

**Testimony by Wesley P. Warren, Director of Programs
Natural Resources Defense Council
Before the Senate Committee on Energy and Natural Resources
On S. 2203, Uranium Decommissioning and Decontamination Fund
Washington, D.C.**

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Good morning Mr. Chairman and Members of the Committee. My name is Wesley Warren and I am the Director of Programs for the Natural Resources Defense Council (NRDC). NRDC is a not-for-profit environmental advocacy organization with over 1 million members and activists whose mission is to safeguard the Earth: its people, its plants and animals and the natural systems on which all life depends. Before joining NRDC, I served as Associate Director for Natural Resources, Energy and Science at the Office of Management and Budget and the Chief of Staff for the Council on Environmental Quality in the White House. I thank the Committee for inviting me to testify today and I am here in support of Senator Sherrod Brown's bill, S. 2203, to reauthorize the Uranium Enrichment Decontamination and Decommissioning Fund.

S. 2203 solves an important problem in a direct and equitable fashion. The legal authority for the Uranium Enrichment Decommissioning and Decontamination Fund (D&D Fund) of the Department of Energy (DOE), established in the Energy Policy Act of 1992 (hereafter EPACT), expires this year and needs to be extended. This extension should apply both to the authorization to spend money to cleanup contaminated nuclear sites and to the authority to collect contributions from the beneficiaries of the program. S. 2203 performs this task in the simplest fashion possible, by extending the framework of the current program for ten additional years. We urge your support for this important bill.

Background

The nuclear weapons program of the DOE has supported the military forces of the federal government by producing nuclear material for warheads and reactor fuel for the navy. Even before DOE – and its predecessor, the Atomic Energy Commission – were created, the government for decades has relied on nuclear materials produced from the mining, milling and processing of raw uranium at numerous sites across the country, and enriched into a usable form at special government plants. Starting in 1964 the government's three uranium enrichment plants (located at Oak Ridge, Tennessee; Paducah, Kentucky; and Portsmouth, Ohio) were put into service enriching uranium for commercial reactor fuel at electric utility power plants, subject to a legal requirement that the utilities pay the full costs of operating the plants to provide that service (section 161v of the Atomic Energy Act).

This arrangement was highly beneficial to the electric utility industry, which was spared the cost of financing, building, and operating a completely new enrichment plant, including paying all the costs of the eventual cleanup of the plant. However, during the

decades that this arrangement was in effect and despite the full cost recovery requirement in law, no money was set aside by the nuclear utilities to pay their fair share of the cost of decommissioning and decontaminating the existing three enrichment plants. This situation left the taxpayer facing a cleanup effort that was expected to take decades to complete and cost billions of dollars.

EPACT rectified this situation by creating a Decommissioning and Decontamination (D&D) Fund that would cleanup old uranium and thorium mill tailings sites and the three DOE enrichment plants. The design of the D&D Fund and the contributions to it was based on three general principles:

- The amount of money going into the Fund should be sufficient to achieve its environmental purpose of cleaning up the contamination at these facilities;
- The taxpayer should not have to pick up all the costs of cleanup, rather, the costs should be split with the other beneficiaries of the program and allocated according to the benefits received; and
- The activities at the three uranium enrichment plants should contribute to the well-being of the local communities, including jobs from the cleanup efforts.

The cleanup work at the uranium enrichment facilities is far from concluded and adherence to these principles is just as necessary and relevant today as it was when the Fund was created. In a timely fashion, S. 2203 addresses the looming shortfall discussed below.

Sufficiency of Funding

In an attempt to help evaluate and contain the eventual cost of enrichment plant cleanup, the 1992 EPACT mandated a report by the National Academy of Science, which was completed in 1996. This study made 13 major recommendations for reducing cost, which the DOE has generally followed, according to the non-partisan General Accounting Office (GAO) in a 2004 review of the program. Estimates in this testimony are largely based on NRDC's calculations derived from information in this GAO report.

However, the GAO also concluded that, if the authority to collect revenue expires in 2007, then the contributions to the Fund will fall short of the amount necessary to finish cleanup activities. More specifically GAO's baseline model determined that the Fund would have sufficient revenue to reimburse uranium and thorium licensees for cleanup at processing sites, but that it would fall short of completing work at the three enrichment plants by up to \$5.7 billion in 2004 dollars -- which would be about \$6.5 billion in 2008 dollars. GAO also projects cleanup activities would need to continue at least through 2044.

Furthermore, GAO acknowledges that the upper end of this estimate could be too low, contingent on the additional cleanup activities that may need to be performed, such as long-term groundwater monitoring – work that could add another estimated \$3 billion in costs to the project. Indeed, DOE currently lacks comprehensive long-term cleanup plans

and appropriate cleanup standards for the Paducah and Portsmouth plants, and both sites will require long-term stewardship.

