, and it would be highly desirable to increase the number of shifts of operation. This machine which was the highest energy electron accelerator in the world now has a competitor in the form of its German counterpart, the DESY accelerator which first came into operation this spring. The CEA is, of course, still well ahead of the new group in that Cambridge is moderately well equipped both in experimental equipment and experienced capable personnel.

7. *Data handling facilities, automatic and semiautomatic, required to handle the output of the new accelerators listed above, are just beginning to come into activity.*—These devices with their greatly enhanced capabilities do cost more to operate, in large part because of the on-line use of computers, and also because of the greater demand for computers to make the arithmetic computations on the many more events which will be analyzed at the higher event rate.

8. The "old" accelerators of the high-energy physics program (the cosmotron and the three synchrocyclotrons supported by the AEC) would be anticipated as probably operating below the fiscal 1963 level even if the entire \$3.7-million reduction is completely restored. This is not because these machines wouldn't operate productively at a considerably higher operating level, but the order of priorities and the budgetary restrictions leave insufficient funds to operate them at a higher level.

B. SPECIFIC EFFECTS OF HOUSE REDUCTION

Argonne National Laboratory

1. *Curtailment of advanced accelerator design study participation by ANL.*—Collaboration with MURA on this program is considered by ANL the most important for Midwest high-energy physics.

2. *Eliminate or defer superconducting magnet development.*—ANL has conducted some of the most advanced research and development in this very promising field toward higher magnetic fields.

3. *Eliminate or defer work on the development of new experiments.*—The amount allowed in the original budget request is less than the cost of one new experiment.

4. *Eliminate or defer several ANL experiments now in the advanced development stage.*—In each of these the total investment is already greater than \$300,000.

5. *Reduce operating time of ZGS below the present 5-day-per-week schedule.*—No clear estimate of the decrease in the budget requirement can be made here since the main result would be a cutback in the amount of high-energy physics that could be performed in the Midwest within the fiscal year.

6. *No increase permitted in ANL staff of Ph. D. physicists.*—An urgent need at Argonne is to obtain a staff of Ph. D. physicists large enough to provide continuity and a nucleus for a strong program at the ZGS. The present number is inadequate. The budget allowed by the House bill will permit no increase.

Brookhaven National Laboratory

The budget allowed by the House bill would seriously impede proper research utilization of the AGS. Curtailment of the operation of large beam handling and detection equipment such as bubble chambers is probable.

The cosmotron would probably have to be reduced in the number of shifts of operation. This effects a much larger percentage reduction in the productive research than it does on the operating costs and thereby would considerably decrease the efficiency of operation of this facility.

Cambridge electron accelerator

This very productive machine is much in demand. A sufficient number of operators and technicians will be trained by the coming September to permit a 7-day per week operation. The portion of the House action CEA would be required to absorb, would probably prohibit this desired increase in activity. The operational increase would effect an even greater improvement in the productivity of the accelerators research output because of the rapid increase in the efficiency of operation with round-the-clock operation in a machine of this type.

Massachusetts Institute of Technology

The previously exacting financial restrictions placed on this productive contract would already produce some reduction in their research activity because of a built-in requirement for more computer activity. The further reduction this

organization would be required to absorb in the proposed budget would not only have a damaging effect, but a disorganizing effect on the remainder of the program thereby decreasing its productivity by an additional factor.

The biggest effect of a cut here would probably be the inability to provide the necessary computing capability required for the experimentation carried out at MIT. The experimental and theoretical program which has been so heavily invested in over the past 5 to 6 years will be greatly weakened if it cannot be supported with the necessary computing capability.

Stanford Linear Accelerator Center

Upon completion, the SLAC accelerator will be uniquely qualified to undertake important experiments in major areas of particle physics research. However, this capability cannot be fulfilled without the availability of the required experimental equipment and personnel.

Detailed studies of the prospective experimental use of the SLAC accelerator have been made during the past several years for the major areas of particle physics research. The point has now been reached where the results of these studies should be translated into definite designs and fabrications and procurement of equipment. This phase, therefore, involves large expenditures and, in this next to the last year before the completion of construction, it is urgent that it be properly carried out without further delay.

To slow down all of the research preparation work in order to meet the budget reduction would mean that none of the experimental programs would be ready by the time the accelerator comes into operation and in light of the very large investment in the accelerator facility would be most irresponsible.

The other alternative is to cut out entirely one or more of the five separate research groups established within the SLAC research division to prepare for initial exploration of the major fields of physics considered important. This also would be most unfortunate in that it would mean that one or more of the major areas of research which the SLAC accelerator was intended to explore could not be exploited at all during the early phases of research operations.

The House allowance for SLAC jeopardizes an orderly transition from construction to operations which has already started. The plan for this transition has been worked out in detail to minimize inefficient use of technical skills and also to minimize the number of skilled engineers, trained to support SLAC scientists, who would have to be dismissed.

Training of research support personnel would be upset, probably resulting in the dismissal of engineers already trained.

Lawrence Radiation Laboratory, Berkeley

Fiscal year 1965 will be the first full year of operation of the improved bevatron with its greatly increased capabilities and flexibility of operation. This obviously involves a considerable increase in operating expense both as a result of the greater number of simultaneous experiments that can be conducted, and of the increased capability to provide beams adequate for more complex, advanced experiments. In addition, it should be recalled that the bevatron did not go on a 21-shift-per-week operational basis in fiscal year 1964 until March 1964, primarily because of insufficient funds.

LRL will be getting much of the computer capacity in fiscal year 1965 that it has been in such dire need of in fiscal year 1964; however, the shortness of funds is even more emphasized by the extra funds required to operate this additional computer capacity.

