UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

June 11, 1979

MEMORANDUM FOR: Chairman Hendrie
Commissioner Gilinsky
Commissioner Kennedy
Commissioner Bradford
Commissioner Ahearne

FROM: Stephen F. Eilperin, Solicitor

SUBJECT: D.C. CIRCUIT'S REMAND IN STATE OF MINNESOTA V. NRC (No. 78-1269) AND ITS RELATION TO THE S-3 PROCEEDING

Introduction

This memorandum summarizes the D.C. Circuit's May 23 opinion in State of Minnesota v. NRC, explains its relationship to the present S-3 proceeding, discusses the scope of issues the Commission should consider in carrying out the court's remand, briefly touches upon the procedural aspects of a further Commission proceeding, and suggests changes in the S-3 statement of considerations to reflect the court's opinion and the Commission's plans to implement it.

Our recommendations are as follows: the present S-3 proceeding should be concluded promptly with issuance of a final S-3 rule and accompanying statement of considerations. Then a new Hearing Board should be appointed to conduct a generic proceeding to determine whether and when waste disposal (or failing that, long-term offsite storage) can reasonably be accomplished. Reconsideration of the zero release number for waste disposal in S-3 should be a possible outcome of the new generic proceeding. The procedures for this rulemaking should be primarily legislative with the Commission reserving its right to decide whether more adjudicatory procedures on specific issues are warranted. Our views on the composition of the Board and the procedures for new generic proceedings are less firm than our views on the other issues. In any event, we think the Commission's decision on the Board and its procedures should be announced in a later notice of hearing after giving the matter more consideration.

503 262

7908080 104

G

Discussion

I. The Court's Opinion

The State of Minnesota and the New England Coalition on Nuclear Pollution challenged the grant of license amendments for the expansion of the Prairie Island and Vermont Yankee spent fuel pools on the ground that the Commission violated NEPA and the Atomic Energy Act in excluding from their license amendment proceedings an evidentiary hearing into whether spent fuel could be disposed of safely. Petitioners claimed that such an inquiry had to be undertaken prior to the issuance of the license amendments, and that if no offsite solution could be projected as probably available, that the Commission must take into account the safety and environmental implications of maintaining the reactor sites as nuclear waste disposal sites after expiration of the operating licenses. In particular, petitioners argued that the Appeal Board had wrongly relied on the Commission's 1977 denial of an NRDC rulemaking petition as a basis for excluding waste disposal issues from their spent fuel pool amendment proceedings, and that there was no record-supported assurance that Prairie Island and Vermont Yankee would not end up as de facto waste disposal facilities once the operating licenses for those plants expired.

The court's opinion, authored by Judge Leventhal, bypassed the principal issue petitioners raised. The court chose not to decide whether the Appeal Board was legally correct in resolving the factual questions whether and when spent fuel would be disposed of safely by reference to Commission "assurances" which had not been the product of a rulemaking record devoted to considering these questions. (The tenor of the court's opinion indicates that had the court reached that issue, the Commission would not have prevailed.) Instead, the Court took note of the pendency of the related generic proceeding -- the S-3 proceeding -- "in which the issues of the storage and disposal of commercial nuclear wastes are of central concern", and wrote that (slip op. pp. 13-14):

> It would be inappropriate for this court to ignore the relevance of proceedings in which some of the basic questions raised now are the subject of current exploration. Since the disposition of the S-3 proceeding, though it has a somewhat different focus, 8/ may have a bearing on the pending cases, and being advised of recent developments 9/ that raise new issues about the feasibility of disposal solutions, we think it appropriate in the interest of sound administration to remand to the NRC for further consideration in the light of its S-3 proceeding and analysis. In particular, the court contemplates consideration on remand of the specific

> problem isolated by petitioners -- determining whether there is reasonable assurance that an off-site storage solution will be available by the years 2007-09, the expiration of the plants' operating licenses, and if not, whether there is reasonable assurance that the fuel can be stored safely at the sites beyond those dates. We neither vacate nor stay the license amendments, which would effectively shut down the plants. [1/]

