## **REMEDIATION OF URANIUM AND THORIUM PROCESSING SITES**

## **HEARING**

BEFORE THE

SUBCOMMITTEE ON ENERGY AND POWER OF THE

## COMMITTEE ON COMMERCE HOUSE OF REPRESENTATIVES

ONE HUNDRED SIXTH CONGRESS

SECOND SESSION

ON

## H.R. 2641

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(II)

# CONTENTS

rage
3
8
13

Page

### REMEDIATION OF URANIUM AND THORIUM PROCESSING SITES

#### WEDNESDAY, APRIL 5, 2000

HOUSE OF REPRESENTATIVES, COMMITTEE ON COMMERCE, SUBCOMMITTEE ON ENERGY AND POWER, Washington, DC.

The subcommittee met, pursuant to notice, at 10:05 a.m., in room 2322, Rayburn House Office Building, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton, Largent, Shimkus, Wilson, Bryant, Ehrlich, McCarthy, Sawyer, Markey, Boucher, Wynn, and Strickland.

Also present: Representative Cubin.

Staff present: Kevin Cook, science advisor; Joe Kelliher, majority counsel; Elizabeth Brennan, legislative clerk; Sue Sheridan, minority counsel; and Rick Kessler, professional staff member. Mr. BARTON. The Subcommittee on Energy and Power hearing on

Mr. BARTON. The Subcommittee on Energy and Power hearing on H.R. 2641 will come to order. We are going to have two hearings today on two bills, the first one being H.R. 2641. This is legislation that was introduced last year by Mrs. Cubin, who is on her way, and is being cosponsored by a number of members of the subcommittee.

It would change how the Federal Government reimburses private licensees for the government share of cleanup costs at uranium and thorium processing sites. The cleanup of these uranium and thorium sites is governed by the Uranium Mill Tailings Radiation Control Act of 1978. The reimbursement of the Federal Government's share of cleanup costs is governed by Title X of the Energy Policy Act of 1992.

Title X establishes the overall schedule for the reimbursement of the program and sets some specific caps on reimbursements. Title X has already been amended twice, once in 1996 and again in 1998. These changes were necessary because the real world costs of cleaning up the sites have exceeded the limitations contained in Title X. That trend continues. The actual costs of cleanup are again pushing past the caps established in Title X.

H.R. 2641 proposes a number of changes to the caps and to the schedule for reimbursements so that the private licensees will receive timely reimbursement from the Federal Government. The changes also ensure that the Federal Government will pay its fair share of the costs of cleaning up Title II sites.

I want to welcome our witnesses from the Department of Energy and Industry and look forward to the testimony. We also welcome Mrs. Cubin, who is a member of the full committee but not of the subcommittee, when she arrives. We would ask unanimous consent that she be allowed to join us today to make an opening statement and ask questions of our witnesses.

The Chair would now recognize the distinguished ranking member from the great State of Virginia, Mr. Boucher, for an opening statement.

Mr. BOUCHER. Thank you very much, Mr. Chairman. I will make comments only with regard to H.R. 380, the National Oil Heat Research Alliance Act. In the 105th Congress, this legislation passed the House by a unanimous vote but was not acted upon by the Senate prior to adjournment. In this Congress, the legislation enjoys broad bipartisan support and has 128 cosponsors, including many of our colleagues on this committee, and in this Congress the legislation has, as of today, been approved by the Senate. The NORA legislation will permit the creation of a self-financing program for heating oil using a percentage of the price of the wholesale product. The program, which is designed to replicate other dedicated industry programs, such as those for propane and natural gas, would fund research and development, energy conservation safety and consumer educational activities.

I am pleased, Mr. Chairman, that we are processing this legislation, moving forward with it. I hope that it will quickly move to markup in the subcommittee in view of the tangible benefits that the legislation will produce, both for the heating oil industry and for its consumers.

I look forward to receiving the testimony this morning with respect to both of the items of legislation pending before the subcommittee, and I thank the Chair.

Mr. BARTON. I thank the gentleman from Virginia. I would recognize the distinguished gentleman from Tennessee, Mr. Bryant for an opening statement if he so wishes.

Mr. BRYANT. Mr. Chairman, I thank you holding for these hearings. I have no statement at this time. Thank you.

Mr. BARTON. We would recognize the gentleman from Illinois, Mr. Shimkus, for an opening statement.

Mr. SHIMKUS. I would ask unanimous consent to have my opening statement submitted in the record.

Mr. BARTON. Without objection, so ordered.

The gentlelady from New Mexico would be recognized for an opening statement.

Mrs. WILSON. Thank you, Mr. Chairman. I would also like to ask unanimous consent that my statement be put in the record.

Mr. BARTON. Without objection.

We are down to the gentleman from Oklahoma. Does he wish to make an opening statement?

Mr. LARGENT. Yes, I do, Mr. Chairman. I want to thank you first of all and your staff for your assistance in scheduling this morning's hearing on H.R. 2641, a bill introduced last summer by Congresswoman Cubin and myself. Before I begin, I want to welcome one of our witnesses here this morning, Mr. Tom McDaniel, vice chairman of Kerr-McGee Corporation, also an Oklahoman. Welcome, Tom. H.R. 2641 proposes to amend Title X of the Energy Policy Act to ensure that the Federal Government continues to meet its commitment within the existing authorization to those companies which were called upon to assist the development of our country's nuclear defense program. The companies which produced uranium and thorium for the government during the cold war are now faced with the task of completing the remediation at the facilities used to produce those materials.

At the time, uranium and thorium were being produced for the government. Neither the government nor the licensees were aware of the hazardous nature of uranium and thorium mill tailings. It was only after the passage of the Uranium Mill Tailings Radiation Control Act and its implementing regulations that the parties began to understand the extensive costs which would be associated with remediating their sites.

To date the Title X program has worked extremely well and DOE has done an excellent job in administering the program.

The amendments proposed by H.R. 2641 recognize the actual remediation experiences encountered by the participants and are designed to ensure that a workable framework for Title X continues to exist as uranium and thorium licensees move toward completing remediation of their sites. The participants in the program are to be commended for coming together to update this legislation to make it reflect the factors experienced since it was initially enacted.

The government recognized its obligation to assist these companies in remediating their States in Title X of the Energy Policy Act of 1992. Title X followed a GAO report which found that the Government had a strong moral obligation to help those companies, which had helped the government during the most critical time in our country's history.

I look forward to hearing from our witnesses this morning regarding the status of their cleanup and the need to amend Title X of the Energy Policy Act, and I yield back Mr. Chairman.

Mr. BARTON. We thank the gentleman from Oklahoma. The Chair will recognize Mr. Markey. Seeing no other members present, the Chair would ask unanimous consent that all members not present have the requisite number of days to put their opening statements in the record. Is there any objection? Hearing none, so ordered.

Gentlemen, we want to welcome you to the subcommittee. We will recognize our distinguished gentleman from Department of Energy for 7 minutes, and then we will go to Mr. McDaniel and then we will go to Mr. Morgan. Your statement is in the record in its entirety and we would ask that you summarize in 7 minutes.

#### STATEMENT OF JAMES J. FIORE, DEPUTY ASSISTANT SEC-RETARY FOR SITE CLOSURE, OFFICE OF ENVIRONMENTAL MANAGEMENT, DEPARTMENT OF ENERGY

Mr. FIORE. Thank you, Mr. Chairman. My name is Jim Fiore. I am the Deputy Assistant Secretary for Site Closure in the Office of Environmental Management within the Department of Energy. I appreciate this opportunity to appear before this committee to discuss the proposed amendments in Title X of the Energy Policy Act of 1992.

Since 1994, we have reimbursed the Federal share of cleanup costs at the 14 sites with Federal-related tailings under the authority of Title X. In 1998 we asked the licensees for updated estimates of their costs to complete their cleanups. Based on the information, we have estimated the future financial liability of the program. Assuming the annual appropriations continue at \$30 million a year, we project that we will be able to eliminate the backlog of \$91 million in unpaid claims by fiscal year 2005.

In terms of program liability, we estimate that \$241 million will be reimbursed to the uranium licensees and \$149 million to the thorium licensee for a total of \$390 million in nondiscretionary liability. This would leave over \$100 million in unused uranium reimbursement authority.

The Secretary was given discretion to make a decision in 2005 whether or not to reimburse any unused authority. We project that in 2005, there will be unused reimbursement authority that the Secretary could allocate to the uranium licensees whose unit costs exceed the dry short ton ceiling.

I would now like to discuss some of the proposed amendments in H.R. 2641. We believe the dry short ton ceiling and the discretionary reimbursement provisions now in Title X were intended to recognize the shared responsibility between the industry and the Federal Government for addressing environmental contamination from these milling activities. Also, Title X provided DOE with flexibility to allocate resources to the most immediate safety and health risks. Therefore, we recommend that Congress continue the current authority of DOE to prioritize its resource needs by maintaining the discretionary provision in the current law.

H.R. 2641 would increase the dry short ton ceiling for uranium licensees from \$6.25 to \$10 in several steps and would direct the Secretary in 2008 to make unused uranium authority available to any licensees that have costs in excess of the \$10 per dry short ton. Since more than \$40 million in costs that are now discretionary would no longer be discretionary, we recommend that the dry short ton ceiling and the Secretary's discretion to reimburse costs in excess of that ceiling remain unchanged.

The current law provides that for any cleanup work performed after calendar year 2002, a licensee must submit a "plan for subsequent remedial action," and this plan must be approved by DOE. Each plan would describe the work to be performed after 2002 and provide an estimated cost and schedule for the work. We do not see any significant management value in the preparation or approval of these plans. Therefore, we support the proposed amendment that would delay the requirement for the plans and, furthermore, would recommend the complete elimination of the requirement for these plans.

Also, we support the amendment in H.R. 2641 that eliminates the escrow requirement because it would defer to later years some portions of the annual appropriations required for the Title X program.

In summary, the new amendments would increase the Department's nondiscretionary reimbursements to the uranium licensees by at least \$40 million. We recommend that Congress retain the current dry short ton ceiling for the uranium licensees and maintain the Secretary's discretion to reimburse any uranium costs within the available authority that exceeds the dry short ton ceiling. We do support the amendment that would delay the requirement for plans for subsequent remedial action and the amendment that would eliminate the escrow requirement.

Finally, we believe that the proposed amendment should be considered within the overall scope of the environmental management program and the need to continue progress at all sites. I will be glad to answer any questions you have.

[The prepared statement of James J. Fiore follows:]

#### PREPARED STATEMENT OF JAMES J. FIORE, DEPUTY ASSISTANT SECRETARY FOR SITE CLOSURE, ENVIRONMENTAL MANAGEMENT, U.S. DEPARTMENT OF ENERGY

Mr. Chairman, I appreciate this opportunity to appear before this committee to discuss proposed amendments to Title X of the Energy Policy Act of 1992 (Title X), which authorizes the U.S. Department of Energy's (DOE) Uranium/Thorium Reimbursement Program. In July of 1998, the Department appeared before this committee and testified on then-proposed amendments to Title X and other matters regarding the Department's various programs for uranium mill tailings cleanup. Today I will summarize the Department's position on H.R. 2641, which would amend Title X, and provide an update on the status of uranium mill site cleanup in the United States under Title I of the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA).

#### PROGRESS IN URANIUM MILL TAILINGS CLEANUP

The cleanup of uranium mill tailings and mill sites was one of the first major cleanup programs authorized by Congress for the Department of Energy. Uranium mill tailings were one of the first environmental legacies of the cold war, and were found later to pose a significant risk to public health. Tailings were originally treated as a benign material, and as a result, the tailings were left at abandoned milling sites and used offsite at thousands of properties for construction and landscaping. In 1978, Congress passed the Uranium Mill Tailings Radiation Control Act which provided DOE the authority to remediate 22 inactive uranium milling sites. Title

In 1978, Congress passed the Uranium Mill Tailings Radiation Control Act which provided DOE the authority to remediate 22 inactive uranium milling sites. Title I of UMTRCA directed the Department to clean up the older, inactive sites that produced all of their uranium for sale to the Federal Government. Title II of UMTRCA directed the Nuclear Regulatory Commission (NRC) to require the owners of the newer, "active" sites, that is, those that were still licensed by NRC in 1978, to clean up their own sites. Of the 30 Title II milling sites, 14 sold uranium or thorium to the Federal Government as well as to the private sector, and the 16 remaining sites sold their product exclusively to the private sector, primarily to electric utilities.

sold their product exclusively to the private sector, primarily to electric utilities. Under Title I, the Department implemented the Uranium Mill Tailings Remedial Action (UMTRA) Project to clean up the surface mill tailings at the 22 inactive uranium processing sites. (Two sites in North Dakota were added to the Project in 1979, but these were deleted in 1998 at the request of the State because of the low risk posed by the sites and because the State decided not to fund its 10 percent cost share required by Title I.)

