



*Natural Resources
Defense Council*

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STATEMENT OF

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AND

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TO THE

DEPARTMENT OF ENERGY

CONCERNING

THE SCOPE OF THE

ENVIRONMENTAL IMPACT STATEMENT

ON THE

PROPOSED RENOVATION AND RESTART

OF THE N REACTOR

May 12, 1987

Spokane, Washington

My name is Dan W. Reicher. I am pleased to submit these comments on behalf of the Natural Resources Defense Council (NRDC) regarding the scope of the Environmental Impact Statement on the proposed renovation and restart of the N Reactor.

I am an attorney with the NRDC's nuclear project. I hold a law degree from Stanford University and an undergraduate degree in biology from Dartmouth College. Prior to joining NRDC's staff in 1985, I was an Assistant Attorney General for environmental protection in the Commonwealth of Massachusetts, a staff member of the President's Commission on the Accident at Three Mile Island, and a legal assistant in the Hazardous Waste Section of the U.S. Department of Justice.

Accompanying me is Dr. Thomas B. Cochran. Dr. Cochran is a Senior Staff Scientist with NRDC. He holds a Ph.D. in Physics from Vanderbilt University, and was a member of the Department of Energy's (DOE) Energy Research Advisory Board (ERAB) from 1978-1982; DOE's Nuclear Proliferation Advisory Panel (1977-79); and the Nuclear Regulatory Commission's Advisory Panel for the Decontamination of the Three Mile Island Unit 2 (1980-1986). He is also an editor and co-author of the Nuclear Weapons Databook series including the recently published Volume II, "U.S. Nuclear Warhead Production."

NRDC is a national environmental organization with over 60,000 members and a staff of 100 lawyers, scientists and resource specialists at offices in New York, Washington, and San

Francisco. NRDC has almost 3000 members in Washington, Oregon & Idaho. NRDC pursues a broad range of environmental, energy and defense issues. NRDC has long been concerned about the environmental effects of DOE's nuclear weapons production complex. Over the past 12 years, the NRDC Nuclear Project has won a series of lawsuits to enforce federal environmental laws at DOE facilities including Hanford, Oak Ridge, Tennessee and the Savannah River Plant, South Carolina. Last year NRDC was instrumental in convincing DOE to undertake an EIS on the renovation of DOE's Feed Material Product Center in Fernald, Ohio.

In December of last year -- following DOE's shutdown of the N Reactor and decision to spend upwards of \$200 million on renovation -- we filed a notice of intent to sue the Department to force it to prepare an Environmental Impact Statement (EIS) on the proposed renovation and restart of the N Reactor. The N Reactor has never been the subject of an EIS unlike every commercial nuclear reactor which has gone on-line since 1969.

On February 9, 1987, DOE Assistant Secretary Mary Walker advised NRDC that the Department had decided to prepare an EIS on N Reactor. Our initial enthusiasm with DOE's decision, however, waned when we learned the four conditions under which the EIS would be prepared:

- (1) The EIS will only consider the environmental impacts of the operating reactor with and without the proposed renovations. It will not consider the question of whether the N Reactor should

be renovated and restarted at all. This is an alternative which DOE is legally obligated to consider under the National Environmental Policy Act (NEPA).

(2) The EIS will not consider alternatives to the proposed renovation and restart including permanent shutdown, reliance on existing plutonium stockpiles, construction of a new production reactor, conversion of the mothballed WNP-1 reactor, or upgrade of the Savannah River Plant production reactors.

(3) The EIS will not be completed prior to the proposed restart.

(4) The EIS will not even be completed before the bulk of the renovations -- the very subject of the planned document -- are made.

DOE's actions with regard to the N Reactor EIS make a mockery of the National Environmental Policy Act (NEPA), which is "our basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a) The Act is overseen by the President's Council on Environmental Quality which has developed a detailed set of regulations to ensure that agencies act according to both the letter and spirit of the law. The regulations, which DOE has adopted as its own, state that the purpose of an EIS is to:

[S]erve as an action-forcing device to insure that the policies and goals defined in the Act are infused into the ongoing programs and actions of the Federal Government. It shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid, or minimize adverse impacts or enhance the quality of the human environment....An

environmental impact statement is more than a disclosure statement. It shall be used by Federal officials in conjunction with other relevant materials to plan actions and make decisions.

We believe that DOE is acting illegally in deciding to restart the N Reactor without the benefit of a full EIS. The Department has chosen to ignore its responsibilities to "look before it leaps" into costly renovations and the potentially catastrophic start-up of the troubled N Reactor. We believe that DOE must prepare an EIS which considers whether the N Reactor should restart and alternatives to that course of action. Moreover, the EIS must be completed prior to the proposed renovation and restart.