The court went on to note that "[t]he Commission may integrate the issues with the pending S-3 proceeding, designate a follow-on generic proceeding, or follow such other courses as it deems appropriate." Slip op. p. 16, n.10. The court was "clear that the central issue posed by petitioners -- the feasibility of interim or ultimate nuclear waste disposal solutions -- is one essentially common to all nuclear facilities" (slip op. p. 11), that determination of those questions in a generic proceeding which would proceed as a rulemaking rather than adjudication was legally permissible, and that "[t]he breadth of the questions involved and the fact that the ultimate determination can never rise above a prediction suggest that the determination may be a kind of legislative judgment for which rulemaking would suffice." Slip op. p. 11. Judge Leventhal concluded his opinion by rejecting a claim made by

---

1/ The footnotes to the court's opinion were as follows:

> 8/ The on-going S-3 proceedings have focused only on the issues arising under NEPA, as to the environmental impact of nuclear waste disposal, and not on the effect of the uncertainty as to solutions under the public health and safety standard for licensing under the Atomic Energy Act, which NRC counsel acknowledged is more rigorous than NEPA standards in certain aspects. And the S-3 proceedings may not be concerned with the more limited issue identified in the pending cases of whether offsite storage solutions will be available prior to the expiration of the operating certificates.
>
> 9/ At oral argument counsel for petitoner New England Coalition told the court of a final Report to the President by the Interagency Review Group on Nuclear Waste Management, issued March 19, 1979, that casts some doubt on whether current proposed solutions to the permanent waste disposal problem are technologically feasible. Id. at 42. The Report also pointed to gathering institutional problems, e.g., the resistance of localities to storage of wastes within their jurisdictions, that "may well be more difficult than finding solutions to remaining technical problems." Id. at 87-88.

the utilities, but not by us, that waste disposal safety issues were never relevant to the licensing of nuclear power plants.

In a concurring opinion, Judge Tamm emphasized his belief that prior to Commission approval of spent fuel pool expansion, NEPA and the Atomic Energy Act mandate a determination whether it is reasonably probable that an offsite fuel repository will be available by the time the plant's operating license expires, and if not, whether it is reasonably probable that spent fuel can be stored safely onsite for an indefinite period.

The court's opinion is striking in its conscious refusal to "make law". For a long time Judge Leventhal has been interested in exploring ways in which the judiciary can work with administrative agencies to resolve disputes and his opinion in this case reflects that interest. Thus unlike Judge Tamm's concurrence which squarely reads NEPA and the Atomic Energy Act as mandating a waste disposal determination prior to expanding spent fuel pool storage, Judge Leventhal's opinion for the court remands the case to the Commission "in the interest of sound administration". This disposition allows Judge Leventhal to postpone a judicial definition of the Commission's obligations regarding waste disposal and reactor licensing or pool expansion. It also allows Judge Leventhal to bypass the question Judge Tamm's opinion calls to mind -- which is if prior to permitting spent fuel pool expansion the Commission has a statutory obligation to make a waste disposal determination it thus far has not properly made, why is it that Judge Tamm does not interfere with the licensing amendments which permit expansion of the Prairie Island and Vermont Yankee spent fuel pools. All Judge Leventhal says of his own views is that Congress has chosen to rely on NRC's assurances of confidence that a waste disposal solution will be reached and there is no implication that Congress intended that the NRC ignore new knowledge or analysis in its licensing decisions.

I suspect that Judge Leventhal's views are probably quite close to our office's views (see Memorandum Strauss to Shapar (Feb. 1, 1977); Memorandum Eilperin to Commission (Feb. 24, 1978)) -- that what the Commission termed its "policy" decision not to continue the licensing of reactors unless the Commission was confident that a waste disposal solution would be available when needed, is, in reality, a statutory obligation. However it is a statutory obligation which could be satisfied outside of the licensing context (i.e. by informing Congress from time to time of the Commission's views) up until the time that the basis for the Commission's confidence was questioned, as here, or as earlier with the NRDC rulemaking petition. At that point, the Commission becomes obliged to decide either in rulemaking or adjudication that there is reasonable assurance a solution can be available when needed, i.e. when storage will no longer suffice as a matter of safety. Since the Commission's statutory obligation for a formal waste disposal finding is of fairly recent origin, and the Commission has committed itself to explore that subject, there was

no judicial reason to interfere with the spent fuel pool amendments, especially where lifting the expansion approvals would effectively close the plants. While this is my speculation about what Judge Leventhal may be thinking, I think it is clear that the time has come for a determination in a rulemaking or adjudicatory proceeding whether the Commission is reasonably assured that wastes can be disposed of safely when necessary, and that a failure to get on with that kind of proceeding will lead to an adverse judicial decision which could have serious implications for the way in which the Commission conducts its licensing of nuclear power plants.