III. LOW-ENERGY PHYSICS

This area of research, central to the AEC's mission, is similarly affected in increasing measure by the cost of operation of major new research tools; e.g., Van de Graaff accelerators, cyclotrons, and research reactors. The fiscal year 1965 budget, as presented to the Congress, represented little more than the amount required to provide for the effective use and operation or preoperational buildup required for recently completed or nearly completed devices such as the Ames research reactor, the Oak Ridge isochronous cyclotron (ORIC), the Brookhaven high-flux research reactor (HFBR), the new Van de Graaff accelerators at the Universities of Texas and Washington, and the Michigan cyclotron.

To live with the House allowance, we have tentatively allocated a reduction of \$1,400,000 to low-energy physics.

If this is sustained, provision must still be made for these new machines but to a lesser degree of effectiveness. For example, at Ames the cost of reactor operation will be met but research personnel may well be held to the fiscal year 1964

level thereby preventing the exploitation of the isotope separator and the beta ray spectrometers.

At Argonne, it would be necessary to limit the program to present staff as well as defer any effort on a promising approach to a high-voltage electron microscope. Further it appeared that, until a recent failure of the CP-5 heat exchanger, needed repairs at this reactor would necessarily be postponed. The failure of the heat exchanger (June 25) has been too recent to permit any assessment of its financial impact on the program. Likely actions also include, at Argonne, the shutdown of the Juggernaut reactor and the 4.5-million-electron-volt Van de Graaff. Some operating personnel would be terminated.

At Brookhaven, we were proposing an increase of \$700,000 in this category. However, the Brookhaven program must decrease since \$750,000 is required for HFBR operating and fuel costs. Salary and wage increases, as well as increased costs of supplies, further diminish the effort that can be obtained within the funds requested. The House reduction makes this problem more severe and prevents any significant redistribution of funds aimed at alleviating the financial picture at Brookhaven. Operation within the House allowance will probably require some reduction in the BNL low-energy physics staff.

The situation is equally austere at the Oak Ridge National Laboratory and full utilization of the ORIC must of necessity be postponed. Other retrenchment in program support will be necessary. It is too early to state exactly what the effect will be on laboratory employment in this area although there is indication that some terminations are involved.

In view of the foregoing, it is impossible to avoid a substantial cutback in existing low-energy physics programs. This would be most unfortunate especially since there is general agreement that this area of research should proceed with vigorous support.

IV. CHEMISTRY

The serious impact upon the chemistry research program of the House reduction of the fiscal year 1965 budget by \$900,000 would result primarily from the fact that a number of new research facilities are just coming into operation or are approaching operational status. It would be impossible to provide adequately for the operation of, and for chemical research using, these facilities within the reduced fiscal year 1965 levels. Productive going programs, not using the new facilities, would have to be cut back to alleviate but not solve the problems of the new facilities. In addition, these pressures would lead to continued erosion of the university contract research program. A tentative assessment and illustrations of these effects are summarized in this report.

At the Ames Laboratory provision will have to be made in fiscal year 1965 for the preoperational buildup and initial operating costs of the Ames Laboratory research reactor. Unless the requested increase is granted, the Laboratory will have serious difficulty in maintaining existing chemistry research programs and in providing the additional scientific staff needed for nuclear and neutron diffraction research with the reactor.

The House bill would lead to serious loss of efficiency and productivity, in the chemistry research program at the Argonne National Laboratory. The new hot Laboratory facility was brought into operation during fiscal year 1964; budget restrictions, however, required the deferral of hiring necessary additional operating personnel, shop work, and other services, which are needed to make efficient use of this major investment. An increase is required in fiscal year 1965 over fiscal year 1964 in order to put the hot Laboratory into full operation. The entire chemistry research program at Argonne was maintained in fiscal year 1964 at an abnormally low level of materials and services expenditures. Continuation of these subnormal levels could cause permanent damage to the program. The proposed reduction might require the termination of several scientists and technicians in addition to the above-mentioned curtailment of services.

The chemistry program at the Brookhaven National Laboratory would have to undergo reduction in effort since it expects to utilize and therefore support about 25 percent of the high-flux beam reactor. Existing manpower, the planned HFBR use, and the increased cost of doing research will lead to serious problems in maintaining the present level of effort.

At the Oak Ridge National Laboratory, financial restrictions caused by the House reduction would require a slowdown in the preoperational preparations related to startup of the high-flux isotope reactor, and would cause a 3- to 6-month delay in the date at which initial criticality is attained. The Oak Ridge National Laboratory chemistry programs other than the transplutonium production program would be adversely affected.

At the Lawrence Radiation Laboratory, the restriction on funds would limit the use of the 88-inch cyclotron and the heavy ion linear accelerator below their optimum levels, and would restrict the research in important areas of inorganic and high-temperature chemistry, representing vital segments of this country's basic materials research effort.

The situation with respect to the contract research program is summarized in tables II and III which give information on operating funds available since 1962 for this program and the number of research contracts in effect. Other requirements of the chemistry research program in times of limited budgets have led to decreases in the level of effort in this program. In view of the decrease in this program which resulted from the JCAE actions in the fiscal year 1965 authorization bill, it would be unwise and damaging to make any further reductions in the university program in order to meet the \$900,000 requirements at the national laboratories.

TABLE II.—*Support of chemistry research at universities*

Fiscal year	Costs (in millions)	Change from previous year (in millions)	Percent change	Number of contracts end of year
1962.....	\$8.9			300
1963.....	9.2	\$0.3	3.3	288
1964.....	9.2	0	0	261
1965.....	8.7	-0.5	-5.4	1245

¹ Estimated.