If DOE does not agree to prepare such an EIS and complete the analysis prior to the proposed restart, we intend to take legal action. In the comments that follow, we outline our position on this critical matter.

The EIS Must Consider Restart of the N Reactor

NEPA requires federal agencies to prepare an EIS for any "major federal action significantly affecting the quality of the environment." 42 U.S.C. § 4332. The Federal Court of Appeals for the District of Columbia has interpreted NEPA to require an EIS "when there is a proposal to change the status quo." Committee for Auto Responsibility v. Solomon, 603 F.2d 992, 1002-3 (D.C. Cir. 1979). Here DOE contends that the status quo is an operating reactor, and the only change is the decision to

renovate the facility under the SEP. We disagree. The N Reactor has been shut down for almost six months. As a result, there is no nuclear reaction in the core creating the potential for a catastrophic accident; no routine and accidental discharges of heated, radioactive water to the ground and subsequently to the Columbia River; no radioactive emissions to the air; and no production of high- and low-level nuclear wastes.

This shutdown is far more than the normal maintenance or refueling outage for the N Reactor. It comes on the heels of serious revelations of critical safety problems with the N Reactor made by a panel of handpicked DOE consultants. The panel, chaired by Louis Roddis, former chairman of the board of Consolidated Edison of New York, raised a number of serious concerns about the N Reactor including: the lack of mechanisms to prevent a hydrogen explosion; the routine and accidental release of large quantities of radioactive coolant to the ground water and subsequently to the Columbia River; the lack of a containment dome to prevent releases of radioactivity in an accident; inadequate back-up systems to provide cooling in a meltdown; and three times the average planned worker radiation exposures as at commercial facilities.

Overall, the Roddis panel members found that the N Reactor did not meet commercial safety standards, and that the facility should be closed no later than the early to mid-1990's. Two members of the panel, including Chairman Roddis, called for the

immediate and permanent shutdown of the N Reactor unless national security required further operation.

DOE took a number of steps in the wake of these disturbing findings. First, the Department shut the N Reactor down for at least six months. Second, DOE accelerated implementation of the Safety Enhancement Program (SEP) which it had instituted after the Chernobyl accident. Third, DOE asked the National Academy of Sciences to review the safety of the facility. Finally, the Department agreed to condition restart on the findings of the NAS.

Despite all these significant changes, DOE would have us believe that nothing has happened to the N Reactor except the decision to add some safety equipment and alter some operating procedures. This explains the impermissibly narrow scope of the proposed EIS. In truth, the Chernobyl accident, the Roddis Panel findings, DOE's decision to halt N-Reactor operations, and the proposed implementation of the SEP have changed the status quo more than perhaps even the original decision to build and operate the facility. Despite this fact, DOE refuses to prepare an EIS which addresses the critical question of whether the N Reactor should be restarted and reasonable alternatives thereto. If DOE does not abandon this indefensible position, we will be compelled to file suit.

This would not be the first time that we have been forced to go to court to force DOE to own up to its NEPA obligations in restarting one of its production reactors. In 1982 DOE refused

to prepare any EIS on its proposal to restart the L Reactor at the Department's Savannah River Plant. DOE argued, just as here, that it only had to consider the environmental impacts of the operating reactor before and after renovation, and also that it could do so in a far less comprehensive document called an environmental assessment. The federal District Court in Washington, D.C. disagreed holding that DOE had to prepare a full EIS prior to start-up the L Reactor. The court found that the EIS had to address the proposal to renew reactor operations with the baseline for analysis being the condition of the environment prior to restart. In reaching its decision the court held that: "start-up of any nuclear reactor is treated as a major federal action requiring consideration of environmental effects...even restarts of dormant reactors which have previously been the subject of environmental impact statements (sic)." NRDC v. Vaughan 566 F. Supp. 1472 (D.C.D.C. 1983).

In the L Reactor case, DOE prepared precisely the EIS we believe is necessary here. DOE analyzed the following with respect to the L Reactor:

- o Description of the proposed start-up.
- o Reason for the action
- o Need for and alternative ways to produce plutonium and tritium to meet defense needs
- o The environmental consequences of L-Reactor operation under normal and accident conditions
- o Potential ways to reduce the environmental effects of restarting the L Reactor

- o Environmental effects from the increased use of existing SRP facilities due to restart
- o Cumulative environmental effects
- o Environmental monitoring and studies
- o Federal and state requirements for the restart of the L Reactor and the status of compliance with these requirements

The findings of the EIS prompted the Department to make some substantial changes in its renovation plans for the L Reactor. These changes significantly decreased the environmental impact of the resumption of L Reactor operation. DOE should take heed of its experience with the L Reactor, avoid time-consuming and expensive litigation, and get on with the task of preparing a full EIS on the proposed renovation and restart of the N Reactor.