II. Relationship Of Court's Opinion To S-3 Proceedings

As the court of appeals recognized the Commission's S-3 proceeding has a somewhat different focus than the cases that were before the court. First, S-3 treats the NEPA issue of the environmental impact of nuclear waste disposal rather than the effect of uncertainty as to waste disposal solutions on public health and safety licensing judgments under the Atomic Energy Act. Second, the S-3 proceeding has not addressed the timing of offsite storage solutions -- whether offsite storage or disposal will be available prior to 2007-09 when the Vermont Yankee and Prairie Island operating licenses expire. Third, since the March 19, 1979 IRG Report post-dates the close of the S-3 hearings the greater uncertainties the Report projects have not been examined at a rulemaking hearing. Fourth, the petitioners are not parties to the S-3 proceeding and in light of the considerations just set out, they must be offered an opportunity to speak to the issues pertinent to their lawsuit.

What this means, simply put, is that the S-3 rulemaking as presently before the Commission for decision, can not be used to resolve the questions the court has remanded to the Commission for its consideration. There has not been adequate notice of the Atomic Energy Act issues, there has not been notice or an evidentiary record compiled as to the timing of a waste disposal solution or of some other away-from-reactor moderating step, and while the Commission can take note of the IRG Report the court of appeals opinion contemplates that the information in the Report should be evaluated in the context of further adversary participation.

Should the Commission, then, proceed to a decision on S-3, despite the clear necessity for a further proceeding on the issues identified by the court? I think so, and for several reasons. First, as has often been explained, the Commission is obliged by NEPA to consider the environmental effects of the fuel cycle whenever it issues a construction permit or an operating license. Not reaching a decision on the S-3 rulemaking does not free the Commission from a decision on issues encompassed through the S-3 rule. The subject has to be addressed, either generically or in individual licensing

actions. Second, the Commission can not avoid a decision on the S-3 rule through the expedient of extending the interim rule. The justification for the extensions to date has been that the Commission thinks the numbers in the interim rule and in the final rule are essentially interchangeable. At some point the Commission will be obliged to articulate why it thinks this is so. (That, of course, is the function of the lengthy statement of considerations for the final rule.) And, if the Commission does not think so, it has no business extending the interim rule. Third, that a general update of S-3 is scheduled for the Fall, and that there is now a staff-imposed moratorium until the Fall on licensing nuclear power plants does not obviate the need for a decision, though it does lessen its urgency. Even if the general update is produced on schedule and contains new information of significance, a new rule based on the general update will be some considerable time away, extending well beyond the three month licensing moratorium. 2/ Moreover, whatever the length of the moratorium, whether longer or shorter than three months, it seems sensible to have as much of an agency's regulatory structure in place as one can. So long as the Commission is of the view that the S-3 rule reasonably forecasts fuel cycle impacts and that no major piece of information at odds with the numbers in the rule is in the near offing, I think the Commission should proceed to a decision. At least thus far it has been my understanding that the Commission does not view the IRG Report as at odds with its conclusions in the S-3 proceeding. Thus a new proceeding, as contemplated by the court, to take account of the IRG information does not call for withholding decision on S-3, or on that part of S-3 dealing with releases after closure of a waste disposal facility. What it could reasonably call for, as suggested in the next section of this memorandum, is the openness to re-consider the zero release number for waste disposal.

III. Scope Of The New Proceeding

a. Generic or Case-by-Case

Applications to increase the capacity of spent fuel storage pools for some 21 reactors are presently pending at the Commission. Of these, the proposed expansions at Dresden, North Anna, Zion, Salem and La Crosse are being litigated before a Licensing Board. Trojan is before the Commission for review of an Appeal Board

---

2/ I understand that a general update by the Fall may be optimistic and that the principal changes in the update are not inconsistent with S-3 but rather relate to subjects not now covered by S-3 such as dose commitment and source terms.