We note for the Committee that the D&D Fund has an existing projected balance of \$4.4 billion for the end of FY 2007, according to the Office of Management and Budget (OMB). However, this net balance is not available to offset the \$6.5 billion shortfall, since GAO has already assumed that the net balance in the Fund will be used to help pay for cleanup, so the shortfall that needs to be made up is in addition to the existing Fund balance.

Taxpayer Equity

EPACT provided that both the taxpayers and the utilities that benefited from the program would make contributions to the cleanup fund, and that those contributions would be allocated in proportion to the benefits each had received from the program. Benefits are calculated based on a standard unit used to measure enrichment services called a Separative Work Unit (SWU). GAO has also historically endorsed this principle of “beneficiary pays” for revenue collection under the program and in its recent July 2004 report. Section 2 of S. 2203 continues the status quo of this equitable agreement and ensures that the states of Ohio, Tennessee, and Kentucky avoid a serious problem.

Using the original EPACT formula, the overall cap on revenue was set at \$480 million a year, indexed to inflation, with a subcap on utility contributions of \$150 million (31.4% of the total), a figure also indexed to inflation. Taxpayers paid the difference (68.6%) to cover services received by the government and by foreign utilities for which there was no certain mechanism by which fees could be collected. The utility sector portion was further prorated among individual utilities in proportion to the amount of SWU that had been contained in fuel shipments that they had received from DOE in the past.

Since the original passage of the Act, Congress has twice raised the overall funding cap somewhat (mainly to authorize additional appropriations for a thorium site) while leaving the utility contribution the same, potentially shifting more of the relative cost of the program to the taxpayer. However, analysis by NRDC indicates that actual payments to the Fund have closely approximated the original ratio set out in EPACT based on SWU benefits. In the 15-year period from FY 1993 to FY 2007, taxpayers seem to have contributed about \$5.27 billion (66.4%) compared to the nuclear utility contribution of \$2.66 billion (33.6%), based on an examination of annual budget documents from OMB.

If, as we urge, Congress passes and the President signs S. 2203, then the current status quo and an equitable management of long-term cleanup liabilities will continue. In short, if S. 2203 is adopted into law, both the taxpayer and the utility contribution, indexed to inflation, will extend for ten years and the overall cap on revenue will be set in proportion to the original benefits-based ratio contained in EPACT. Following the formula set out in EPACT, S. 2203 sets the overall authorization cap on contributions to the Fund in FY 2008 at about \$700 million, with the utility contribution set at \$220 million. As has been done in the past, S. 2203 directs that both caps be indexed to inflation.

Well-Being of the Communities

Title X of the 1992 EPACT was meant to help serve the interests of the local communities affected by mill tailings sites and enrichment plants in several ways, and Section 2 and Section 3 of S. 2203 continues that work. For all of the affected communities there was a concern that greater certainty be brought to the process for cleaning up contaminated materials. In addition to the potential public health and environmental benefits of greater certainty, there are also technical and economic benefits to having a sure and predictable way of maintaining a trained and experience workforce in cleanup operations.

Section 2 of S. 2203 ensures both sufficiency and certainty in future funding by extending revenue contributions to the D&D Fund for 10 years. In 2004 GAO recommended a three-year extension in the program while DOE considered longer-term issues. However, that period of time has passed and the authority for the entire cleanup expires this year. S. 2203 addresses the issue of funding sufficiency by providing enough time to ensure the collection of sufficient revenues to pay for the projected shortfall.¹ Meanwhile, S. 2203 presumes vigorous ongoing oversight to DOE's cleanup activities at these sites.

In continuing the original framework of the EPACT D&D program, S. 2203 serves the parallel interest Congress had in reforming the longstanding DOE program that provided uranium enrichment services to the private sector. For decades, in addition to failing to collect money to pay for cleanup costs, DOE had undercharged nuclear utilities billions of dollars for the enrichment services that it provided to them, with some of the past GAO estimates of the unrecovered costs running between \$3 billion and \$11 billion. At the same time growing international competition in the uranium enrichment market had limited the ability of DOE to hike its charges to collect these past debts. To help address these matters, EPACT authorized the eventual privatization of the DOE program into the United States Enrichment Corporation (USEC).

Importantly, I would like to raise one final issue concerning S. 2203 and the potential impact of the cleanup fee on nuclear utilities and their decisions regarding whether to purchase enrichment services from USEC in the future. Since the fee is based on historical purchases prior to October 24, 1992, there would be no additional fee payments associated with present or future utility purchases of enrichment services from USEC or any other source. Therefore, the extension of the special assessment should have no impact on trade balances or future utility decision-making about the use of nuclear power.