TABLE III.—*Chemistry research programs at universities*

Fiscal year	Number of proposals		Number of contracts			
	Received	Declined	In effect at start of year	Terminated	New contracts issued	In effect at end of year
1962.....	127	66	291	25	34	300
1963.....	137	100	300	29	17	288
1964.....	133	102	288	40	13	261

V. METALLURGY AND MATERIALS

PROGRAM MISSION

The metallurgy and materials programs of the Division of Research has the responsibility of aiding the advancement of materials science in areas of interest to the AEC. The continuing objective of the program is to insure that research is conducted which furthers the body of fundamental knowledge to be used in coping with the broad spectrum of materials problems facing civilian and military nuclear technology. The direction taken is to investigate material structure, properties, and phenomena, in such a manner so that the results of the investigation may be interpreted in terms of fundamental laws of nature. Moreover, the knowledge gained from analysis of the research results is used directly to advance our understanding of these laws.

The research is performed in two major types of laboratories—the AEC-owned laboratory (on site) and the university laboratory (off site). In addition, a small portion of the program is conducted in private laboratories where very special capabilities can only be found. The AEC laboratories provide highly specialized experimental and support facilities not available elsewhere, such as high flux research reactors and facilities for handling and studying toxic or highly radioactive materials. Also, at the AEC laboratories concentrated efforts of groups of mature scientists representing many disciplines may be devoted to important problem areas for extended periods of time without unnecessary diversion. Approximately 60 percent of the funds allocated to the metallurgy and materials programs are directed to the AEC laboratories for these purposes.

The contract research program, which is largely conducted in universities, provides breadth and flexibility to the overall program. By supporting such university research, the AEC obtains the benefit of the capabilities of scientists who prefer the academic environment. As a further benefit to the AEC and to the national scientific effort, the placing of research contracts in universities aids in the advanced training of materials scientists which will enter the technical manpower pool of the Nation. This is particularly important to the AEC since the major problems standing in the way of advanced, high power density nuclear devices are materials limitations.

Materials science is an especially dynamic field today. There are several divergently oriented sources of this dynamism. First, the needs of technology provide a powerful stimulus for research aimed at improving our understanding of the structure and behavior of materials. Second, the background of theory and empirical knowledge that has been building up over the past decade has, in addition to solving many questions, revealed critical problems which must be attacked. Third, important questions which had been formulated years ago could not be explored when the needed financial support was lacking but are now ready for study. This last is especially relevant to the AEC metallurgy and materials programs. The availability in the coming year of new reactor facilities, new particle accelerators, and new research materials sources makes it possible to contemplate attacking important problem areas. The House cut of the 1965 budget deals a staggering blow to these plans. The impact of this cut will be discussed in the following paragraphs.

IMPACT OF THE HOUSE CUT

As a result of the House action we have tentatively allocated a reduction of \$2 million to this program, providing a dollar increase of less than 4 percent over the fiscal year 1964 program. In like manner, the increase in operating funds in the M. & M. programs was less than 5 percent from fiscal year 1963 to fiscal year 1964. How did this near leveling off affect the fiscal year 1964 program and how serious would a similar reduction in effort be in fiscal year 1965? The answer to this question is, first, that it seriously handicapped the research effort at our national laboratories by diminishing the research capability of existing manpower through the loss of supporting services. Another important effect was a loss of morale among dedicated scientists who were frustrated and restrained from normal experimental endeavors by forced economies.

That the severe reduction in the requested increase in program funding for fiscal year 1964 caused undue hardship in one of our AEC laboratories is strikingly evident from the following economy measure they adopted:

1. Chemical analytical services were postponed.
2. Computer services were postponed.
3. Travel funds to scientific meetings were withdrawn even after laboratory scientists had already submitted abstracts to the appropriate technical journals.
4. Purchase of everyday operating items were postponed.
5. Temporary postdoctoral and thesis summer appointments were curtailed as well as consultant services.
6. Overtime authorizations were canceled in reactor experiments where continuous operation was important.

It should be noted that many of the economy measures listed above were postponements. Continued financial restrictions in fiscal year 1965 will force a change from deferral to cancellation with an attendant loss of program vitality.

One probable result of a similar level of funding in fiscal year 1965 would be the departure of key scientists from their national laboratory positions. The loss of these scientists would not only disrupt important programs but would also deter gifted young scientists from engaging in research at our national laboratories. These effects are especially deleterious now when our on-site facilities are acquiring high flux reactors and accelerators that have been eagerly sought. It would be extremely wasteful if these new and expensive devices were not fully exploited in the national interest.

Perhaps it is not always fully realized that we are faced with continually rising costs due to equipment obsolescence, the increased sophistication of equipment and procedures, salary rises, and the usual inflationary pressures. Since research is pushing at the barriers of knowledge, programs must have the flexibility to exploit fully new ideas and discoveries as they arise. Examples of this would be in recent advances in superconductivity where materials have been developed to carry superconducting electric currents in magnetic fields as high as 80 kilogauss.

Estimates have been made that this critical field strength may be pushed as high as 250 kilogauss, but this requires the combined efforts of teams of physicists and metallurgists together with the necessarily expensive cryogenic equipment, high field magnets, and heavy operational costs. Although the responsibilities of the metallurgy and materials programs in this area are to uncover the fundamental principles governing the material's behavior, the knowledge gained from this research will be invaluable for future use of these materials in magnets, power, and communication devices, and could aid the Nation's space effort.