503 267

decision, and the Prairie Island and Vermont Yankee expansions are presently before the Commission on remand from the D.C. Circuit. 3/ It hardly seems open to question that the generic waste disposal issue should be handled in a generic proceeding rather than litigated in these eight individual proceedings and what others are to come. The court of appeals has made quite clear that a generic proceeding is proper. Moreover, at this point, the court has declined to interfere with the grant of license amendments to expand spent fuel storage capacity while the Commission considers whether and when an offsite waste disposal solution will be accomplished. 4/ Given the Commission's present thinking on the government's movement toward a waste disposal solution and its linkage to reactor licensing, 5/ spent fuel pool expansion proposals should continue to be acted upon now but be made subject to the outcome of whatever conditions the Commission may later impose as a result of its future generic waste disposal proceeding.

b. Issues for the Generic Proceeding

At a minimum the new generic proceeding must consider the issue remanded by the court for the Commission's consideration -- "whether there is a reasonable assurance that an off-site storage solution will be available by the years 2007-09, the expiration of the plants' operating licenses, and if not, whether there is reasonable assurance that the fuel can be stored safely at the sites beyond those dates." Slip op. p. 14. 6/ One obvious comment should be made about this. Given a literal, or narrow, or grudging reading, the court's instructions do not call for a determination that nuclear wastes can be disposed of safely when needed. Rather, the narrow

---

3/ Increases in the capacity of spent fuel pools for 50 of the 67 operating reactors have already been approved.

4/ Presumably, if the Commission does not take prompt action to institute a generic proceeding or does not proceed diligently with it, at a party's urging the court could re-consider.

5/ See, e.g., March 9, 1979 Commission letters to Senator Glenn.

6/ Or as Judge Tamm put it in his concurring opinion: "Specifically, there must be a determination whether it is reasonably probable that an offsite fuel repository will be available when the operating license of the nuclear plant in question expires." Slip op., concurring opinion, p. 1.

issue is simply whether it is reasonably probable as the year 2000 rolls around that the Prairie Island and Vermont Yankee spent fuel assemblies can be transferred to another location or safely left on-site until a transfer is later effected. This narrow issue reflects the fact that the cases before the court arose in the context of expanding waste storage capacity rather than as a general challenge to licensing power plants and production of nuclear waste. Moreover, the narrow issue seems straightforward and, as things go, simple. Can the United States provide an away-from-reactor storage site sometime in the next quarter century to safely house the spent fuel from individual reactors in the event that individual reactor sites can no longer safely or acceptably retain the spent fuel? Months or years of hearings should not be necessary to answer that question.

While a generic proceeding on that limited issue would arguably comply with the court's instructions in these cases, we would be unhappy with so narrow a proceeding. This is so for a variety of reasons. First, the public's concern is with whether nuclear wastes can be disposed of safely, not with whether a larger storage pool can be built. Second, aspects of the court's opinion suggest a more generous hearing to investigate whether it is "reasonably probable that an offsite waste disposal solution will be available", Tamm, J., slip. op. p. 1, and to consider "whether current proposed solutions to the permanent waste disposal problem are technologically feasible". Slip op. p. 14, n.9. Third, the Commission has advised Congress and the Executive Branch that it is committed to reassessing its basis for confidence [that nuclear wastes will be safely cared for] as new data are developed and progress is made in the Federal waste management program." Commission letter to Senator Glenn (March 9, 1979); see also Letter to Dr. Joseph P. Kearney from Mr. Dircks (May 30, 1979). The court's remand provides a suitable, and perhaps compulsory, occasion for looking at this larger question.