The UMTRA Title I Project has been implemented in two separate phases—surface tailings cleanup and ground water compliance. In 1998, in cooperation with ten States and two Indian Tribes and with the concurrence of the NRC, cleanup and disposal of the surface tailings from the last two of the 22 UMTRA Title I sites was completed. This included the cleanup of more than 5,300 vicinity properties that were also contaminated with tailings. During 1999, NRC completed the certification and licensing of those final two processing sites, and all of the disposal sites are now under the custody of the Department's Long-Term Surveillance and Maintenance Program at DOE's Grand Junction Office in Colorado. Thus, phase one of our major cleanup programs has been brought to a successful conclusion with the disposal of 42 million cubic yards of contaminated material.

We are now implementing the Uranium Mill Tailings Ground Water Project at the 22 inactive Title I processing sites. Our current planning assumes that compliance with the Environmental Protection Agency's groundwater standards requires active cleanup at only three of the 22 sites. The remaining 19 sites will only require monitoring to provide assurance that contaminant levels are diminishing or not spread-

ing. To date, NRC has approved our cleanup or monitoring strategy at 8 sites, and strategies have been submitted for three other sites. Thus, we have completed or developed a compliance strategy for 11 of the 22 sites. We have initiated active cleanup at the Tuba City and Monument Valley sites in Arizona, and active cleanup at the Shiprock site in New Mexico is planned to begin in fiscal year 2001. All three of these active cleanup sites are on lands of the Navajo Nation.

Title II sites are being cleaned up by the current licensees, including the 13 uranium and one thorium milling sites that are eligible for reimbursement under the Title X Program. Among these 14 sites is the former Atlas Corporation mill site at Moab, Utah. This past January, the Secretary proposed that Congress provide authority for DOE to take over cleanup of the Moab site and move the tailings away from the Colorado River to a disposal site in Utah. The Department is preparing proposed legislation to authorize DOE to cleanup the Moab site, and our fiscal year 2001 Energy and Water Development Appropriations Act budget request includes \$10 million to initiate work on Moab. This legislation would, among other provisions, amend UMTRCA by transferring authority for the Moab site from Title II to Title I.

#### STATUS OF THE TITLE X REIMBURSEMENT PROGRAM

I would now like to focus my discussion on DOE's responsibilities related to the 29 active uranium processing sites and one thorium site that are being cleaned up by their licensees under Title II of UMTRCA. While these cleanups are regulated by the NRC (or in some cases by the host Agreement State), DOE has two responsibilities for these sites under current law: (1) to take custody, in most cases, and long-term responsibility for stewardship of completed disposal sites, and (2) to reimburse the Federal share of cleanup costs at the 14 sites that sold uranium or thorium to the Federal Government. At two of the sites (TVA at Edgemont, South Dakota and ARCO Bluewater at Grants, New Mexico), the cleanup has been completed, the NRC licenses have been terminated, and custody has been transferred to the DOE for long-term stewardship. We expect that over the next decade most of the other Title II disposal sites will become the property and responsibility of DOE.

Today, we are reimbursing the Federal share of cleanup costs at the 14 sites with federal-related tailings under the authority of Title X of the Energy Policy Act of 1992. In several weeks we will make the fiscal year (FY) 2000 reimbursements. Through FY 2000 we will have made seven annual payments to the licensees totaling \$257.6 million dollars, including \$169.1 million to the 13 uranium site licensees and \$88.5 million to the thorium site licensee. DOE has approved an additional \$91 million in licensee claims for the Federal share of cleanup costs that exceed the funds appropriated through FY 2000. Of that \$91 million, \$17.7 million are amounts that exceed the per dry short ton reimbursement ceiling in Title X that applies only to the uranium licensees— most of that is for one licensee.

In 1998, we asked the licensees for updated estimates of their costs to complete cleanup at each of their sites. Based on that information, we have made projections of the future financial liability of the program. Assuming that annual appropriations continue at \$30 million a year, we project that we will eliminate the backlog of unpaid claim amounts by FY 2004 or FY 2005. In terms of program liability, we estimate that \$241 million will be reimbursed to the uranium licensees, and \$149 million to the thorium licensee, for a total of \$390 million in non-discretionary liability. This would leave over \$100 million in unused uranium reimbursement authority. The payments of \$149 million to the thorium licensee would exhaust the total thorium reimburse.

The \$241 million estimated uranium reimbursement claims are within the current \$6.25 per dry short ton ceiling authorized by Title X, adjusted for inflation. In addition, we project there will be at least \$40 million in Federal-related costs at uranium sites that exceed the dry short ton ceiling. An existing provision of Title X states that costs exceeding the dry short ton ceiling may be reimbursed if there is unused uranium authority. The Secretary was given discretion to make a decision in the year 2005 whether or not to reimburse any unused authority. We project that in 2005 there will be unused reimbursement authority that the Secretary could allocate to uranium licensees whose unit costs exceed the dry short ton ceiling. In summary, it appears that the current uranium authority will be more than adequate to reimburse the total costs of cleanup for Federal-related uranium mill tailings, including the costs in excess of the current dry short ton ceiling. Of course, Congress would need to appropriate funds for the reimbursement of any excess costs.

#### 6

#### DISCUSSION OF PROPOSED AMENDMENTS TO TITLE X

I would now like to discuss H.R. 2641. The Department would like to highlight some of the proposed amendments and would like to recommend that Congress evaluate H.R. 2641 in the context of the original intent of Title X.

The proposed amendments would require the Department to reimburse \$40 million, or more, of Federal-related costs that are now discretionary because they would exceed the current dry short ton ceiling. Since Title X was passed in 1992, Congress has amended Title X twice. The total authorization for the uranium licensees was increased by \$70 million to \$350 million, and the dry short ton ceiling for uranium licensees was increased from \$5.50 to \$6.25. As discussed previously, the uranium authority is expected to be more than adequate to reimburse all Federal-related costs at uranium sites, including both discretionary and non-discretionary reimbursements. The total authorization for the thorium licensee was increased twice for a total of 250 percent from \$40 million to \$140 million. We expect that the thorium authority will be fully utilized.

We believe that the dry short ton ceiling and the discretionary reimbursement provisions now in Title X were intended to recognize the shared responsibility between industry and the Federal Government for addressing environmental contamination from these milling activities. Also, Title X provided DOE with the flexibility to allocate resources to the most immediate safety and health risks. Therefore, we recommend that Congress continue the current authority of DOE to prioritize its resource needs by maintaining the discretionary provision in the current law.

H.R. 2641 would increase the per dry short ton ceiling for the uranium licensees from \$6.25 to \$10.00 in several steps, and would direct the Secretary in 2008 to make unused uranium authority available to any licensees that have costs in excess of \$10.00 per dry short ton. These amendments would have two effects. First, there would be a small reallocation of annual payments to those with unit costs in excess of the current dry short ton ceiling from those with costs less than the current ceiling—in other words the licensees with higher unit costs would get a portion of their reimbursements quicker. Since the increases are phased in over several years, this impact would be gradual. More significantly, it would make the determination in 2008 regarding the availability of unused uranium authority a moot point except for one or two licensees. This is because, once inflation adjustments are factored in, the proposed dry short ton ceiling would be greater than the estimated unit cost at all but one or two of the sites. Since reimbursements that are now discretionary would no longer be discretionary, we recommend that the dry short ton ceiling and the Secretary's discretion to reimburse costs in excess of the dry short ton ceiling remain unchanged.

Current law provides that for any cleanup work performed after calendar year 2002, a licensee must submit a "plan for subsequent remedial action," and this plan must be approved by DOE if that work is to be eligible for reimbursement. A plan for subsequent remedial action is a description of the work to be performed after 2002 and the estimated cost and schedule for that work. Current law also requires that the funds for any approved post-2002 work must be placed in escrow by the end of calendar year 2002. H.R. 2641 would delay by five years the requirement for licensees to submit plans for subsequent remedial action, and it would eliminate the requirement to set aside funds in escrow for work to be performed after calendar year 2002. Each of the 12 sites still being cleaned up reported to us that they will have work that remains to be done past 2002. Therefore, each would have to submit a plan for subsequent remedial action if their costs past that date are to be eligible for reimbursement. If the requirement for submitting plans for subsequent remedial action is moved to 2007, it appears that only four sites would have to submit these plans to remain eligible for reimbursement of their post-2007 costs. Thus, this proposed amendment would reduce administrative requirements for DOE and the licensees. We do not see any significant management value in the preparation and approval of these plans. Therefore, we support the proposed amendment that would delay the requirement for plans for subsequent remedial action—and furthermore would recommend the complete elimination of the requirement for these plans.

The elimination of the escrow requirement proposed in H.R. 2641 would affect budget planning for FY 2002 and 2003. Under current law, the costs for work performed after December 31, 2002 need to be estimated by the licensee in a plan for subsequent remedial action no later than December 31, 2001, and must be approved by DOE and placed in escrow no later than December 31, 2002. Thus, funds for post-2002 work must be appropriated and placed in escrow no later than FY 2003. Current estimates are that the amount to be placed in escrow would be in excess of \$40 million. This presents DOE with two options: (1) place portions of the annual Title X appropriations from FY 2002 and FY 2003 into escrow and reduce the annual payments to licensees accordingly, or (2) request an increase to the appropriations for those years to cover the escrow amount and the normal reimbursements that are currently about \$30 million annually. We do not believe the first option is appropriate given the large backlog in unpaid claims. The second option could require DOE to forgo allocating resources to more immediate environmental, safety, and health risks in order to meet the escrow requirements of Title X. Under the proposed amendments, annual appropriations after FY 2005 could be limited to the actual approved annual claims, which we believe will be less than the current annual appropriation of \$30 million. Therefore, we support the elimination of the escrow requirement because it would defer some portions of the annual appropriations required for the Title X Program to later years.

In summary, the new amendments would increase the Department's non-discretionary reimbursements to uranium licensees by at least \$40 million. However, under current law the Department already has the discretion to reimburse all of those costs. We recommend that Congress retain the current dry short ton ceiling for the uranium licensees and maintain the Secretary's discretion regarding reimbursing any uranium costs within the available authority that exceeds the dry short ton ceiling. We do support the amendment that would delay the requirement for plans for subsequent remedial action and the amendment that would eliminate the escrow requirement. Finally, we believe that the proposed amendments should be considered within the overall scope of the Environmental Management program and the need to continue progress at all of its sites.

I would be glad to answer any questions you may have.

Mr. BARTON. Thank you, Mr. Fiore.

We would now like to hear the testimony of Mr. McDaniel. We will recognize you for 7 minutes and your statement is in the record in its entirety.

#### STATEMENT OF TOM J. McDANIEL, VICE CHAIRMAN, KERR-McGEE CHEMICAL CORPORATION

Mr. MCDANIEL. Mr. Chairman and members of the subcommittee, my name is Tom McDaniel. I am vice chairman of Kerr-McGee Chemical Corporation. I have provided a formal statement for the record which describes what I believe is the significant progress Kerr-McGee has made at its West Chicago thorium site, and contains our current estimate as to what we expect to spend completing remediation at that site. I am pleased to join you this morning and would like to discuss the need to amend the Energy Policy Act as proposed by H.R. 2641.

The Energy Policy Act recognizes the contribution to national defense made by companies that had produced uranium and thorium for the government during the years our country was developing its nuclear defense program. The Act followed a 1979 GAO report that concluded that these are tailings for which the government has a strong moral responsibility. That moral responsibility became a commitment in 1992 when the Congress passed the Energy Policy Act under which the Federal Government agreed to pay its portion of the costs associated with stabilizing and decommissioning the mills which were used to produce uranium and thorium.

Kerr-McGee is the licensee at the West Chicago rare earth facility in West Chicago, Illinois. It is among the mills covered by the Act. DOE has determined that more than 55 percent of that facility's thorium production was provided to the Federal Government in support of the Nation's nuclear defense programs. Through the end of 1999, Kerr-McGee, I say Kerr-McGee, had spent \$345 million in the West Chicago remediation costs and had received approximately \$69 million in reimbursements through Title X. I point this out to underscore that at this level of financial exposure, you can be assured that our company is doing all it can to contain the costs of this project.