DOE may argue that no "restart" of N Reactor is planned because the reactor is not "shut down." Rather, the Department has developed a new term -- "stand down condition" -- to describe the reactor's current status. Whatever semantic sleight-of-hand DOE might engage in, Congress has defined restart of a DOE reactor as any "activity ...that would achieve criticality, generate fission products within the reactor [or] discharge cooling water from nuclear operations...." 97 Stat. 247. Renewed operation of the N Reactor would meet each of these criteria. Coining a new phrase for the N Reactor's current status simply will not undo the fact that DOE plans to restart the reactor and that applicable case law requires analysis of that decision. The EIS must address the decision to restart the N Reactor, particularly in light of the dramatically changed

circumstances since the April 1986 disaster at the N Reactor's progeny at Chernobyl.

The EIS Must Consider All Reasonable Alternatives to the Proposed Renovation and Restart

The NEPA regulations state that consideration of alternatives to the proposed action is "the heart of the environmental impact statement." 40 C.F.R. § 1502.14. The EIS must address all reasonable alternatives to the proposed action including no action. Id. at § 1502.14. Here DOE has defined the proposed action so narrowly, i.e. implementation of the SEP, that it has illegally limited the relevant alternatives. DOE will only look at two alternatives: first, different types of hardware to improve plant safety; second, continued operation of the N Reactor without the SEP. 52 Fed. Reg. at 12455.

Preparing an EIS which considers the decision to restart would require DOE to explore a far more meaningful and realistic set of alternatives, including a true no-action alternative, i.e. permanent shutdown -- a course of action two of DOE's own safety consultants recommended. Other alternatives include: (1) shutdown and mothballing with renewed operation only in the event of a national emergency; (2) construction of a new production reactor; (3) conversion of the Washington Public Power Supply's WNP-1 reactor; (4) reliance on existing stockpiles of plutonium; and/or (5) upgrade of the Savannah River Plant production reactors.

Consideration of these alternatives is critical because they raise the fundamental question of whether we need to run N Reactor at all. Although plutonium production figures are classified, recent information indicates that we simply do not need the N Reactor to meet our national security needs. The Senate Appropriations Committee recently revealed that the demand for plutonium is roughly in line with the rate at which the material is recovered from old weapons. Science Magazine, May 1, 1987 at 515. According to the Committee, DOE's production reactors, including the N Reactor, simply "are not the main source of material for weapons." Id. Volume II of NRDC's Nuclear Weapons Databook estimates that the N Reactor adds only about 0.5% to the U.S. plutonium stockpile each year. U.S. Nuclear Warhead Production, Ballinger, 65 (1987). The EIS must explore whether a costly renovation and restart of N Reactor can be justified in light of the minor contribution that operation of the plant -- in its last few years of useful life -- will make to the plutonium stockpile and the significant safety risk the public will be asked to endure. This question of need is most properly considered in the context of the decision to restart the reactor and in an exploration of alternatives.¹

¹ NRDC recognizes that consideration of the need for plutonium may necessitate a classified appendix to the EIS. However, such a document would, at a minimum, give our elected and appointed officials better information on which to determine the future of the N Reactor. Just such a classified appendix was prepared in the L Reactor EIS.

The EIS Must Be Completed Prior to Renovation and Restart

As things presently stand, the Department has no intention to complete the EIS, whatever its scope, prior to restart or even before much of the SEP has been accomplished. DOE's treatment of these critical timing issues show the Department's serious disregard for NEPA. Nothing is clearer in the NEPA regulations than an agency's duty to "insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken." 40 C.F.R. § 1500.1(b). DOE has indicated that the reactor will be restarted in early July, barely a month after these scoping hearings, and long before issuance of the draft or final EIS. The Department has also admitted that much of the SEP will be completed prior to submission of the final EIS.

Any hope that the EIS on the SEP will serve as a decision-making tool regarding the N Reactor are laid to rest by these facts. The EIS will simply be a post-hoc rationalization -- and a limited one at that -- for a decision to restart already made. The NEPA regulations warn of precisely this situation: "The statement shall be prepared early enough so that it can serve practically as an important contribution to the decisionmaking process and will not be used to . . . justify decisions already made." 40 C.F.R. § 1502.5.