And last, Section 3 of S. 2203 directs the DOE, not later than 1 year after enactment, to complete a study for the use of proceeds from the sale of the product of enriching

¹ The sufficiency of Section 2 of S. 2203 can be calculated by dividing the \$6.5 billion estimated shortfall by the proposed \$700 million a year in collections for a total period of 9.3 years, rounded up to an even 10 years for the reauthorization period.

uranium tailings. This sensible provision, which we support, provides both the Administration and the Congress an opportunity to assess whether additional enrichment of uranium tailings may be used to supplement the taxpayer contribution to the cleanup fund and to provide assistance to local government and community reuse organizations. We also believe any final decision to sell off this government asset: (1) should use the proceeds to help pay for obligations that would otherwise be borne by taxpayers and not to relieve the industry of its contribution to cleanup; (2) should not draw the government back into the uranium enrichment business but should leave those activities to the private sector; and (3) should comply with all environmental laws, including the National Environmental policy Act.

Response to Concerns of the Nuclear Industry

At the present time and in the past, nuclear utilities have opposed paying into the cleanup fund a special assessment based on the concept of “beneficiaries pay.” They have generally offered two objections – in their view the fee costs them too much and they have already paid their share. However, both of these arguments are flawed and so I will briefly examine each in turn to explain.

First, the special assessment is a minor expense to the utility industry but makes a major contribution to the DOE cleanup fund. For the past 15 years, the special assessment has provided nearly a third of the cleanup expenses of the D&D Fund, helping to ensure the program’s solvency and the adequacy of environmental cleanup. Without this stream of revenue the overall success of the program, which until now has run fairly smoothly, would be brought seriously into doubt.

By contrast the size of the contribution from utilities to the Fund is so small in comparison to their annual revenue that it is almost difficult to calculate precisely what it equals. In 2005 (the last year for which there are consistent data for these calculations) total utility revenue was \$298 billion, of which the special assessment was less than seven-tenths of one percent of the total. Another way to think about this is to consider the overall increase in residential electricity prices including inflation in the 15 years between 1991 and 2006. That increase was 29.35% including the special assessment; but an almost indistinguishable 29.29% without it. Finally, one could consider that the amount of the fee paid monthly by the average residential customer is just over a nickel (5.6 cents), or less than the cost of a stamp for the average household.

Second, the special assessment is a fair share for the utilities to pay and is fair to the taxpayer too. The special assessment is allocated based on the relative proportion of enrichment services received by the two main beneficiaries of the program, nuclear utilities and the government. Utilities have argued in the past that they should have to pay little or nothing to this program because the plants were already contaminated by defense use before they started receiving services, and so they should only have to pay at most incremental expenses. However, this position is contrary to the history of the program and a basic sense of fairness to those taxpayers who did not benefit from the nuclear power that was produced in the past.

During the 1960s when the government made fuel services available to electric utilities the question was raised about what to charge for enrichment services and how to treat the fixed overhead costs of the plants that were already built. The decision was made then that utilities should not only pay for the variable costs of providing those services but also a share of the fixed costs, such as plant depreciation. This policy position was embodied in the famed “Conway” formula, and was adopted by the Atomic Energy Commission and supported by Congress in part because of a desire even then to pave the way for privatizing these plants by charging full production prices for their services.

After it was realized that DOE had failed to collect sufficient revenue to pay for the cost of cleanup of the enrichment plants, Congress made the decision then in EPACT to allocate the costs in proportion to the services provided to these two sets of beneficiaries. DOE testified in 1991 in support of the principle that the costs of cleanup should be divided between government and civilian beneficiaries based on past purchases of SWU. The next year, the first proposal for a fee on utilities to collect their share of the allocation was included in the budget of President George H.W. Bush.

Nuclear utilities have maintained that they agreed to a 15-year, \$2.25 billion payment and that they have now paid their share. However, the conference report for EPACT records no such agreement. Indeed if Congress had meant to strike such a deal, it would have extended the authorization for the government’s share for an additional 25 years, the period of time estimated in 1992 that it would take to complete cleanup. In addition, the behavior of nuclear utilities since 1992 belies that there was any such deal to which they were a party, since they have repeatedly brought (and lost) lawsuits to keep from paying any of the special assessment.

In any case, since no past Congress can in fact bind the actions of a future Congress, the real question is, what is the fair decision to make? The need for cleanup at DOE’s cleanup plants continues to be a pressing need to protect the environment and the nearby communities. If utilities do not pay their share of the costs, then all of the remaining expenses will fall on the taxpayer. While it may be true that all ratepayers of nuclear utilities are also taxpayers, it is not true that all taxpayers get their electricity from nuclear power. Even now 19 states get no power from nuclear power. It is quite simply not fair for the taxpayers who did not benefit from the below-cost power to shoulder all of the remaining cost of that cleanup.

Conclusion

S. 2203 addresses the serious issues raised by the expiring authorities for the DOE’s uranium cleanup D&D Fund by reauthorizing the Fund and ensuring the sufficiency of environmental funding, taxpayer protection, and community well being. We strongly urge your support for it.

Thank you for allowing me to testify and I look forward to your questions.