Before addressing the need to amend Title X, I do want to commend the job that DOE has done in administering the claims process and the reimbursement programs. At least for us it is working well. However, in order to ensure that a suitable framework continues to exist for this program, as remediation of Title X sites moves toward completion, several amendments to Title X are necessary, I believe. The amendments do not seek to increase the existing Title X authorization, but they do propose to extend the date from 2002 to 2007, through which the current claims process and reimbursement procedure would remain in place.

Extending the date to 2007 will ensure that many licensees such as Kerr-McGee are not unintentionally precluded from recovering the Federal share of remediation costs, which they will incur subsequent to December 31, 2002.

Currently in order to be eligible to recover those costs, licensees must describe and quantify all costs expected to be incurred through the remainder of the sites cleanup in a plan for subsequent remedial action. This plan must be submitted to DOE before December 31, 2001, and approved prior to December 31, 2002. Receiving reimbursement of the Federal share of post-2002 costs would then be contingent upon those costs having been adequately described in the licensee's plans.

In 1992, when Title X was enacted, it was anticipated that remediation at most Title X sites would be approaching completion, thereby enabling the licensees to submit their plans for subsequent remedial action. However, the need for substantial groundwater remediation and the continuing identification and evaluation of additional vicinity properties have extended significantly the time necessary to remediate many Title X sites like our West Chicago site. Because of this, it will be very difficult to identify, with the required specificity, post-2002 remediation activities and the associated costs and the required plan under the current deadline.

Kerr-McGee's remediation of the factory site where deep excavation of contamination is underway is expected to continue through 2003, and this provides a good example of the hardships current law will create. Excavation of the factory site will extend well below the water table and will remove most of the source of the groundwater contamination.

However, until the excavation is complete, actual groundwater conditions are determined, a treatment system is operating and actual results are available, which we estimate to be likely in 2004, we will not know what will actually be required for complete groundwater remediation. Extending the date on which a plan for subsequent remedial action must be approved from 2002 to 2007 will provide the time necessary to prepare the plans on a more informed basis and avoid the hardship which will likely result from the 2002 deadline.

The second important change proposed by H.R. 2641 relates to the Secretary of Energy's calculation and disbursement of excess funds under the existing authorizations. The proposed amounts would extend the date on which the excess is calculated from July 31, 2005 to December 31, 2008, and would require the Secretary of Energy to permit all Title X licensees to be reimbursed the Federal share of remediation costs on a pro rata basis, should an excess of the authorization exist on that date.

These changes are supported by the licensees, including Kerr-McGee, and we believe are consistent with the purpose of the Energy Policy Act to ensure that cleanup is completed at all these Title X sites and that the Federal Government bears its appropriate share of those costs.

I appreciate the opportunity to share these views with you and will be glad to respond to any question. [The prepared statement of Tom J. McDaniel follows:]

## PREPARED STATEMENT OF TOM J. MCDANIEL, VICE CHAIRMAN, KERR-MCGEE CHEMICAL LLC

My name is Tom J. McDaniel. I am Vice Chairman of Kerr-McGee Chemical LLC ("Kerr-McGee"). I am pleased to join you today to discuss the progress at the West Chicago thorium mill tailings remediation site and the need for the amendments proposed by H.R. 2641 to Title X of the Energy Policy Act of 1992. See 42 U.S.C. § 2296a.

The Energy Policy Act recognizes the contribution to national defense made by companies that had produced uranium and thorium for the Government during the years our country was developing its nuclear defense program. The Act followed a 1979 GAO report that concluded: "the most significant factor in favor of providing federal assistance in cleaning up tailings pertains to the federal government's role in creating the mill tailings situation. These are tailings for which the government has a strong moral responsibility." That moral responsibility became a commitment in 1992 when Congress passed the Energy Policy Act. Under the Act, the federal government agreed to pay its portion of the costs associated with stabilizing and de-commissioning the mills which were used to produce uranium and thorium. Kerr-McGee is the licensee at the West Chicago Rare Earths Facility in West Chi-

cago, Illinois, which is among the mills covered by the Act. More than 55% of that Facility's thorium production was dedicated by contract to the federal government in support of the Nation's nuclear defense programs. Through the end of 1999, Kerr-McGee had spent approximately \$345 million in West Chicago remediation costs and had received approximately \$69 million in reimburgements through Title X. I point this out to make you aware that at this level of financial exposure, you can be assured that our company is doing all it can to contain the cost of this project.

I testified before this Subcommittee just over 1<sup>1/2</sup> years ago, on July 27, 1998, when the Subcommittee was considering an increase in the reimbursement ceiling. At that hearing, I testified that remediation costs would be substantially more than initially anticipated and that we expected costs to escalate even further as additional cleanup requirements were developed and implemented. I also provided testimony which detailed a number of steps we were taking to prevent costs from escalating unnecessarily

My testimony today will focus on the significant progress we have made since I last testified. In addition, my testimony will provide an example of the difficulties many licensees will encounter in accurately estimating their costs when submitting "plans for subsequent decontamination, decommissioning, reclamation, and other remedial action" to DOE. Under current law, such plans must be approved by DOE by December 31, 2002 in order for the uranium and thorium licensees to be eligible to recover the federal share of remediation costs incurred subsequent to that date. Simply stated, many licensees will have insufficient information available at the time such plans are to be submitted to DOE to accurately predict the timing and extent of work that will be necessary to complete remediation of their sites.

First, however, I will provide some background.

#### I. BACKGROUND

Operations. The West Chicago Facility began operations in 1932 and was shut down in 1973. Various owners operated the Facility until it was acquired by Kerr-McGee in 1967. Kerr-McGee operated the Facility, on a limited basis, for only the final six of the 41 years the Facility was open. The Facility produced a variety of chemical compounds containing rare earth elements and thorium, a naturally occurring radioactive element, from ores and ore concentrates.

The milling process produced a substantial volume of sand-like materials and sludges, called "tailings", which are mildly radioactive. The government contracts in-cluded specifications addressing physical characteristics, grade and impurities. How-ever, the contracts did not include provisions for mill decommissioning, long-term management of the tailings, or stabilization of tailings piles. The reason for this omission is that the potential hazards of tailings were not appreciated at the time the contracts are constant. the contracts were executed.

After several decades of operations, the Facility was contaminated with tailings generated by the milling activities. Also, as happened with similar sites across the country, local residents and others apparently used the sand-like tailings as fill which resulted in low-level contamination of surrounding areas.

After closing the Facility in 1973, Kerr-McGee began working with the U.S. Nu-clear Regulatory Commission ("NRC") to decommission the Facility and remediate the surrounding areas. In 1989, the NRC staff issued an environmental impact study in which the NRC staff preliminarily endorsed a plan by Kerr-McGee to bury the tailings on the Facility in an appropriately secured disposal cell. On-site encap-sulation was estimated to cost approximately \$26 million.

In 1990, at the request of the State of Illinois, the NRC transferred jurisdiction to the State, which is requiring off-site disposal. At that time (and until as recently as late summer 1994), there was no disposal facility anywhere in the United States licensed to accept the tailings for disposal. Kerr-McGee ultimately contracted with a disposal facility located in the state of Utah (i.e., Envirocare of Utah) and, in late 1994, began shipping contaminated soils from the West Chicago site to the Utah fa-cility. The requirement by the regulatory agencies to move the tailings offsite has dramatically increased decommissioning costs. Energy Policy Act. The Energy Policy Act of 1992 recognized the obligation of the

United States to reimburse those who produced uranium and thorium for the Gov-ernment for a portion of the costs of stabilizing and decommissioning the mills. The Act specifically authorized the Department of Energy to reimburse licensees for the federal government's share of decommissioning and reclamation costs.

Under the Act, Congress required off-site disposal in a manner consistent with requirements imposed by the state regulatory agency in order to obtain reimburse-ment for the government's share of cleanup costs. The Act initially set a limit on reimbursement at the West Chicago thorium site of \$40 million, plus inflation adjustments. At that time, however, Congress did not know the actual dollar amount of the federal government's share of West Chicago cleanup costs (because the Department of Energy had not yet determined the federal government's percentage share, and the scope of the contamination at the Facility and at the vicinity properties, and the full financial impact of shipping contaminated soils across the country to the Utah disposal facility was not known.)

As more information became available, Congress increased the federal government's authorized share for thorium reimbursement to \$65 million in 1996, and to \$140 million in 1998, plus adjustments for inflation. Even then, however, the full financial impact of the remediation effort was uncertain, as cleanup standards and other closure requirements imposed by the regulatory agencies were not fully in place and the clean up of surrounding areas was still far from complete.

#### II. REMEDIATION ACTIVITIES—PROGRESS

Kerr-McGee began shipping material to Utah in 1994. Significant progress has been made since and, all told, we have now shipped more than 725,000 tons of ma-

been made since and, all told, we have now shipped note than 725,000 tons of ma-terial to Utah, including 235,000 tons from the vicinity properties. At the factory site, we are continuing with deep excavations and remain on sched-ule to complete the cleanup in 2004. Significantly, we recently passed the halfway point with respect to material expected to be shipped to Utah from the factory site.

Excavation and removal of contaminated material at the Reed-Keppler Park vicin-ity property was completed during 1999. Approximately 115,000 cubic yards of ma-terial were shipped from this area. Restoration is currently underway.

In addition, significant progress has been made remediating residential properties in the vicinity of the factory site. These vicinity properties have been identified as being contaminated with materials which originated at the factory site. Through March 22, we had remediated 488 of the 610 identified vicinity residential sites. This represents an increase of more than 150 sites since I last testified. The number of remaining sites, currently 122, will increase as a result of EPA's continuing investigations. The cleanup orders issued by EPA for the vicinity properties are based upon EPA regulations promulgated to implement the Uranium Mill Tailings Radi-ation Control Act ("UMTRCA") and the agreement state's source material milling facility regulations. License authorizations issued by the state regulatory agency

provide for contaminated materials excavated from the vicinity properties to be returned to the West Chicago Facility for processing and shipment to the Utah disposal facility.

Two additional items are also indicative of the progress we have made since I last testified. The first is the treatment of water through a water treatment plant. The water treatment plant has enabled us to handle water generated from the deep excavations at the factory site and also will be used during groundwater remediation. Since I last testified, over 43 million gallons of water have been treated at the water treatment plant.

The second is the successful use of a physical separation facility (PSF), which was designed to separate thorium tailings from native soils, thereby reducing the volume (and cost) of material that must be shipped to the Utah disposal facility. When I last testified, the facility was in the testing stage. Today, it is in operation and more than 188,000 tons of material have been processed through the PSF. It has produced 99,000 tons of material that are being backfilled at the site instead of being shipped to Utah. We are now projecting that we will save \$10-\$15 million through use of PSF, up from our earlier estimate of \$5-\$10 million.

#### III. PROJECT COSTS

The progress made over the past year and a half allows us to better estimate the cost of completing the decommissioning and cleanup work. Our estimate of total project costs eligible for reimbursement under Title X from inception of the project through project completion now totals \$441 million, which reflects an increase of \$81 million over the \$360 million estimated in July 1998. This equates to a federal share of \$243 million, based on the 0.552 federal ratio determined by DOE. The cleanup of the Kress Creek vicinity property is not included in this estimate, as Kerr-McGee currently is studying that site to determine closure requirements.

- The \$81 million increase in estimated costs is attributable to the following:
- \$40 million for the cleanup of vicinity properties.
- \$23 million for oversight costs, additional infrastructure (including PSF expenditures), excavation work and associated site operations.
- \$18 million for groundwater remediation.

#### IV. H.R. 2641—TECHNICAL CORRECTIONS TO TITLE X

The reimbursement program under Title X has worked very well and the DOE has done a commendable job in its administration of the claims process. However, in order to ensure that a workable framework continues to exist as remediation of Title X sites moves toward completion, several amendments to Title X are necssary. The amendments do not seek to increase the existing authorization. However, the amendments do seek to extend the date—from 2002 to 2007—through which the current claims process and reimbursement procedure remain in place. Extending the date to 2007 will ensure that the licensees are not unintentionally precluded from recovering the federal share of remediation costs incurred subsequent to December 31, 2002. Currently, in order to be eligible to recover those costs, licensees must describe and quantify all costs expected to be incurred throughout the remainder of the site's cleanup in a "plan for subsequent decontamination, decommissioning, reclamation and other remedial action." Such plans must be submitted to DOE before December 31, 2001 and approved prior to December 31, 2002.