At the opposite end of the temperature scale our national laboratories are increasing their efforts in research in the high-temperature body-centered cubic metals (structural) and alloys with the hope of unraveling the sources of high temperature strength and the ductile-brittle transition so important to these technological materials. Any blunting of this effort through insufficient funding could do serious harm to a difficult area of research where advances are badly needed.

In the contract program in fiscal year 1964 it was found necessary to give final notice to 21 contractors (\$450,000) that their contracts could not be renewed in fiscal year 1965. In addition, our reduced funding in fiscal year 1964 forced the reduced funding of nearly every other contract and caused considerable hardship in the university community which is reflected in loss of research productivity, both long range and immediate.

It is starkly evident that another austerity year in fiscal year 1965, if as severe as in fiscal year 1964, would result in the waste of large national facilities and the departure of key scientific personnel from vital positions in our national laboratories. In the off-site program it is also clear that materials research would lose the momentum it has gained, possibly even regress. Gifted young students will be deterred from entering these scientific fields. In both the on-site or off-site programs, it is plain that drastic fund reductions will adversely affect our national interests in retaining world leadership in these research fields.

In the following paragraphs, the effects of the cut on the major programs supported by M. & M. will be detailed.

ADDED RESPONSIBILITIES OF M. & M. PROGRAMS IN FISCAL YEAR 1965

Ames Atomic Laboratory

At Ames Laboratory the largest portion of the needed increase is associated with the new Ames Laboratory research reactor. New programs are to be initiated on the effects of neutron irradiation on mechanical properties of materials, inelastic neutron scattering, and Mossbauer experiments using artificially produced radioactive elements from the reactor. This year is the first year that costs of reactor oriented experiments at Ames must be borne by the M. & M. programs. Another important program to be initiated is on the relationship between imperfections and superconductivity. This is motivated by the numerous findings of an increase in residual superconductivity at high fields with increased plastic deformation. A third major area where an increase is planned is the determination of electronic structures of the transition metals. A major breakthrough occurred in this field last year when Ames Laboratory detected the De Haas-Van Alphen effect for the first time in an iron, a ferromagnetic metal. The De Haas-Van Alphen effect is a major technique used in the study of electronic structure of metals. It was planned to expand the program to exploit this finding in fiscal year 1965.

If no restoration of the House cut is made, the productivity of this program will suffer since it will be necessary to curtail services, support, materials acquisition, and graduate and postgraduate student participation. After meeting a proportionate share of the minimum operating costs of the new reactor, insufficient funds will remain to initiate efficient research programs utilizing the reactor.

Argonne National Laboratory

It had been planned to increase research on Pu metallurgy by 2 to 3 SMY (scientific man-years) in fiscal year 1964. The necessity for this increase has definitely been established by Commission staff study. However, this has had to be delayed to fiscal year 1965 because of budget cuts in fiscal year 1964. The House cut of the fiscal year 1965 budget means that this work will have to be delayed again until fiscal year 1966. Other areas where needed strengthening will have to be delayed are low-temperature irradiation damage studies, a program of prime Commission importance. Also, needed strengthening in theory of alloy phase study must be deferred. These alone account for about \$250,000 in needed new programs.

In the area of solid-state physics it will be necessary to delay again buildup of the neutron scattering program and associated theory—about \$150,000.

Severe economy measures were taken at Argonne during fiscal year 1964 to live within the stringently cut budget for that year. These measures have had a visibly adverse effect on the metallurgy and solid-state programs there. It was hoped, however, that a satisfactory budget in fiscal year 1965 would prevent these effects from leaving serious scars and prevent a permanent deterioration of the program. This can easily come about in this and the other programs because the best researchers, who can always find employment elsewhere, will leave if they become sufficiently frustrated.

Brookhaven

The House of Representatives allowance would provide an amount \$200,000 less than the going rate for this activity, assuming prudent use of new facilities. The full amount requested is needed for utilization of the high flux beam reactor for neutron diffraction and scattering and the new dynamitron electron accelerator for radiation damage studies. A new program on the effects of radiation on superconducting materials was begun in fiscal year 1964, and was to have been brought up to strength in 1965. If the House cut holds, build up of these programs will have to be delayed until fiscal year 1966. Another new program which was to be built up was on the structure and physical properties of liquid metals. This also will have to be delayed. The House of Representatives allowance will force curtailing of activities or initiation of a forced manpower reduction.

LRL-Berkeley

The LRL believes it needs \$1,500,000 to operate in fiscal year 1965. While the amount in the President's budget for LRL-B is only \$1,350,000, the House cut would require that this be further reduced, giving them very much less than their projected needs. The result would prevent the increase in postdoctoral support necessary for the overall strengthening of the theoretical aspects of the program. It would prevent the buildup of the number of graduate students planned, thereby hampering the productivity of the program and hindering AEC's part of the Government effort to increase rate of Ph. D. production, as recommended by the Federal Council. Full and effective utilization of the new Inorganic Materials Laboratory, scheduled for completion in September 1964, would not be possible.

Specific new programs that would have to be delayed or slowed down would be work on transport properties of solids, diffusion in solids, kinetics of solid gas reactions at high temperatures, and the structure sensitive properties of superconducting and magnetic materials.

ORNL

At ORNL the requested increases for 1965 over 1964 are approximately \$500,000.

Many of the programs are so interrelated that severe cutbacks in one are certain to adversely affect other programs. For example, the research in superconductivity and superconducting materials spreads over several groups and includes magnetic, specific heat, metallurgical, theoretical and cryogenic techniques. Fundamental information gained is important to controlled thermo-nuclear research and to space.