DOE argues that under the NEPA regulations it may proceed with renovations which do not limit the choice of reasonable alternatives or have an adverse environmental impact. However,

restart, as DOE's own consultants have found, poses serious environmental hazards, ones that do not exist now. Assuming, as NEPA does, that the decision to restart is properly part of the EIS, then DOE will violate the law if it reactivates the N Reactor prior to completion of the EIS. Even under DOE's limited view of the scope of the EIS, proceeding with the SEP prior to completion of the EIS will violate NEPA. DOE has identified as its "no-action" alternative the operation of the N Reactor without implementing the SEP. It defies logic for DOE to contend that it can proceed with the SEP and simultaneously consider this no-action alternative in the EIS. The expenditure of many millions of dollars on the SEP will simply preclude the adoption of other alternatives to the proposed N Reactor restart.

The case law is clear that alternatives be considered at the earliest possible point. "[T]he time for examining alternative[s]...should be when it is practical to implement them, and not after the expenditure of millions of dollars when it may be too late....It is quite possible that a later analysis of alternatives will prove to be a 'hollow exercise'" 394 F. Supp. 105.

The Chairman of the President's Council on Environmental Quality (CEQ) was concerned about just such a "hollow exercise" when he testified recently before Congress on the N Reactor EIS. CEQ Chairman Alan Hill said the following:

I am very disappointed [with DOE's NEPA compliance]We have advised them very clearly that they are on extremely slim legal ground. They are getting 'beyond the

border.' Thus far, we have not been successful in encouraging some movement other than that they have now agreed that they will do an EIS at least on the safety enhancement portion....

CEQ has specific authority to review DOE's compliance with NEPA. 42 U.S.C. 7609. However, exercise of that authority is dependent upon a formal referral by the Administrator of the Environmental Protection Agency (EPA). 40 C.F.R. § 1504.1. Congressman Les AuCoin (D-Or) has asked EPA to make such a referral but as of this date EPA is still reviewing the issue. We call upon EPA to refer the N Reactor matter to EPA as expeditiously as possible and for CEQ to hold hearings.

DOE Could Prepare An Adequate EIS Expeditiously

DOE Hanford Site Manager Michael Lawrence has contended that preparation of a full EIS on N Reactor would take two years. The CEQ, however, has advised agencies that even large complex energy projects should require only about 12 months for completion of the entire EIS process." 46 Fed. Reg. 18037 (March 23, 1981, col. 1). The L-Reactor EIS, for example, was completed in ten months. In the case of the N Reactor, DOE should be able to prepare a final EIS by early next year. Assuming for the sake of argument that DOE does decide to restart the N Reactor, the additional six to eight months preparation of a full EIS would add to the proposed restart of the facility would permit a meaningful examination of the safety and environmental issues surrounding the N Reactor, the technical adequacy of the SEP, and

alternatives, including shutdown. Moreover, such a delay would have a trivial impact on plutonium production in view of the current stockpile of some 100 metric tons.

Admittedly, the additional delay caused by preparation of an EIS may have temporary impacts on employment at Hanford and in the surrounding area. These have been the subject of wild speculation in recent weeks. The EIS itself could address the economic impact of renovation and restart and alternatives, including N Reactor shutdown. Under the regulations a cost-benefit analysis of various alternatives may be undertaken and "[i]n any event, an EIS should at least indicate those considerations, including factors not related to environmental quality, which are likely to be relevant and important to a decision." 40 C.F.R. § 1502.23. We believe that DOE could take steps to minimize the economic impacts of a prolonged or permanent shutdown. Rather than attempt to rush through the restart of the N Reactor, DOE should give the highest priority to cleaning up the mess it has already made at Hanford -- a task estimated to cost up to \$20 billion.

Conclusion

The events of the past year -- the disaster at Chernobyl, the report of the Roddis panel, the extended shutdown, and the proposed Safety Enhancement Program -- have all brought us to a critical decisionmaking point in the life of the N Reactor. Simply put, should the N Reactor be restarted? The answer to

this question is of immediate concern to DOE and the residents of the Tri-Cities. But, as Chernobyl taught us, it also has serious potential ramifications for millions of people, some living many hundreds or thousands of miles away from Hanford. At stake as well are \$200 million of taxpayers' money which DOE plans to plow into this outmoded, aged reactor, and the concerns of people throughout the Northwest regarding the millions of gallons of radioactive and chemical wastes now present at the Hanford Reservation.

The National Environmental Policy Act has created a mechanism for making the important decision on the N Reactor now facing us. It brings together all interested parties -- the DOE, federal and state agencies, public officials, individual citizens, and public interest organizations -- so that all the right questions are asked, all available information is gathered, and the most informed decision possible is made. We are eager to avoid a confrontation with DOE and urge the agency to meet its obligations under NEPA by initiating a full EIS prior to making a final decision on the N Reactor restart.