Unanticipated developments since the time Title X was enacted will likely cause this provision (and its implementing regulations) to work an unintended hardship upon many licensees, including Kerr-McGee. In 1992, when Title X was enacted, it was anticipated that remediation at most Title X sites would be approaching completion thereby enabling the licensees to submit their plans for subsequent remedial action. However, the need for substantial groundwater remediation and the continuing identification and evaluation of additional vicinity properties have extended significantly the time necessary to remediate many Title X sites, including Kerr-McGee's West Chicago site. Because of this, it will be virtually impossible to identify, with the required specificity, post 2002 remediation activities and the costs associated therewith in a "plan for subsequent remedial action" under the current deadline.

Kerr-McGee's remediation of the factory site, where deep excavation of contamination is underway and is expected to continue through 2003 provides a good example of how the current law will likely work an unintended hardship. Excavation at the factory site will extend well below the water table and will remove most of the "source" of the groundwater contamination. Although we have budgeted approximately \$18 million for groundwater remediation, until the excavation is complete, actual groundwater conditions are determined, a treatment system is operating, and actual results are available (likely sometime in 2004), we will not actually know what will be required. Extending the date on which a plan for subsequent remedial action must be approved, from 2002 to 2007, will provide the time necessary to prepare the plans on a more informed basis and avoid an unintended hardship which would result from the 2002 deadline.

The second significant change proposed by H.R. 2641 relates to the Secretary of Energy's calculation and disbursement of excess funds under the existing authorizations. Under the current law, the Secretary is required to determine whether excess funds are available in the uranium authorization on July 31, 2005. Should an excess exist on that date, the Secretary of Energy, at his discretion, may then reimburse, on a pro-rata basis, the uranium licensees' additional remediation costs from the excess. The proposed amendments would extend the date on which the excess is calculated to December 31, 2008, and would require the Secretary of Energy to permit all Title X licensees to be reimbursed the federal share of remediation costs, on a pro-rata basis, should an excess in the authorization exist on that date. These changes are supported by the licensees and are consistent with the purpose of the Energy Policy Act to ensure that cleanup is completed at all Title X sites and that the federal government bears its appropriate share of the costs.

I appreciate the opportunity to share these views with you and welcome your questions.

Mr. BARTON. Thank you, Mr. McDaniel.

We would now like to hear from Mr. Morgan. Again, your statement is in the record. We ask that you summarize it in 7 minutes.

#### STATEMENT OF PATRICK MORGAN, CONSULTANT TO UMETCO MINERALS CORPORATION AND FORMER GENERAL COUNSEL TO UMETCO MINERALS CORPORATION APPEARING ON BE-HALF OF CURTIS O. SEALY

Mr. MORGAN. My name is Patrick Morgan. I am a consultant to Umetco minerals corporation and formerly served as general counsel to the company. I am appearing here today in place of Curt Sealy, our general manager, who had a last minute conflict in his schedule.

In 1996, Congress passed H.R. 2967, which increased the per ton reimbursement rate at the uranium sites from \$5.60 to \$6.25. At page 9 of its report on that legislation, this committee said that even this increased rate will not be sufficient to fully reimburse the cost of remediation at some mining sites as the cost of remediation varies widely due to various environmental factors. That statement was very prescient.

Umetco and other uranium companies are facing substantially higher remediation costs. For example, while DOE, Title I and private uranium mill sites must comply with EPA groundwater standards, the EPA has been allowed to use practical and economic solutions to remediate groundwater at the Federal sites. The Title II licensees have not been afforded this privilege. Specifically, the DOE sites are allowed to use the natural flushing concept to remediate aquifers. Natural flushing allows the natural groundwater movement and geochemical processes to decrease the contaminant concentrations to levels within regulatory limits given a given time period.

This technique is applied at sites where groundwater compliance will be achieved within 100 years, where effective monitoring and institutional controls could be maintained, and the groundwater is not currently and is not projected to be a drinking water source.

The vast majority of Title II sites, which is the subject of today's legislative discussion, fall into this category where natural flushing and attenuation is a viable alternative. Natural flushing has been demonstrated with the Title I program as being protective of human health and the environment.

It is interesting to note that in DOE's submitted testimony, they state at page 3 that our current planning assumes that compliance with EPA groundwater standards requires active cleanup at only three of the 22 sites. The remaining 19 sites will only require monitoring to provide assurance that contaminant levels are diminishing or not spreading.

This is one of the key reason these groundwater costs have a provision in 2641 for a gradual increase in the per ton reimbursement ceiling from \$6.25 to \$10 over a 5-year period. The cleanup program at the uranium sites is also taking longer than originally contemplated. Once again, the Title II sites are the victim of the unrealistic groundwater compliance regimen that I just described. That is why H.R. 2641 provides for an extension of the reimbursement program from 2003 through 2007.

In conclusion, I believe that since DOE concludes in its testimony that there would be at least a \$100 million in unused uranium reimbursement authority, it should not be left to the discretion of DOE whether a portion of that unused authority should be paid to the higher cost uranium sites. The original \$5.50-per-ton ceiling was put in the law in 1992 to assure that higher cost sites would not disadvantage lower cost sites. Given the projected excess in the uranium authorization increasing the ceiling to \$10 over a 5-year period no longer poses that concern.

Thank you very much. I am prepared to take questions.

[The prepared statement of Curtis O. Sealy follows:]

#### PREPARED STATEMENT OF CURTIS O. SEALY, GENERAL MANAGER, UMETCO MINERALS CORPORATION

Mr. Chairman and distinguished Members of the Commerce Committee's Subcommittee on Energy and Power, my name is Curt Sealy. I am General Manager of UMETCO Minerals Corporation. I am here today to present testimony in support of proposed amendments to Title X of the National Policy Act of 1992 (P.L. 102-486). These amendments will not affect the amounts authorized for reimbursements to the Title X licensees. They will extend the period for reimbursement under the program from 2002 to 2007 and will provide relief from the per ton cap limitations in Title X to licensees that have incurred higher costs in remediating their sites.

When Title X was enacted in 1992, it provided reimbursement for thirteen commingled uranium sites, such as UMETCO. These sites varied greatly in size and the time of remediation also varied at each site. In order to assure a fair and equitable distribution of reimbursement payments to the uranium sites, a per ton cap was included in the legislation. The \$5.50 per ton cap assured that the \$270,000,000 Congress designated to reimburse the uranium sites would be spread equitably among the eligible licensees. In 1996, Congress passed HR2967 which increased the per ton cap \$5.50 to \$6.25 per ton and increased the authorization for uranium site licensees from \$270,000,000 to \$350,000,000. In its report on HR2967, the House Commerce Committee recognized that the increase in per ton reimbursement from \$5.50 to \$6.25 would not be enough to fully reimburse the cost of remediation at some active mining sites while other sites could be fully reimbursed at this level. At page 9 of its report, the Committee said that: "Even this increased rate will not be sufficient to fully reimburse the cost of remediation at some mining sites, as the cost of remediation varies widely due to various environmental factors".

In 1999, the uranium licensees, working with the Department of Energy, determined that the \$6.25 per ton cap could be increased as total estimated total costs at the various sites had become more concrete. DOE surveyed the uranium licensees and determined that the \$350,000,000 authorization is sufficient to cover the Federal Government's share to reclaim the uranium sites. The survey also indicated that a gradual increase of the per ton cap from \$6.25 per ton to \$10.00 per ton would allow the higher cost sites to receive more timely reimbursement, while as-

suring adequate funds for the lesser cost sites. The proposed amendment would put a gradual increase of the caps into place. The increase of the cap from \$6.25 to \$10.00 per ton will not increase the aggregate amount authorized by Title X to cover the Federal share of this remediation.

The second major change of the proposed amendment will extend the period for uranium and thorium licensees to obtain reimbursement for work done from 2003 through 2007. Currently these licensees can make their claims for the costs of remediated work done through 2002. At this time, licensees whose sites are not fully re-mediated can file a plan with DOE that contains an estimate of future claims for reimbursement. The proposed extension from 2003 through 2007 recognizes the fact that the remediation of the Title X sites has experienced unexpected complications, particularly in the area of groundwater decontamination. Significant remediation has been accomplished especially in the surface reclamation at the sites. However, by extending the period during which remediation work is done, the guesswork of future costs will be eliminated, and the reimbursement program can continue to

work as designed. The Title X reimbursement program has worked very well. DOE has done an out-standing job administering the claims process. DOE and the licensees have devel-oped excellent procedures in submitting and processing the claims.

While this committee is very aware of the background of Title X, I believe it is worth mentioning the genesis of Title X. In 1979, in response to a request from the Committee on Energy and Natural Resources, the General Accounting Office ("GAO") issued a report entitled "Cleanup of Commingled Uranium Mill Tailings: Is Federal Assistance Necessary?" (DMD79-29), in which GAO recommended that Congress provide assistance to the active site owners for the reclamation of tailings generated under federal contracts. This recommendation was based on several factors, including the Federal Government's role as buyer of the uranium, the fact that possible hazards from tailings were not recognized at the time they were produced, and the fact that government procurement contracts did not require reclamation of tailings. The GAO concluded that the mill owners had acted in good faith and should not bear subsequent costs of reclamation by themselves.

In that report, the GAO concluded that: "In order to assure that the uranium (and thorium) mill tailings are controlled in a safe and environmentally sound manner, we recommend that the Congress provide assistance to the active mill owners to share in the cost of cleaning up that portion of the mill tailings that were generated under Federal contracts. These are the tailings for which the Federal Government has a strong moral responsibility." (Emphasis supplied.) I am here today requesting amendments to Title X to allow the program to work

better. These proposals have been thoroughly reviewed by the eligible licensees.

I would like to also briefly detail the remediation program we have conducted at the UMETCO sites.

UMETCO has two sites that qualify for reimbursement under Title X. They are located at Uravan, Colorado and Gas Hills, Wyoming. The Uravan site has 10.2 million tons of mill tailings. Of this amount, 5.7 million tons or 55% relate to govern-ment purchases. The Gas Hills site has 11.1 million tons, of which 2.1 million tons relate to government purchases.

The reclamation plan at Uravan consists of stabilization of the tailings, removal of process wastes to an on-site repository, decommissioning of the mill and ground water restoration. At Uravan we have been able to reclaim our tailings in place. While this saved the expense of moving the tailings to another site, it has made it necessary to quarry and move a half million cubic yards of rock for the erosion protection cover. In addition, we have placed 2.8 million cubic yards of clay and random fill on the piles to serve as a radon barrier.

We had produced nearly 1.5 million cubic yards of process wastes, primarily from the treatment of waste process solutions, that had to be moved from various ponds to an on-site repository. We used the rock quarry as a below grade repository. Our ground water remediation system is in place and functioning. We are annu-

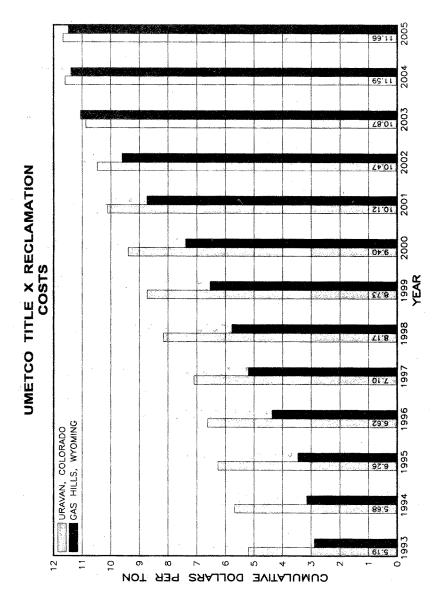
ally pumping thirty million gallons of contaminated ground water to evaporation ponds. The ponds, covering an area of over thirty acres, about two to three times the size of the reflecting pool at the Washington Monument, have double liners and leak detection systems. The removal of ground water will continue beyond 2002.

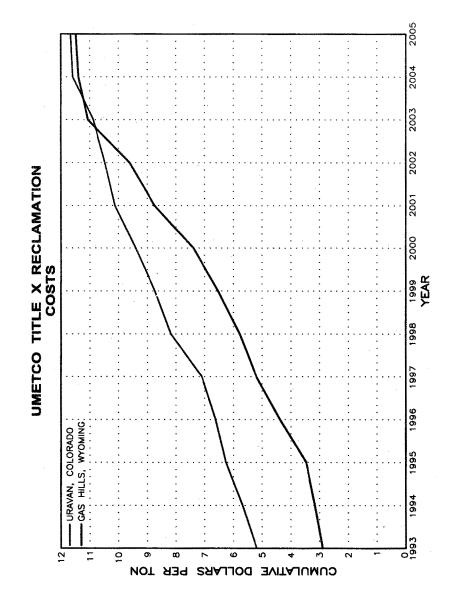
Mill decommissioning includes the removal of all buildings, except a few of histor-ical interest, and all process equipment. We will bury all contaminated materials and will dig up and bury an estimated 250,000 cubic yards of contaminated soils. Our radiation based cleanup standards for soils are the EPA standards. Heavy metal cleanup standards for the site are background based standards.