The House financial cut will also restrict the important studies of radiation effects in important nuclear materials such as BeO, and in the refractory and structural metals and alloys in studying the ductile-brittle transition so important to reactor pressure vessels.

The financial cut will also strongly restrict the development of cryogenic techniques capable of temperatures as low as 2.5° K. in nuclear reactors, a field in which the United States excels at present.

If the increase proposed is not granted, these programs will be hurt seriously and many others will fall badly behind.

Contract research program

An increase in the contract program is needed to explore new lines of research and to provide for the increasing costs of programs underway. The increase is also needed to provide for prior commitments on this program falling due in fiscal year 1965. To help provide for these necessary increases, many contracts were served termination notices in fiscal year 1964. These economy measures are still insufficient to meet the increased responsibilities of the contract program in fiscal year 1965. For example, in fiscal year 1965 an increase is committed in

the University of Illinois contract where the materials science program has been increasing to help provide the Nation with scientists trained specifically in the materials field. Increased effort will begin at Illinois in such areas as superconductivity, magnetic resonance, and transformations in metals. Increased efforts in ceramic materials are expected because of newer developments in this field.

Unless the requested increase is granted, the mortgages, which exist for fiscal year 1965, will become exceedingly crucial. It is practically certain that not only would no exciting new investigations be initiated, but that existing good work would be drastically curtailed if not entirely dropped. As a secondary but equally important effect the House allowance would result in the disorientation of many capable scientists from the atomic energy field.

BIOLOGY AND MEDICINE

Dr. SEABORG. Biology and medicine program: The budget estimates for this program for the fiscal year 1965 amounted to \$80 million as compared to \$71.3 million available for 1964. The House appropriation bill would allow \$78 million. Of the \$2 million reduction, \$1 million was effected in authorizing legislation and an additional \$1 million reduction was made by the House.

In studies of radiation effects particular attention will be given to dose rate dependency studies, especially with respect to low dosage rates requiring long-term studies of genetic and cytologic effects. Molecular and cellular level studies providing background for interpretation of genetic and somatic effects will be strengthened.

Environmental contamination and problems of atmospheric radioactivity and fallout will be given additional emphasis, with some expansion in the fallout research program at the Lawrence Radiation Laboratory, Livermore.

After careful consideration, the Commission, while not necessarily agreeing with the basis for the House reduction, has determined that the reduction will not be appealed.

TRAINING, EDUCATION, AND INFORMATION

Training, education, and information program: The 1965 budget estimates include \$17.7 million for operating costs for the training, education, and information program. The House appropriation bill would allow \$15.7 million. Of the reduction of \$2 million, \$1.5 million was effected in the authorizing legislation, and an additional \$0.5 million reduction was made by the House.

This program includes the conduct of specialized courses; the granting of fellowships in nuclear fields; assistance to colleges and universities, including equipment grants; operation of the Puerto Rico Nuclear Center; and dissemination of technical information, including participation in international conferences and exhibits on nuclear science and technology.

The Commission is not requesting restoration of the budget reduction for this program.

ISOTOPES DEVELOPMENT

Isotopes development program: Costs for the isotopes development program are estimated at \$10.3 million in the budget for fiscal year 1965.

The House appropriation bill would allow \$9.3 million. Of the \$1 million reduction, \$0.5 million was effected in the authorizing

legislation and an additional reduction of \$0.5 million was made by the House. No restoration is being requested.

The program includes the development of isotopic power and heat sources for specific applications research and development to provide new and improved power and thermal sources for future applications, work on the radiation pasteurization of food program to extend the shelflife of fruits and fish and the research and development of new and improved production process technology for radioisotopes fission products, and radiation sources.

The principal objectives of the program are (1) advancement of radioisotope and radiation technology to the point of productive and economically meaningful uses, and (2) enhancement of the overall peaceful uses of atomic energy.

CIVILIAN APPLICATION OF NUCLEAR EXPLOSIVES—PLOWSHARE

Civilian applications of nuclear explosives program—Plowshare: The \$11 million provided in the House appropriation bill for operating costs for the Plowshare program, while \$1 million less than the amount authorized for this program, reflects the amount of the budget estimate, and would allow us to continue to make important progress in the development of peaceful uses for nuclear explosives. In particular, we would expect to make further reductions in the amount of radioactivity produced by nuclear explosives, and improvements in techniques of emplacing them. Together with past improvements, this could result, in time, in a 100-fold reduction from the already low levels involved in the Project Sedan detonation of 1962.

Likewise, we do expect to continue our progress in developing and assessing the technology of using nuclear explosives for excavation which may hold important advantages in large scale construction projects like a sea-level canal across the American Isthmus. Also, we would expect to explore other promising uses for nuclear explosives in scientific research work and in the natural resources field.

COMMUNITY

Community program: The community program provides for the operation and administration of the community at Los Alamos, N. Mex., and for assistance payments to AEC communities. We are making substantial progress in carrying out the program for disposal of the Los Alamos community. Estimated costs for this program in fiscal year 1965 are \$9 million.

PROGRAM DIRECTION AND ADMINISTRATION

Program direction and administration program: The fiscal year 1965 budget estimates include \$76.8 million for program direction and administration. The House bill would allow \$76 million, a reduction of \$0.8 million. The Commission is not requesting restoration.

This program covers salaries and other costs of Federal employees at the Washington headquarters and field offices who are engaged in executive direction, general management, and technical supervision of the AEC program; negotiation and administration of contracts; establishment and enforcement of regulations for civilian uses of atomic energy; and other related administrative activities.