Because of the nature of the reclamation work at Uravan, our costs there are significantly higher than at our Gas Hills site. In fact, these costs now exceed the \$6.25 per ton reimbursement level and are expected to average over \$10.00 per ton. Our reclamation costs at Gas Hills have also increased dramatically and are expected to average over \$8.25 per ton. We understand that the per ton reclamation costs at some of the other uranium sites will also exceed \$10.00 per ton. These costs are appreciably higher now and in prospect than contemplated at the time that Title X was passed into law in 1992. This is due to a number of factors such as more rigorous state and federal cleanup standards, EPA's ground water standards and long term surveillance costs. In fact, these cost factors are cited in GAO's December 1995 report entitled "Uranium Mill Tailings—Cleanup Continues, but Future Costs are Uncertain" (RCED 96-37) as contributions to the escalating cost of cleanup at the Title I sites by the Department of Energy. The Title I sites are those that were inactive at the time that the Uranium Mill Tailings Radiation Control Act of 1978 ("UMTRCA") was enacted into law. The purpose of the GAO report was to provide Congress with information on (1) the status and cost of DOE's surface and ground water cleanups and (2) factors that could affect the Federal Government's costs and liabilities in the future in anticipation of congressional deliberations on reauthorizing the DOE program for cleaning up the Title I sites under UMTRCA which was scheduled to expire on September 30, 1996.

In summary, the proposed amendments to Title X recognize what has occurred at the sites since the enactment of this reimbursement program in 1992. Because of numerous cost factors, including economy of scale, the cost per ton to remediate the sites varies greatly. Based upon DOE's survey of the uranium licensees, these licensees are agreeable to expanding the per ton cap limitations in order to allow higher cost sites to receive additional reimbursement now rather than waiting to submit these claims at the end of the reimbursement program. Actual remediation factors, such as the ground water remediation regimes, imposed on the licensees have significantly protracted the time horizon for completion of remediation. The licensees are confident that extending the Title X program from 2003 through 2007 will sufficiently allow the site remediation to be completed within this time and allow the reimbursement program to work as designed.

#### 16





Mr. BARTON. Thank you. The Chair would recognize himself for 5 minutes. My question is not specifically on the pending legislation, but it is related and it is directed to the Deputy Secretary.

Last fall, Secretary Richardson went out to Utah and proposed a transfer of a Naval Oil Shale Reserve to the Ute Indians. The Ute Indians would then take the uranium tailings pile at Moab, Utah, and pay to relocate it and the cost of that was expected to be about \$300 million. Secretary Richardson indicated the Department of Energy would support that. The committee is a little bit puzzled by this proposal.

So we would ask you what technical basis does the Secretary of Energy have for making that proposal and also ask you to comment on the fact that the Nuclear Regulatory Commission has completed a final environmental impact statement in which they determined that the most cost effective and sensible thing to do was to cap the pile in place where it is currently located.

Mr. FIORE. When the Secretary made his decision, he based it not only on technical considerations, but also stakeholder concerns, the proximity to the park, what technical assurances you would have if you did relocate the piles. So all of those things were considered in the decision. We are not critiquing the NRC decision, but the Secretary is reflecting a number of other factors in his position.

Mr. BARTON. What legal authority does he have to make that recommendation? That is the main concern that we have. We have got concerns about the quality of the recommendation, but our primary concern is we don't see under law that he has the authority to make that proposal.

Mr. FIORE. In order for the Department to implement actions at that site, it would require additional legislation to do that, and without that additional legislation we do not have the authority to proceed at that site. So the Secretary announced he would develop and propose legislation. You are correct—we do not currently have the authority.

Mr. BARTON. That is really the only question that I have. Gentleman from Virginia is recognized for 5 minutes.

Mr. BOUCHER. Thank you, Mr. Chairman. I have a series of questions here and I will propound these to the extent of the time I have allotted, and those that I don't have an opportunity to ask this morning I will submit with the chairman's permission for the record.

Mr. Fiore, at page 6 of your testimony, you recommend that Congress evaluate H.R. 2641 in the context of the original intent of Title X, and I think that is a wise suggestion since the costs of some of these cleanup efforts have more than doubled. If we go back to the last enactment of Title X, in the report of the House Commerce Committee on the Energy Policy Act of 1992, I note a passage in that report with respect to the Federal Government's share of the cleanup costs that reads as follows, and this is a quote: "total payments for the thorium site would not exceed \$40 million" and then from the corresponding Senate report in that same year: "the proposed limit on the Federal Government's share for thorium cleanup is placed at \$30 million" and the report stipulated that the provision does not constitute an entitlement. Of course as of now, we have an authorization for total cleanup costs in the Federal share at \$140 million, and one could read the legislation pending before us as carrying the authorization even beyond that amount. I make this point not because I am hostile to the need to clean up the site or unsympathetic to the fact that taking waste to a Utah disposal site would be an expensive proposition. On the other hand, the costs for this cleanup have multiplied several times over the original estimates, and the clear congressional intent as announced in 1992, and it's important for us to take a close look at all of the equities that are involved since taxpayer monies, and I think also utility rate payer funds, are involved.

So the first question that I have for you is related to the involvement of State and local governments and their regulatory regimes as part of the reason that the costs have gone well beyond the original congressional intent, and do you believe that State and local government regulations have been responsible in some significant part to the increase in these costs beyond the amount that we originally expected?

Mr. FIORE. I don't think I am in a position to really estimate the impact that State and local requirements would have on the claims. I think the determination that the Department is expected to make is whether or not the claims that are being submitted to us reasonably reflect the costs that are being spent. My understanding is we are not passing judgment on whether or not those costs themselves are driven appropriately or inappropriately by any factors.

Mr. BOUCHER. Do you believe that State and local government regulations have had an effect in this area?

Mr. FIORE. I just have no basis for saying that.

Mr. BOUCHER. Mr. McDaniel, would you care to comment on that?

Mr. McDANIEL. I would be glad to. The answer to your question is yes, I do think the State and local regulations have had a dramatic impact. Our original proposal to clean up the site included encapsulation of the material onsite. That proposal was later rejected, and when Illinois became an agreement State, they required us to bury the material offsite. At that time, when we began this process, there was no site available in the United States to which to move the material. Enviracaire of Utah then was licensed, and we have now been moving the material there since 1994. I might just say that yes it increased the costs of course significantly to handle the material, to load the material, to put it on trains and to move it to Utah and to pay a disposal fee. That increased the costs by an order of magnitude.

In addition to that, as I mentioned in my testimony, as we learned more, the first material we sent there of course was from the surface cleanup, and as we have now gotten in the groundwater cleanup, we have discovered more about this that we don't know over these many decades of operation of this plant. And then, in addition to that, we have continued each year to have more vicinity properties added to this. All of those things have contributed.

Mr. BOUCHER. Do you think, Mr. McDaniel, that it might be appropriate for us to consider suggesting to the State and local gov-

ernments that have contributed through their regulatory burdens to the cost of this program that perhaps they bear some of the cost of this cleanup so as to offset the added burden to the Federal Government?

Mr. McDANIEL. Well, I would not think so, but certainly—.

Mr. BOUCHER. You would or you would not?

Mr. McDANIEL. I would not. I think that is something certainly you all might consider, but the benefits of this to the taxpayers came from the contribution that this made to the national defense, and it is my view that the requirements that have been made, while some of them have been the subject of much discussion and much debate, I think they are legitimate concerns that when you have a facility that is located within city limits, I think the city has a legitimate interest in determining how that should be cleaned up.

Mr. BOUCHER. All right. Thank you, Mr. McDaniel. Mr. Chairman, I ask unanimous consent that the balance of these questions be submitted to the witnesses and that their written responses be included in the record.

Mr. BARTON. Well, this subcommittee is generally known as a States' rights subcommittee, so we would assume the States have the right to help clean it up if they want to include the additional charges. Let us see who was first here, I think Mr. Shimkus of the members. Mrs. Cubin is prepared, if we want to recognize Mrs. Cubin, who is one of the cosponsors or chief sponsors of the legislation. Welcome to the subcommittee.

Mrs. CUBIN. Well, thank you, Mr. Chairman, for the hospitality of allowing me to sit at the dais and also forgive my tardiness this morning. Imagine my surprise when I went to my car and someone had tried to steal it and jimmied a wire into the ignition. So that is why I was late getting here.

I have only three questions that I would like to directly address to the panel, and so I hope I have time to do it, but I do feel, and I will also obviously submit my opening statement for the record, but there are a few points that I want to make that will be shorter than going through the question and answer process.

During World War II, the government tapped U.S. producers of thorium and uranium to have their mines and mills available for any government needs, and I think it is only fair—I think it is fair to suggest that since the Federal Government was the only customer, that had there been other customers, prices might have been higher, there might very well have been other things built into the contracts that wouldn't have left these companies in a situation where they are now with the cleanup, and the thrust that I would like to make today because I know my colleagues are going to question it is why should the government be "bailing out" the uranium companies at this point in time.

And these elements were used, as was mentioned by Mr. McDaniel, for national defense purposes, and so at that time all of the taxpayers benefited. We continued to benefit from that production, and while reclamation of the mill tailings from uranium and thorium that was produced was not recognized as hazardous, now that they are hazardous and now that we have to deal with cleaning up the groundwater as well, it is a much larger, huge expense than it was in the beginning. The energy policy that was enacted in 1992 recognized the equity of the Federal Government in cleaning up these mill sites as well, and Title X of the Act established a program for reimbursement for the remediation costs incurred by the uranium active uranium and thorium sites. So I just want that on the record that this is not a bailout for the industry.

I don't recall which Secretary it was that said it is our moral obligation to help clean up these sites. So now I will just go to the questions.

Mr. McDaniel, would you please explain to me the wide range of the various costs at the sites that are eligible for reimbursement under Title X.

Mr. MCDANIEL. Well, of course, the one with which I am most familiar is the one that our company is involved in the cleanup. So I can't speak to all of the other sites, but I think that, at least it would be my view, the wide range relates to the location, the cleanup standards, and how many vicinity properties are impacted from the facility side itself. We happen to have all of those factors at our site located within the city limit. Also, we have more than six hundred vicinity properties which were impacted, which we did not know going into this process, and then we have more stringent cleanup standards, what I will call a residential cleanup standard, which you might not have in a more remote location. Those would be the principle things I think, Mrs. Cubin.

Mrs. CUBIN. And that would be the main reason then maybe for needing to extend the date?

Mr. McDANIEL. Yes. I think now at least our experience at our site is that the more that we have gotten involved in the cleanup, the more we have learned about the needs of the cleanup and particularly with the additional vicinity properties which we continue to have designated for cleanup, and in addition to that, the groundwater contamination which seems to be something that you only know about as you get into the excavation process and where we are still involved in that process.

Mrs. CUBIN. Thank you. I think it is important to note, too, that the government's contribution to the reclamation of the commingled sites does come from a self-contained fund which is comprised of government contributions and utility contributions. It does not come from the general budget. I would ask any of the witnesses why do you think it is necessary that we amend Title X in this regard? And could you just briefly say what the benefit is to the American taxpayer, to justify their payment into this.

Mr. FIORE. Again, is your question commenting on the appropriateness of the current Title X provisions or the proposed ones in 2641?

Mrs. CUBIN. The proposed.

Mr. FIORE. The proposed ones. In my testimony, I commented there are a few things that I think are improvements to the current process, which I think is already working very well. I agree with what my industry counterparts have said, that we seem to have hit a rhythm on processing claims. But the requirement to produce a plan for subsequent remedial action of forces industry to make estimates of what might be required, and as the gentleman next to me said, it is difficult often to estimate those changessome of the cleanups are taking longer than we thought they would.

So we think it is reasonable to have an amendment that extends the reimbursement period and also we would encourage the requirement to submit these plans to be pushed out in time so that we all have greater certainty on what the costs would be. So I think those are improvements that can result from some of the provisions in the proposed bill.

Mrs. CUBIN. Mr. Chairman, I would ask unanimous consent to ask one more question.

Mr. BARTON. Without objection.

Mrs. CUBIN. I would like to ask Mr. McDaniel, will you please explain why the Title X part of the Energy Policy Act of 1992 is not a bailout for the uranium and thorium industries?

Mr. MCDANIEL. Well, yes. From the viewpoint of our company, we acquired a company called American Pot Ash in the late 1960's, and one of the throw-ins was this very small thorium processing plant in West Chicago, Illinois. We operated the plant a very short period of time and now have been charged with responsibility under the law to discharge the cleanup. As I mentioned in my testimony, we have spent \$345 million to date, and we expect to spend another \$100 million, and the DOE has determined that the government's share of that cleanup cost is 55 percent.

To date, we have been reimbursed \$69 million, which is about 20 percent. In addition to that, all the money has to be paid when the cleanup is done. The reimbursement process, although it is working well for us, does not take into account the time value of the money. So I guess I am supposed to stop.

Mrs. CUBIN. No, that was her beeper. You can go ahead.

Mr. McDANIEL. So we not only are we having to spend—we have spent 80 percent of the money to clean this up for a problem we did not cause. We also have to pay all the bills as they come due and wait for the reimbursement process subject to this cap. We certainly don't look at this as a bailout. We think the taxpayers received the benefit of this through the development of our national defense, through the nuclear defense programs, and we think that the taxpayers are also benefiting by the cleanup of these tailings in getting them moved to a remote site in Utah.

Mrs. CUBIN. Thank you, and thank you, Mr. Chairman, for your courtesy.

Mr. BARTON. Thank you, Congresswoman Cubin. Does the gentlelady from Missouri, Congresswoman McCarthy, wish to be recognized for questions?

Ms. McCarthy. Very briefly, Mr. Chairman.

Mr. BARTON. Recognized for 5 minutes.

Ms. McCARTHY. Thank you, Mr. Chairman. I just wondered how realistic the date is that is being proposed in this legislation as far as completion of the task. Please understand, I am supportive of doing what we have to do to get it completed, but I just want to be sure that we address it, we are doing it responsibly with a date we can all meet.

Anyone.

Mr. MORGAN. Well, as far as Umetco is concerned, we have two of the higher cost sites, and I can assure you that our management will be former management if they don't complete these remediation efforts within the time period we are projecting at present time.

Ms. McCARTHY. Does that go along with the sponsors of this bill, former members?

Mr. MORGAN. No. I don't comment on those.

Ms. McCarthy. I wanted that assurance.

Mr. MCDANIEL. Well, I might comment on that as well. We believe it is in our company's best interest to get this problem solved as soon as we can. So we are doing everything we can to expedite this process. It is of course a slower process than any of us would have anticipated when we began. But we believe it is in our interest. We believe it is in the country's interest to get these tailings stabilized, and we are making every effort to do that. We do believe that the provisions proposed by this bill are reasonable from our viewpoint, and we do believe that we could complete the work within the time allotted.

Mr. MORGAN. Could I make one additional comment?

Ms. McCarthy. Yes.

Mr. MORGAN. It is important to recognize this is a partial reimbursement statute covering only the government's portion of the responsibility. It is not in the interest, certainly of our company or any—at our company we have two sites. There are about 55 percent government, what we call government tailings at our Uravan site in Colorado and about 26.2 percent site of the tailings in Gas Hills, Wyoming, are government tailings. Given the partial reimbursement nature of the statute, it is not in our interest to spend any more money or any more time than we have to to do the cleanup.

Ms. McCarthy. Thank you.

Mr. FIORE. And let me just echo that in terms of the other sites not covered by these gentlemen. I think because the companies are sharing the cost of the cleanup, they are driven to try to get that done as quickly and as safely as possible. So I think it is reasonable to expect that the cleanups will be done in the time period proposed.

Ms. McCARTHY. Do you have any other impediments that are unanticipated? I know groundwater contamination has been a real issue in the delay, but it is a critical issue to address. Are there other things out there we cannot anticipate that might be coming up in this final time period we are addressing today?

Mr. MCDANIEL. At least at our site the identification of additional vicinity properties, these would be properties where the material was either taken by local homeowners, or in other ways taken offsite from the factory site, and at least our experience is that we have continued to identify those sites and we would expect there will be some additional vicinity properties added, and that of course would take more time.

Ms. McCARTHY. Well, Mr. Chairman, I thank you for this opportunity and commend the sponsors for this bill. I hope we do have a realistic date to determine otherwise in the course of its passage, please make that adjustment.

Mr. BARTON. I thank the gentlelady. Does Mr. Shimkus now wish to be recognized?

Mr. SHIMKUS. Thank you, Mr. Chairman.

Mr. BARTON. Five minutes.

Mr. SHIMKUS. I also want to welcome Mr. McDaniel. He has appeared before the committee before in July 1998 on this same issue. Obviously Kerr-McGee's representation in West Chicago has the great interest of Illinois members, and really former committee member and now Speaker Dennis Hastert has worked very closely on this issue, and Congresswoman Cubin mentioned a point that I was going to bring up, and just for the record, your company was not the processor of thorium, but in essence, purchased the site and then was required to do the remediation by the Federal Government, and then the State of Illinois, EPA, got involved; is that correct?

Mr. MCDANIEL. That is correct, Congressman, yes.

Mr. SHIMKUS. So in being good public stewards in trying to do the cleanup, instead of trying to drag this out in the court process, trying to reassess liability, I just think that is a point that needs to be addressed.

Deputy Secretary Fiore, one effect of the language of H.R. 2641 is to make the single thorium licensee eligible for distribution of that unused reimbursement authority which is presently restricted only to the uranium licensees.

Mr. McDaniel has testified that Kerr-McGee has already spent \$345 million on the West Chicago site and estimates a total cost of \$441 million. The Federal share is supposed to be 55 percent, but the current statutory ceiling for thorium is only \$140 million. What is the Department's position on this particular provision that would allow Kerr-McGee to claim a portion of the unused uranium ceiling?

Mr. FIORE. My understanding of the legislation is that it does not increase the thorium authority. It does?

Mr. BARTON. You answered correctly, I believe. Let me ask the counsel. It is a complicated answer. If the gentleman will continue, we will try to get a correct answer for the record. It is very complicated.

Mr. SHIMKUS. I would like to yield to my colleague, Mrs. Cubin, if she would like to add to this question or discussion.

Mr. BARTON. Sure.

Mrs. CUBIN. I am not sure what is complicated about it, because the intent is not complicated. The intent is that after the uranium sites are cleaned up, if there is money that is left, that it goes to the thorium site in West Chicago. Now, if the language doesn't reflect that we need the address it.

Mr. LARGENT. Well, let me see if I can bring a little light to the subject. First of all, you are correct, Mr. Fiore, it does not increase the overall authority that is currently in effect, but it does two things. One, it is raising the dry short tonnage ceiling from \$6.25 to \$10, and it also says that if there is any money left over at the end of the program, that it would be disbursed not just to uranium sites, but to uranium and thorium sites, the additional funds left over at the end of the program. So it does not increase the overall authority, which is what your response was and that is correct.

Mr. BARTON. The counsel indicates that those answers were correct, but to me that seemed complicated but I am from Texas. Mr. Morgan, yes, sir.

Mr. MORGAN. If I heard that DOE's testimony correctly, they want to maintain discretion as to whether they will or will not distribute that excess.

Mr. BARTON. That is correct.

Mr. MORGAN. To the uranium and thorium site licensees. Mr. BARTON. That is correct.

Mr. MORGAN. And I think it is the view of the industrial members of the panel that that is not appropriate. We think they should be mandated to do that, and there is a provision in the 2641 that would require DOE to distribute the excess.

Mr. SHIMKUS. Reclaiming my time, if that is the case, the ques-tion then goes back to Mr. Fiore, would it be your intent to help refund the thorium facilities with this given Mr. Morgan's state-ment, that it is up to your discretion? What would be the DOE's position?

Mr. FIORE. What I would like to do is give you a short answer right now and then respond to that in writing. The short answer right now is I don't want to try to prejudge what the Secretary of Energy in 2005 will choose to do with that particular time in terms of how he or she might exercise their discretion, but we will give you an answer in writing on that.

[The following was received for the record:]

Title X of the Energy Policy Act of 1992 provided for several limitations on reim-bursements. It limited the total authorized reimbursements to a specified dollar amount for the uranium licensees as a group, and to a different specified dollar amount for the thorium licensee, and it also imposed limits on the dollars per short ton of tailings that could be reimbursed to the individual uranium licensees. It provided authority to the Secretary of Energy to make a decision in 2005 whether or not to make reimbursements under any still-unused uranium reimbursement authority to uranium licensees who had costs that exceeded the short ton limit. DOE believes this discretion now provides the Secretary the option to evaluate other needs in future years as well as the needs of the uranium licensees.

In his testimony on April 5, 2000, Mr. McDaniel of Kerr-McGee provided estimates for the West Chicago thorium site cleanup that were higher than the Depart-ment had heard before. Specifically, he testified that the total Federal share is now estimated by Kerr-McGee to be \$243 million, and he also testified that this estimate does not include other potential increases in scope. This compares to the \$149 million, including inflation adjustments, that the Department had assumed previously. Current overall total Title X program authority is \$490 million (\$350 million for uranium licensees and \$140 million for thorium licensees) plus adjustments for in-flation. Previous estimates by DOE were that \$390 million would be reimbursed to all licensees under existing authority and that up to \$40 million could be reim-bursed to the uranium licensees at the discretion of the Secretary after 2005, With the required adjustments for inflation, there is likely to be approximately \$100 mil-lion in total program authority remaining after these reimbursements are made.

If the proposed amendments are enacted, the Department would be directed to re-imburse all or most of the estimated Federal share of uranium and thorium costs. This includes the \$40 million in uranium licensee costs that are estimated to exceed the current dry short ton limitation as well as the nearly \$100 million in thorium site costs for which there is no current reimbursement authority. Thus, the net effect of this legislation would be to increase the estimated liability of the Title X program by up to \$140 million, including approximately \$100 million that is not reim-bursable under current law. This could require approximately \$100 million or more in total appropriations from the Uranium Enrichment Decontamination and Decommissioning (D&D) Fund during the second half of this decade than DOE currently anticipates; and, if annual appropriations from the D&D Fund do not increase, it means that approximately \$100 million in planned cleanup at gaseous diffusion plants may have to be deferred.

The Department does not question the cost effectiveness of the Title X cleanups. The licensees are doing the cleanup work with their own funds, and the Title X program provides only a partial reimbursement of their costs. However, the Department supports providing discretion in Title X because it gives the Department the option in later years to evaluate the overall program needs and those of the licensees. We do not support changes to Title X that would make additional reimbursements to the thorium licensee above the amount currently authorized non-discretionary.

Mr. BARTON. Gentleman, do you have one more question? Your time is expired.

Mr. SHIMKUS. No. I will finish by saying you understand the importance of trying to get some DOE intent on the record so that we can use that in the next administration to see some consistency in a position, and I yield back.

Mr. BARTON. The gentleman from Ohio, Mr. Sawyer, is recognized for 5 minutes.

Mr. SAWYER. Thank you, Mr. Chairman. First of all, let me apologize for not being here to hear the testimony. So if my questions seem redundant of materials that have already been covered, I apologize.

Let me just begin with the premise that I think I understand the conceptual linkage between the D&D funds that are set to clean up the uranium enrichment plants under EPAct. I don't understand the conceptual linkage between those funds and the thorium cleanup. Can you illuminate that for me?

<sup>^</sup>Mr. M<sup>°</sup>CDANIEL. Mr. Chairman, would you permit me to start on an answer to that while Mr. Fiore—.

Mr. FIORE. I need to get you an answer on that. I don't have one. Mr. BARTON. Mr. McDaniel might want to try.

Mr. McDANIEL. I am willing to try. It is our facility. It is our belief that the linkage is that, just like uranium, thorium was used in, for example, the Manhattan Project, and the production from this plant at West Chicago was dedicated to the Department of Defense for the development of our nuclear program. In the early days of that program, it was not known whether they would use thorium, uranium or plutonium in support of the national defense, and so as it progressed they used the product from our plant just as they did from the uranium plants, and so that is why we believe we are included in Title X of the Energy Policy Act.

Mr. SAWYER. I don't disagree with the ultimate need. I guess I am trying to get at the question of who pays. Utilities contribute directly to the cleanup of the uranium sites; is that not correct?

Mr. FIORE. They make a contribution to the D&D fund from which the reimbursements are made.

Mr. SAWYER. And I am assuming that is an allowable cost of doing business under the regulatory structures of the States in which they operate.

Mr. FIORE. I believe that is the case, sir.