PLANT AND CAPITAL EQUIPMENT

Plant and capital equipment: The House bill includes \$363 million for this appropriation, which is \$7 million less than the estimate of \$370 million included in the budget presented to Congress.

The reduction of \$7 million includes a \$3 million reduction in the authorizing legislation for capital equipment for the special nuclear materials program and an additional reduction of \$4 million in capital equipment which the House Appropriations Committee report states is to conform in general with the reductions made in the operating programs. The \$363 million approved by the House includes \$148.3 million for 37 new construction projects; \$3 million for construction planning and design, \$182.8 million for capital equipment not related to construction, and \$28.9 million for construction projects included in prior years authorization acts.

The \$363 million provided in the House bill is commensurate with the program levels approved by the House.

This concludes my prepared statement, Mr. Chairman. I would be pleased to answer any questions you or any members of your committee may have.

REVENUES AND REIMBURSEMENTS

Senator PASTORE. The House did not effect the item for revenues and reimbursements from non-Federal sources; is that correct?

Dr. SEABORG. That is right.

Senator PASTORE. This is \$36,066,000?

Mr. CORSO. That is right, sir.

Senator PASTORE. The Joint Committee did act on an omnibus bill which allows us, if it is passed and signed by the President, to sell this nuclear material to the Euratom countries; is that correct?

Dr. SEABORG. Yes.

Senator PASTORE. Which anticipates the sale of about \$11 million next year. If that bill is passed and the sale is made, what harm would it be to raise that figure of \$36,066,000, by \$11 million?

Mr. CORSO. That could be accommodated, sir.

UNOBLIGATED BALANCES

Senator PASTORE. Could we have an explanation of the \$20 million on the unobligated balances brought forward?

Mr. CORSO. Yes, sir. As a result of reviewing our fiscal year 1964 cost estimates and where we are likely to come out in total in utilization of the funds appropriated for operating expenses in 1964, we now estimate that about \$20 million of that appropriation will be unobligated at the end of the year and will be free in that it will not be earmarked for specific purposes such as Euratom or the cooperative power demonstration program. Therefore, these moneys could be carried over and applied to reduce our appropriation request for fiscal year 1965.

Senator PASTORE. Is it proper and workable to do it that way?

Mr. CORSO. Yes, sir; it is.

Senator PASTORE. Do the members of the Commission or the staff want to add anything further to this testimony?

Dr. SEABORG. I believe not, Mr. Chairman.

Senator PASTORE. Are you satisfied that you had a full and fair hearing?

Dr. SEABORG. I am satisfied that we had a full day in court.

Thank you.

Senator HILL. Senator Fong is with us today and wishes to make a statement concerning the appropriation request for a food irradiator for Hawaii. You may proceed, Senator.

STATEMENT OF HON. HIRAM L. FONG, A U.S. SENATOR FROM THE STATE OF HAWAII

FOOD IRRADIATOR FOR HAWAII

Senator FONG. Mr. Chairman and members of the subcommittee, I deeply appreciate this opportunity to submit a statement urging approval of the Atomic Energy Commission's request for \$350,000 for a food irradiator for Hawaii.

These funds are included in the 1965 budget request of \$370 million for plant and capital equipment.

Last September, an AEC team visited Hawaii to meet with officials of the University of Hawaii and the U.S. Department of Agriculture to evaluate the opportunities for initiating a research and development program to demonstrate the practicability of using radiation on a commercial scale to eliminate insect infestation in agricultural products of the State of Hawaii.

This would open up U.S. mainland and other markets to such tropical fruits as Hawaii mangoes, which now cannot be exported because of the seed weevil, and papayas, which now have a heavy loss rate because of rapid deterioration in shipment and on the shelf.

RESEARCH AND DEVELOPMENT

Following the joint conferences, it was concluded that radiation treatment had sufficient promise, both technically and economically, to justify research and development. Therefore, the Atomic Energy Commission requested funds for a large irradiator in the 1965 budget.

Meantime, the State of Hawaii recently appropriated \$49,000 to install a small research irradiator to permit a prompt start on needed preliminary research. This will provide the technological basis to enhance the utility and benefits to be derived from the large-scale irradiator.

PRELIMINARY RESEARCH

The irradiator requested will consist of an appropriately shielded superstructure, housing approximately 400,000 curies of cobalt 60. It will have the capacity to expose to radiation, and thereby disinfect, 2,500 pounds of fruit products per hour. The housing will include a small laboratory and space for handling products before and after irradiation. An elevator and conveyor system will move the product, in boxes, through the irradiation process. It is intended to locate the irradiator at the University of Hawaii. The program will be a joint effort of the AEC, University of Hawaii, and the USDA experiment station at the University.

INSECT DESTRUCTION

It is expected the irradiator will provide means of destroying insects immune to fumigation, such as the mango seed weevil and will prolong the life of very perishable foods, such as papayas.

By destroying the seed weevil in mangoes and by preserving the life of papayas and other fruits and vegetables, irradiation would permit greatly expanded commercial export of these farm commodities from Hawaii.

Agriculture is Hawaii's mainstay industry, but it needs to be strengthened and diversified. In view of increasing domestic and international competition, there is little prospect for significant expansion in the near future of sugar and pineapple, our two leading crops. We are, therefore, trying to diversify agriculture production by raising other commercial farm crops.

MANGOES

Mr. Chairman, this is very important to the State of Hawaii because we are unable to ship our mangoes to the mainland here because of the weevil infestation. We feel with this irradiator we will be able to ship a lot of mangoes to the mainland and it will create a very large industry. It is very important. You prevent the U.S. Department of Agriculture from shipping in a lot of fruits because they are afraid that infestation will be taking place, so this is a protection for the mainland fruits.

Senator HILL. I understand the amount you request is in the budget.

Senator FONG. Yes.

HOUSE ACTION

Senator HILL. Did the House approve it?

Senator FONG. The House knocked off \$4 million but I have been advised by the Department that this will not affect it.

Senator HILL. The amount that you are requesting now.

Senator FONG. Will not affect it.

Senator HILL. It is in the budget and as far as the Department is concerned it is in the bill as passed by the House, is that correct?

Senator FONG. Yes, sir.

Senator HILL. Any questions, Senator?

Senator ELLENDER. No.

Senator HILL. Thank you very much, Senator.

Senator FONG. Thank you.

LAND BETWEEN-THE-LAKES PROJECT

(Insert referred to on p. 72)

U.S. SENATE,
SELECT COMMITTEE ON SMALL BUSINESS,
July 10, 1964.

HON. LISTER HILL,
Chairman, Subcommittee on AEC and TVA,
Committee on Appropriations,
New Senate Office Building.

DEAR SENATOR HILL: Earlier this week, I asked that the printed record of testimony on the Between-the-Lakes project include communications. I had received in support of the project. Since that time, I have received the enclosed telegrams. They are not long, and I hope they may be included in the record.

I would like to note for the record that I have also received letters and telegrams from the following, expressing more fully their support for the Between-the-Lakes project:

Mr. F. E. Richards, secretary, Benton Rotary Club;
 Mr. William Nelson, the Tribune-Democrat, Benton;
 Mr. Joseph H. Coulter, Phillips Chevrolet Co., Benton;
 Mr. A. Walker Wood, copublisher, Kentucky New Era, Hopkinsville;
 Mr. Tom Webb, station WHOP, Hopkinsville;
 Mr. Frank A. Yost, president, Hopkinsville Milling Co.;
 Mr. Max B. Hurt, Murray;
 Mr. George D. Edwards, manager, Credit Bureau of Paducah;
 Mr. Avery H. Green, Paducah, Ky.

With kind regards, I am,

Sincerely yours,

JOHN SHERMAN COOPER.

HOPKINSVILLE, KY., July 3, 1964.

Senator JOHN SHERMAN COOPER,
Senate Office Building, Washington, D.C.:

Urge you read Courier-Journal lead editorial July 2, concerning land Between-the-Lakes. Accelerated effort needed to save this priceless asset. Your help appreciated.

W. W. BRYAN,
Executive Secretary, Chamber of Commerce.

PADUCAH, KY., July 8, 1964.

Hon. JOHN S. COOPER,
Senate Office Building, Washington, D.C.:

I respectfully urge your support for the fullest development of the Between-the-Lakes area by TVA in its entirety as originally planned.

ARTHUR P. BRAZELTON,
General Manager, Paducah Power System.

PADUCAH, KY., July 8, 1964.

Hon. JOHN S. COOPER,
Senate Office Building, Washington, D.C.:

The members of the Electric Plant Board of the city of Paducah, Ky., wish to notify you that they collectively and individually favor the development of the Between-the-lakes area by TVA, in its entirety as originally planned, and urge your support in this to afford the fullest development of western Kentucky.

LEON T. SEARLES, *Chairman.*
 ERNEST MITCHELL.
 JEROME HARRIS.
 JOHN OEHLSCHLAEGER.
 RALEIGH BROCKMAN.

PADUCAH, KY., July 8, 1964.

Hon. JOHN S. COOPER,
Senate Office Building, Washington, D.C.:

I respectfully urge your support for the fullest development of the Between-the-Lakes area by TVA in its entirety as originally planned.

LLOYD C. EMERY, EMERY & CARROLL, *Attorneys.*

PADUCAH, KY., July 8, 1964.

Hon. JOHN S. COOPER,
Senate Office Building, Washington, D.C.:

I respectfully urge your support for the fullest development of the Between-the-Lakes area by TVA in its entirety as originally planned.

H. JEROME HARRIS, *Harris Funeral Home.*

PADUCAH, KY., July 8, 1964.

HON. SENATOR JOHN S. COOPER,
Senate Office Building, Washington, D.C.:

I respectfully urge your support of the development of the area Between-the-Lakes in western Kentucky in its entirety.

JEROME HARRIS.

PADUCAH, KY., July 8, 1964.

HON. JOHN S. COOPER,
Senate Office Building, Washington, D.C.:

I respectfully urge your support for the fullest development of the Between-the-Lakes area by TVA in its entirety as originally planned.

ERNEST P. MITCHELL, *Mitchell Machine Shop.*

WHOP,

Hopkinsville, Ky., July 6, 1964.

HON. LISTER HILL,
*U.S. Senate,
 Washington, D.C.*

DEAR SENATOR HILL: We join hands editorially with the Nashville Tennessean and the Courier-Journal of Louisville in urging support for our Between-the-Lakes Park.

Not taking gift figures from the TVA or the Tri-County Organization for Constitutional rights, we conducted our own survey. The attached editorial was the result of that study.

The tricounty group is made up of about 350 members, less than half of which are homeowners in the area.

A minority cannot be allowed to ruin a facility that would serve the entire midsection of the United States, from the South to the North.

WHOP begs you to support the TVA proposal for the national recreation facility.

Sincerely,

TOM WEBB, *News Director.*

[Editorial comment from WHOP radio, Hopkinsville, Ky., July 5-6, 1964]

"A PUSH FOR A PARK"

Last Thursday the Courier-Journal editorially said if someone doesn't stand up and be counted for the land Between-the-Lakes, we are going to lose it. Viewpoint would like to echo that statement.