Mr. SAWYER. My question, in trying to get at the conceptual linkage, is not one simply of need but rather of the appropriateness of ratepayer paying for the thorium cleanup, even if those are dollars that are left over and whether that is an appropriate revenue stream for an obvious need that I don't disagree with, but whether or not we are sending the proper dollars to the proper places. Does that question make sense to you? Mr. FIORE. I believe I understand the question which is whether or not such a cost is appropriate.

Mr. SAWYER. Whether it is appropriately borne under rate of return price structures for utilities when the cost is going to an equally important, but nonetheless, purpose, that is, not directly beneficial to rate payers as they support the cost of their generation.

Mr. FIORE. I understand the question, but I think I personally, and the Department, are not in a position to comment on whether or not that is an appropriate charge that would be passed on to ratepayers.

Mr. SAWYER. Someone in the Department of Energy, I would hope, would have a thought about that again.

Mr. FIORE. Again, we don't pretend to be experts on State regulations for what is reimbursable or not to the utilities or what utilities can put in their rates.

Mr. SAWYER. I guess I am getting at the question of whether or not there is a limit to how much ratepayers who presumably are benefiting directly from at least a portion of this, how much they need—they ought to be paying for what essentially a government purpose that ought to be borne more generally by taxpayers of the United States whose defense was benefited. I think that is an important question to ask, particularly as we move from an era of rate of return regulation to a competitive, restructured situation where the utilities will be more or less competitive depending on the amount of burden they have to bear in this.

Mr. FIORE. If I interpret your question right as to whether or not that is a reasonable charge that the utilities are paying now or whether that is a ceiling that would go up or not, I think the best I can say is that Congress, when it passed the legislation that enabled or required the utilities to make the contribution into the D&D fund, evaluated what those costs were, and the reasonableness and the appropriateness of it at that time, and we don't have any disagreement with that legislation that was enacted.

Mr. SAWYER. Nor do I. It is whether or not the funding stream that results from the legislation that we are thinking about is driving dollars to an appropriate place from an appropriate source, and by extension, whether or not the uranium sites will have sufficient funds to achieve the cleanup they envision and, at the same time, whether the thorium site, third in line or 40 in line or wherever they are, will have sufficient funds to do an equally important job without overburdening ratepayers. I grant you, it is not the Federal Department of Energy's role to be responsible for State rate of return regulation, but it is, I think, enormously important to understand the consequences of these kinds of funding streams on the rates that are paid by people.

Mr. BARTON. Gentleman's time is unfortunately expired.

Mr. SAWYER. I appreciate the chairman's latitude.

Mr. BARTON. Gentlelady from New Mexico is recognized for 5 minutes.

Mrs. WILSON. Thank you, Mr. Chairman, and now that my colleague from Wyoming is here, with or without her car, and I want to thank her for bringing this legislation forward, and my friend from Oklahoma for his work on this. I really only have a couple of questions that haven't have been asked by other members thus far but may have been asked and I stepped out of the room.

I wanted to ask the Department of Energy, in your testimony, you said that all the work would be done on these sites by 2007 except for four, and I am wondering if you could tell us which four sites those would be that won't have work completed by 2007.

Mr. FIORE. Let me just check. I don't know. Maybe if you want we can, while my colleague looks for that answer, I will try to deal with the next question.

Mrs. WILSON. Okay. My other question is actually for Mr. Morgan, although Mr. McDaniel may also have a comment on this. Are any of the Title II sites also Superfund sites and does that add to the cleanup costs?

Mr. MORGAN. It happens that two of the very high cost sites are CERCLA or Superfund sites, and both happen to be in Colorado, Uravan which is the oldest site, Uravan, Colorado, and also the Cotter site in Colorado. It just more than coincidentally both of those happen to be at the very high end of the cost spectrum in terms of cleanup.

Mrs. WILSON. Is there a marginal increase in cost because they have to comply with the Superfund regulations as well as this cleanup under Title X? Is it more expensive to do this under Superfund?

Mr. MORGAN. I would say yes, because of the more rigorous regulatory regime that they must adhere to.

Mrs. WILSON. Mr. McDaniel, do you have any further additions to that?

Mr. MCDANIEL. Well, I just say that at our West Chicago site, some of the offsites are subject to EPA Superfund regulation. Our experience is not that they have been more expensive than the cleanup that we are doing under Title X, under our license from the Nuclear Regulatory Commission.

Mr. FIORE. I do have that answer. The four sites are the Dawn site, the Home Stake site.

Mrs. WILSON. Dawn Site where?

Mr. FIORE. Washington, and the Cotter facility in Cannon City, the Home Stake site and—.

Mrs. WILSON. The Home Stake site in?

Mr. FIORE. New Mexico and the Quivira site at Ambrosia Lake, which is—.

Mrs. WILSON. That is more than four. What were the four again? Mr. FIORE. The Quivira-Ambrosia Lake is one site. So that is one, Dawn is two, Cotter is three, and Home Stake is four.

Mrs. WILSON. And Cotter is in?

Mr. MORGAN. It is Colorado. That is one of the CERCLA sites that I just mentioned.

Mrs. WILSON. And Ambrosia Lake?

Mr. FIORE. New Mexico.

Mrs. WILSON. So 2 of the 4 sites that won't be cleaned up by 2007 are in New Mexico?

Mr. FIORE. Yes.

Mrs. WILSON. I had the opportunity to go out to the Grants area, which is actually outside of my District—of course, the whole northwest corner of New Mexico has a long history of mining, and I had the opportunity to go out and spend a day there, and one of the things that I would like you to comment on is there are a number of tailings piles out there; some of them that were done exclusively by the Federal Government and some that were done by private industry with some reimbursement. I wonder if you can give us a cost comparison of how much it cost the Federal Government to do this themselves as opposed to under these cooperative or reimbursement arrangements.

Mr. FIORE. What I would like to do is answer that for the record because I think it would involve a fair amount of explanation with all the different sites and all the different characteristics to be sure we did a fair comparison because as one of my colleagues said, every site is different, has different characteristics. So we would have to try to, in a sense, normalize those costs to make a valid comparison for you. I think that is better done in writing.

[The following was received for the record:]

In general, uranium milling site cleanups under the Department's Title I Uranium Mill Tailings Remedial Action Project were more costly than the Energy Policy Act Title X site cleanups by the licensees on a per ton basis. There are several reasons for this. First, under Title I, the Department had to clean up essentially abandoned sites that were no longer licensed. This meant that site access or title to each site had to be acquired, the site had to be characterized without the benefit of previous knowledge, and the contractors had to be mobilized for each individual site, often in remote locations. In contrast, the Title X sites have been licensed and operated continuously for several decades by the licensees. Cleanup was an extension of their production operations and benefitted from the use of existing resources including previous knowledge, staff that had operated the plant, and existing production equipment that could be used for cleanup. In some cases, the licensees operated for at least some period with the knowledge that they would also have to clean up their sites.

On average, the Title I sites cleaned up by DOE were smaller than the Title X sites, which means that there are greater economies of scale in cleaning up many of the Title X sites. Also, of the 13 uranium milling sites in the Title X program, the only one at which uranium mill tailings were relocated was the Tennessee Valley Authority (TVA) site at Edgemont, South Dakota. Uranium mill tailings at 12 of the 22 Title I sites were relocated by DOE, which increased costs significantly. DOE also cleaned up more than 5,300 vicinity properties as part of the Title I project. These generally were private properties near the milling sites that had used tailings for construction fill or landscaping. We do not believe that vicinity properties have been a significant problem at Title X uranium sites because the sites have been continuously licensed and, in general, the off-site use of tailings was controlled. The TVA site is an exception, with more than 100 vicinity properties. Since the Title I sites were part of a Federal program, there were additional requirements for worker health and safety; and public stakeholder involvement was also greater. The latter was a significant factor at many sites because it resulted in the disposal of uranium mill tailings off site and changes in the way tailings were transported (i.e, train versus truck).

There are three Title X sites in the Grants, New Mexico, area, and, in addition, DOE cleaned up another site, Ambrosia Lake, in the same area under Title I. The Title I Ambrosia Lake disposal cell contains about 9.7 million short tons of tailings. DOE's total costs for the Title I site were \$33.8 million, or about \$4.10 per short ton. The Title X sites are the Bluewater Mill (23.9 million short tons), the Homestake Mining Company site (22.3 million short tons), and the Quivira Mining Company Site (33.2 million short tons). The estimated total costs for the three Title X sites are about \$3.70, \$4.50, and \$1.70 per short ton, respectively. Currently, the licensees' total estimated costs for the Title X uranium sites run from cheut \$1.20 to \$15.50, nor short ton after the average cost is obset

Currently, the licensees' total estimated costs for the Title X uranium sites run from about \$1.20 to \$15.50 per short ton of tailings, and the average cost is about \$5.00 per short ton. By comparison, the costs for the Title I sites ranged from about \$4.10 for Ambrosia Lake (the largest site) to about \$112.20 per short ton for Canonsburg, Pennsylvania (the second smallest site). The cost for Title I sites averaged about \$21.30 per short ton. However, the 10 sites where the tailings were disposed of on site averaged about \$9.90 per short ton, compared to \$33.60 per short ton for the 12 sites where the tailings were relocated to more remote disposal sites.

#### 30

Mrs. WILSON. I would appreciate that, and when you do that, a very good site to do it at, I think would be in New Mexico where there is one pile on one side of the road and another pile on the other side of the road, and came from pretty much the same ground with the same stuff, and that would be probably a pretty good comparison to start with.

Thank you, Mr. Chairman.

Mr. BARTON. The other distinguished gentleman from Ohio, Mr. Strickland, is recognized for 5 minutes.

Mr. STRICKLAND. Thank you, sir. Mr. Deputy Assistant Secretary, if this bill were to pass, in your judgment, would the Department ask for an increased appropriations for the work that is to be done under this bill?

Mr. FIORE. My expectation is no, we would not.

Mr. STRICKLAND. That being the case, is it your opinion that as a result of this the D&D work at the gaseous diffusion plants in Piketon, Paducah and Oak Ridge could be affected in terms of rate of cleanup or time lines for cleanup?

Mr. FIORE. No, there would be no intent to delay any of that work. The work at these particular sites, as you are well aware, is very, very important and a high priority for the departments. So no, we would not delay those.

Mr. STRICKLAND. How can we increase costs without—when there is a limited amount of money to be appropriated, how can we increase the costs of that cleanup, which will occur under this legislation, and the timetable of the work not be affected?

Mr. FIORE. I think it gets back to actually how much is appropriated specifically each year by Congress for the disbursement of the claims. It has to do with the rate that the claims are paid out. Even if there is added total costs over many, many years, if the reimbursement amount stays at \$30 million level as it has for the last few years, there would be no impact on the other activities such as the gaseous diffusion plants.

Mr. STRICKLAND. My understanding is that this bill would increase the reimbursement rate per ton and require the Department to reimburse an estimated \$40 million or more of federally related costs that are now discretionary funds. And I guess what I am having a difficult time understanding is how can you increase costs and have a limited appropriation without that affecting work at the gaseous diffusion plants? If you can just help me understand how—it seems to be there ought to be a relationship between appropriated funds and work to be done if there is a limit on those funds that are appropriated.

Mr. FIORE. I think, again, it really gets to the number of years you would make the payments. Right now we already have claims that we have received that exceed the appropriations that we have been provided by Congress. So we have built up a backlog. Again, if there were a total increase in the cost of the program, that just builds up the backlog of claims, and perhaps rather than for 8 years we would need to pay \$30 million a year for 9 years, something like that. It does not have an effect in the near term. Ultimately you would need to disburse those funds, but it is not a current issue. It is more an issue at the end of the project. Mr. STRICKLAND. I have a question I would like to direct to all three of you. Ratepayers, as my colleague from Ohio said, pay into this fund. Do you think it is appropriate to use these resources from ratepayers for the purpose of cleaning up thorium when the ratepayers apparently are receiving no more benefit than every other taxpayer in this country? I guess my question is, this needed work that needs to be done, ought not the resources to carry out this work come from some other source rather than ratepayers who are receiving no particular benefit over any other American citizen? Is it fair—I guess better, simply, is it fair to use ratepayer funds to carry out this work when those ratepayers have received no special or particular benefit? I am just asking, I guess, for your opinion as to whether or not this is a fair thing that we are doing here, not whether or not the work needs to be done, because I think we all think it needs to be done, but maybe we should just consider a different revenue source for getting that work done.