Down Between-the-Lakes struggle is going on that affects all citizens of mid-America, every Kentuckian and Tennessean in general and in particular each west Kentuckian.

The fight concerns the acquisition of private lands between the two lakes for a national wilderness park. The park looms as one of the major recreational advances in this century, but political tossing and turning is endangering it.

There is really no right or wrong side in all this turmoil. In our opinion the only wrong thing is with the Senators from Indiana and Louisiana who have seen fit to turn it into political hay as self-styled watchdogs of the Treasury and individual bodyguards to the few who are fighting the land acquisition.

And it is only a handful of those who live in the area that are sincerely against the acquisition of homelands. The rest of the opposition comes from either the minor political powers around it and the out-of-State people who purchased speculative land on Barkley Lake.

This station cannot say a man is wrong to want to keep his homeland and not be forced into sale to a Federal agency. We are quick to agree the Federal Government takes too much latitude and too much responsibility in many of its dealings.

Yet the fact remains the expanding population of the United States is quickly taking over all the remaining open expanses of land. Such developments as the land Between-the-Lakes will soon be all that's left to break the monotony of one big stretch of concrete and asphalt from coast to coast and border to border.

For someone such as Senator Allen J. Ellender of Louisiana to say TVA should develop the park on its own 70,000 acres in the area is nothing short of sheer frivolity.

In such a central location, how much of mid-America could the park serve with only 70,000 acres? A tenement house would seem roomy by comparison.

And what about commercial development? Does Senator Ellender approve of TVA building a park so area landowners could construct a huge tourist business? That certainly would be the Federal Government serving a minority, a precept surely Senator Ellender opposes.

Senator Vance Hartke has been publically quoted as saying his interest in the park was brought about because some of his constituents owned land there. He wanted to bring public hearings into the area. But aside from the Trigg and Lyon County political interests that are so vocal and the few sincere landowners who would have testified? In all probability the Indiana interests Senator Hartke so pompously defends.

TVA published a concept statement saying what it hopes to do in the area. To the west Kentuckian who knows what the garish land between the rivers looks like today, the TVA statement reads like a thrilling glimpse of a sportsman's, naturalists', or camper's heaven.

So far, TVA has forced no one to sell their holdings. Yet the number who have already sold or indicated they are ready to sell is approaching half the total number of landowners. And more have sat down to talk about selling. When the time comes that forced land sales are necessary, only about 10 percent will be left to fight.

Another travesty is the apparent lack of willingness on the part of Kentucky Congressmen and Senators to publically take a side and to forcefully defend that side.

To opponents of the development they have given halfhearted and shadowy statements of support. They have given the same to those who are in favor of the park.

Gentlemen, the time is coming when you must take a stand one way or the other. If you want Kentucky to lose it, you are following an effective path. But if you are opposed then openly say so. If you are in favor, then between now and July 20 you had better be putting some pressure on that House Appropriations Subcommittee where Senator Ellender promises to bottle up the TVA funds.

This holds true for Governor Breathitt and other Kentucky officials as well.

Yes, WHOP is in support of the land Between-the-Lakes as proposed by TVA. And we do not feel sympathy for the county officials who are crying about lost revenue, although not too loudly because TVA might be right about increased taxpayments more than making up for the losses.

We do not feel badly about the Indiana interests who have bought land for speculation in the area for Barkley Lake. We are not in sympathy with Senator Ellender and his public watchdog-protector stand on something he obviously knows little or nothing about.

The people we do feel sorry for are those in the area who are honest and sincere in not wanting to give up their homelands. There are no comforting words to someone who has invested his life in something and then has to give it up.

But let not the opportunists play on the heartstrings of the public about these people just to further selfish gains.

The park represents progress Kentucky hardly can afford to lose. And progress, as long as civilization exists, is going to continue at the expense of some individuals.

Nothing is permanent. Relocation will begin soon and the surrender of homelands may be easier if the people will realize their fight is hopeless and begin now to make plans to settle in new lands.

PHILLIPS CHEVROLET Co.,
Benton, Ky., July 7, 1964.

Senator ALLEN ELLENDER,
Senate Office Building,
Washington, D.C.

DEAR SENATOR ELLENDER: This is to urge you to give active support to the development of the Between-the-Lakes area by TVA. I am positive that if a poll were taken, it would indicate overwhelming support of the project. As is usually the case, the minority opposition is so demonstrative that it could easily give a distorted picture.

Please consider this in your evaluation of the problem. If you could visit the area, or have someone do so, I am sure you would find this to be an accurate appraisal of the conditions.

Thanking you, I am,
Very truly yours,

JOSEPH H. COULTER.

SUBCOMMITTEE ADJOURNMENT

(Whereupon, at 11:05 a.m., Wednesday, July 1, 1964, the subcommittee hearings adjourned.)

The following table shows the distribution of the respondents by ethnic group and by type of occupation. The respondents are listed in the order of their ethnic group, and within each ethnic group they are listed in the order of their occupation. The total number of respondents is 100.

Ethnic Group	Occupation	Number of Respondents
Caucasian	Professional	15
	Skilled	35
	Unskilled	50
Negro	Professional	10
	Skilled	25
	Unskilled	65
Hispanic	Professional	12
	Skilled	28
	Unskilled	60

When the respondents are listed in the order of their ethnic group, the distribution of the respondents by occupation is as follows:

Occupation	Caucasian	Negro	Hispanic	Total
Professional	15	10	12	37
Skilled	35	25	28	88
Unskilled	50	65	60	175

The total number of respondents is 100.

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