Mr. FIORE. Let me take the first shot at it. I think when the various Acts were passed by Congress that authorized the reimbursement of these funds, it was the judgment of the Congress at that point that it was a reasonable approach. I have no basis for disagreeing with that. As my colleagues have said, there is a link to the former activities for the Federal Government, and again, the payment into the fund isn't solely for this particular cleanup. Dollars are paid into the D&D fund, and then they are used for the cleanup of the gaseous diffusion plants, and those facilities clearly provided material that the utilities used as a reasonable expense.

Mr. STRICKLAND. But, see, I don't have any problem with that. The issue is the thorium site. Obviously, these ratepayers, there is a connection between the benefits they receive and the GDP facilities and the work that is being done there, but I do not see a connection between the thorium site and the ratepayers, and that is what I am asking for your opinion in terms of fairness and appropriateness.

Mr. FIORE. Let me try to deal with that.

Mr. BARTON. Answer that question and then we are going to go to Mr. Largent. I want the panel to have an opportunity.

Mr. FIORE. I think a very quick answer is there are two sources of revenue into the fund. The Federal Government makes a contribution, and the utilities do, and then there are disbursements out of the fund for gaseous diffusion plants and this. I think what you are doing is trying to make a link between some of the dollars going in, saying those are earmarked specifically for one thing. I think all the dollars go into the fund and all the dollars come back out. So an equal case can be made that it is the Federal dollars that are being contributed into the fund that are going toward the uranium thorium reimbursement, with the link to the weapons activities that is appropriate.

Mr. McDANIEL. I would only add this. I certainly do not think that I would want to try to make a case for the ratepayers having to pay for the thorium cleanup. I do want—.

Mr. BARTON. You would or would not?

Mr. McDANIEL. Would not. I understand that this is a multisource fund, that about six times the amount comes from the Department of Defense as comes from the ratepayers, and so I think it is a fair source of funding from our viewpoint for the thorium cleanup.

Mr. BARTON. Mr. Morgan, did you want to comment on the question?

Mr. MORGAN. I would just echo the comments that Mr. McDaniel made.

Mr. BARTON. We would recognize one of the sponsors of the pending bill, Mr. Largent of Oklahoma.

Mr. LARGENT. Thank you, Mr. Chairman. I would like to address some of the questions that my friend from Ohio raised as well. First of all, again to point out that this is a joint participation. In other words, as we heard testimony from Mr. McDaniel, Kerr-McGee is paying 80 percent of the cost of cleanup right now. DOE is paying 20 percent, even though the commitment the Federal Government made, this committee made was 55 percent. They are paying 80 when they should only be paying 45. So, I mean, you are talking about alternative sources, they are already 80 percent of the source today, and that is one of the problems that we are trying to address in this particular bill.

The second thing that I would say is that you can substitute ratepayer for taxpayer. It is all the same.

Mr. SAWYER. No, it is not.

Mr. LARGENT. Absolutely it is the same. Show me a ratepayer that is not a taxpayer or a taxpayer that is not a ratepayer; they are interchangeable.

Mr. SAWYER. Will the gentleman yield?

Mr. LARGENT. Let me go ahead and finish my question, and then I will be glad to yield if I have time at the end. Mr. BARTON. We are supposed to be directing questions to the

panel.

Mr. LARGENT. Right and I want to do that. Mr. Morgan, I want to ask you a question. We heard testimony from Mr. McDaniel that said that the Federal Government's commitment to the thorium site in West Chicago is 55 percent. The Federal Government has come in with a whopping 20 percent. You said in your testimony that the Federal Government's responsibility in some of your sites was around 25, 26, 27 percent; is that correct?

Mr. MORGAN. We have two sites. One is at Uravan, Colorado. That is an older site and, therefore, more government tailings. That is at about 55 percent government tailings. The site in Gas Hills, Wyoming is about 26.2 percent.

Mr. LARGENT. Okay. What percent of the Federal Government have they actually contributed to the site cleanup? Do you have that statistic? Have they met the requirement of the Federal Government? Have they paid 55 percent at one site and 27 percent at another?

Mr. MORGAN. No. We are currently-they have not-because of the backlog they have not-because we are now over the cap at least at the Uravan site by some significant margin, we are not being reimbursed at anywhere near the percentage that provided for.

Mr. LARGENT. That brings me to a question to you, Mr. Fiore, and that is, we have heard testimony from all the panel, frankly it is a little bit surprising, is that the reimbursement process is working. Maybe they are talking about the actual process of getting a check, even though I understand there is some delay in that and there is a cost—when you don't pay the IRS in time they charge you interest. I am assuming you don't pay interest to these guys when you don't get the check out on time. It is sort of a one-way street and I recognize that, even though I don't think it is fair. I don't understand why we would say that the reimbursement rate is working when you are reimbursing 20 percent to Kerr-McGee and less than the amount to this gentleman's company. The Federal Government is not meeting its obligation. So how can we say that the reimbursement rate is working?

Mr. FIORE. When Congress does the appropriation each year they make a determination as to how much money will be appropriated from the D&D fund, and each year typically the number, at least the last 3 years I believe has been about \$30 million. I think there is recognition on both the part of the Members of Congress and ourselves that this does create a backlog.

But the tradeoff is if you pay out those things quicker, do you need to either, as the Congressman said, increase the total appropriation or spend less at some other active cleanup sites. I think that is a tradeoff decision that we have to make and that Congress has to make, and at least for the last 3 years, spending at \$30 million does make some progress. It does provide a backlog right now but in balance compared with the active cleanup activities we have what we think is a reasonable balance.

Mr. LARGENT. But didn't the President in his budget that he submitted this year actually decrease this fund by \$5 million himself?

Mr. FIORE. Yes, he did. Again, as I said-

Mr. LARGENT. So we can talk about Congress doing the appropriations bills, and I can understand that because all spending bills originate in the House of Representatives, I am familiar with that, but the fact is the administration has kind of been out to lunch on this as well in terms of funding this at an appropriate level. I think there are really two issues that we are trying to address in this bill, and it really is to try to create some fairness in this in terms of meeting the obligation of the Federal Government.

There are two issues. One is the current cost reimbursement, which is why we are increasing it from \$6.25 per dry short ton to \$10 per ton, because everybody recognizes that the costs have increased dramatically in the last 10 years, and so this legislation is trying to increase that, still not going outside of the authority that this committee passed. Yes, it will increase the amount of the appropriation necessary, but it won't even come close to the necessary authority that this committee has given to this issue. That is one issue that we are trying to address by increasing the short ton limit which you are opposed to which I want to find out why.

The second is future liabilities. So this bill does two things in terms of addressing future liabilities. One is it extends the time from 2002 to 2007, because frankly the costs are greater and the problems are bigger. We didn't know about the water table issues that are going to have to be addressed that increase the cost dramatically, the fact that they now have to take the materials from West Chicago to Utah. Finally, there is a place since 1994 to take the materials, but prior to that, they didn't even have any place to go with them. So we are extending the timetable from 2002 to 2007, which you think is a good idea, but we are also saying that if there is excess funds left over which the DOE says there will be excess funds, there also probably will be excess liability. In other words, at the end of 2007, there is going to be more problems that still are left on the table that have been unaddressed, and we are saying that money should be appropriated to address these future liabilities that everybody is in agreement that there will be.

So why would the DOE be against, A, raising the short ton amount, and why would you be against saying that this money will be disbursed for its intended purpose?

Mr. BARTON. This will have to be the last question.

Mr. LARGENT. Okay.

Mr. FIORE. I think our position right now is not that ultimately the money will not get appropriated for the right purpose. I think it is simply whether or not we are doing it by a prescribed formula as established right now in the legislation, or whether or not the Secretary has the authority or the discretion at that time to make the reimbursements in a way that he or she sees fit.

Mr. BARTON. Does the Department object to the change in the reimbursement rate for the short ton? Is the gentleman from Oklahoma correct that you oppose that, your Department opposes that?

Mr. FIORE. What we are saying is that we would prefer if the Department—the Secretary—not be required as proposed in the bill to make those reimbursements for anything over the short ton limit which the bill would increase from \$6.25 to \$10. But let me say, we do not have a strong overwhelming objection to that. We recognize our liability and the requirement to ultimately pay reasonable costs. I think the Department is just trying to preserve as best it can the discretion that the Secretary was given when the Act was passed.

Mr. LARGENT. I yield back, Mr. Chairman.

Mr. BARTON. We are well represented by Ohio and Maryland today. We have two gentleman from Maryland, the distinguished ranking minority member from Maryland, Mr. Wynn, is recognized for 5 minutes.

Mr. WYNN. Thank you, Mr. Chairman. Having come in late, I will forego questions at this time and perhaps come back later.

Mr. BARTON. We appreciate the discretion. The distinguished gentleman from Maryland on the majority side, Mr. Ehrlich, is recognized for 5 minutes.

Mr. EHRLICH. Mr. McDaniel, after listening to your testimony, I will be glad to yield after some brief questions to Mr. Largent or Mrs. Cubin or whoever. I have some sympathy for your corporate history. In my private law practice, I represented a company who got, a very successful company in the United States who decided in the 1960's to purchase a small asbestos manufacturer. 50,000 lawsuits later, that great idea has cost a lot of money.

You had talked about, with respect to cleanup, the \$345 million spent. Can you break that down in the context also of—you had cited 600 impacted properties, and you had cited one primary factor, I guess leaching with respect to water tables, and can you give me, as someone who did practice in this area, kind of a breakdown of your cleanup and how those properties have been identified over the years, those additional properties, and the process you follow with respect to adding properties?

Mr. MCDANIEL. I am going to ask you for permission to submit in writing the breakdown. I perhaps could give you a general idea, but I will just say that the bulk of the cost to this point has been cleaning up the factory site, and the increased costs that we discussed there is as we are doing deep excavation.

We started—for example, there were tailings on the surface, and so we started cleaning up the tailings and we sent those out to Utah, starting in 1994. If I didn't say this I should have. Our original plan was to encapsulate the material onsite, but when that plan was not approved, we were required to find another disposal site, and so the principal thing that has increased the cost would be the transportation which I would estimate to be more than \$100 million to move the material to Utah and to pay the disposal fee. So of the \$345 million spent to date, probably \$100 million has been that.

And so far as your question is concerned about the vicinity properties, I think we started with the flyovers to try to identify these, and I am not a scientist, so I may not be saying this exactly right, but then as those properties were identified, then more specific testing was done on the ground itself, and then as we would find some material, excavate it, clean it up, and perhaps as we got deeper in the excavation, that would show that it had spread farther on to someone else's property.

And so I think—I don't recall the exact number, but I think we started out thinking that we had maybe 150 or 200 properties, and I think we have now cleaned up more than 450, and we are thinking that we have as many as 600 yet to clean up, and probably there will be more identified as that excavation goes forward.

Mr. EHRLICH. With respect to process, obviously there has to be notice, and I guess your attorneys call the other attorneys or whatever, or what happens with respect to notification? How does that occur?

Mr. McDANIEL. Well, when we are able to identify property, we notify the property owner. If they have an attorney, of course we meet with them and we try to work out a process by agreement to excavate, and actually, I would just say that on the vicinity cleanup, there haven't been that many instances of individual property owners hiring lawyers. We have gone out and volunteered to do it, and we have had to get necessary permits, zoning and that sort of thing from the city, but it has mainly been done by agreement.

Mr. EHRLICH. What about lawsuits?

Mr. McDANIEL. Over the course of this project, which we began the decommissioning process with the Nuclear Regulatory Commission in 1973, we have had a number of lawsuits for a variety of reasons, maintaining a nuisance, diminution of property value, that sort of thing. Virtually all of those have been resolved by agreement. To my knowledge we have not gone to trial on any of those private citizen lawsuits.

Mr. EHRLICH. Thank you, sir. I will yield to Mr. Largent or Mrs. Cubin. I yield back, Mr. Chairman.

Mr. BARTON. Gentleman yields back the balance of his time. That concludes the hearing on this bill. The Chair wants to announce to

the Department of Energy representative, this is a bill that is pos-sible for markup, I say possible, not probable, next week. There have been a number of questions raised both on the minor-ity and majority side, so staff will be in touch with representatives of DOE to see if we can reach some compromises. I would say, based on the hearing, that it is unlikely this bill will be put on the markup calendar next week, but it still is a possibility. So I would encourage you to instruct your staff to be available on a time-sensitive basis to see if we can reach agreement. We are going to adjourn this hearing, and then 1 second later we are going to reconvene to start the next hearing on the next bill. This hearing is adjourned.

[Whereupon, at 11:30 a.m., the subcommittee was adjourned.]

37