There are still more expanded issues the Commission could look into at the new generic proceeding. For example, the Commission could utilize the proceeding to give its views on DOE's GEIS on alternative waste disposal technologies. And it may well be that the Executive Branch will ask the Commission to review DOE's GEIS and to make findings, based on that study, whether wastes can be disposed of safely when needed. See Letter to Dr. Joseph P. Kearney from Mr. Dircks (May 30, 1979). 7/ The problem with this alternative

---

7/ I have sent Dr. Kearney a copy of the State of Minnesota decision so that he is advised of the fact that the Commission will be conducting further hearings on storage or disposal of nuclear wastes in advance of the final DOE GEIS. Mr. Dircks has also spoken to Dr. Kearney about this.

is that DOE's GEIS is now only a draft, and the final version is probably a year or more away. The Commission could not wait that long to begin its proceeding in response to the court's order. While no doubt the Commission's proceeding will not be concluded by the time the DOE GEIS is final, there seems no compelling reason at this point to make it a principal subject of the Commission's new generic proceeding.

Another possible issue for the new proceeding is reconsideration of the zero release waste disposal number in S-3. The new proceeding is clearly pertinent to that number -- or what it reflects -- the likelihood that nuclear wastes once buried will stay buried. But while the continued validity of that assessment will be open to question in the new proceeding we recommend that reconsideration of the S-3 number should not be a formal issue in the proceeding. Instead, we suggest that the notice of hearing alert the public to the possibility that the record in the new proceeding on waste disposal can be incorporated into whatever hearing is held on the general update of S-3.

Our reason for this more temporizing approach is that we think an expression of Commission confidence or lack of confidence in the permanency of nuclear waste disposal may not be best addressed through some curie release number -- whether zero, 400, 1200 or what have you. To call for reconsideration of the zero release number seems to suggest an adherence to the present S-3 format just at a time when the general update may propose a changed format. We think the information generated in the new proceeding can be used in the general update simply by giving notice of that possibility.

c. The Board and Procedures

We are not asking the Commission to decide now either on the members of a Hearing Board or on the procedures for the new hearing. We do think, however, that the Commission can decide whether it wants to again tap the S-3 Hearing Board or to seek new Board members. We suggest trying a new Board. While the choice of a new Board will likely lead to greater delay in getting started and the Commission will be forfeiting a large sum of knowledge which the S-3 Board already has, 8/ a new Board would emphasize the distinctness of the new proceeding from S-3, could include people of different disciplines, and would emphasize the Commission's commitment to a fresh

---

8/ We have not been advised whether the S-3 Board members would be available if the Commission wanted them to serve for the new Board.

look at waste diposal proposals.

As to hearing procedures, the scope is at the Commission's discretion. My preference is for the legislative procedures the Commission recently employed in S-3 but without delegating to the Hearing Board the final say as to cross-examination on particular issues. The problems with more adjudicatory procedures are that (1) they can be time consuming and tie up too much staff time to the new proceeding, (2) can be difficult to conduct if, as is probable, there will be many participants in the new proceeding, (3) are overly formal for the kind of predictive judgment that the waste disposal issue calls for and (4) are inappropriate for a situation where the Staff is not the repository of most of the expertness on the subject.

The NRC staff should not be placed in the role of principal proponent of waste disposal progress. The prospects for waste disposal must be based on information largely in the hands of other agencies, e.g., DOE and USGS, and there may be difficulty in securing extended participation of the work force of these other agencies. All of these considerations counsel against an overly adjudicatory structure for the generic proceeding. Indeeed, in considering more adjudicatory procedures, it may be useful to recall what Judge Bazelon said when discussing the idea of a Science Court as a way for the legal process to cope with technological issues:

> ". . . I fear that a lengthy adversary proceeding, limited solely to factual issues, might well exaggerate the importance of those issues, and might tend to diminish the importance of value choices. A factual decision by a Science Court, surrounded by all the mystique of both science and law, might well have enormous, and unwarranted, political impact.
>
> "Moreover, it's not entirely clear to me that all disputes among experts either could be or should be "resolved". When experts disagree, it is usually not so much about the objectively verifiable facts, but about the implications which can be drawn from those facts. And they disagree precisely because it is impossible to say with certainty which implications are the "correct" ones."

Address by David L. Bazelon, "Coping with Technology Through the Legal Proces" p. 14 (Nov. 29, 1976); see also NRDC v. NRC, 547 F.2d 633, 644 (D.C. Cir. 1976), rev'd sub nom Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519 (1978) ("we have been more concerned with making sure that the record developed by agency procedures discloses

a thorough ventilation of the issues than with what devices the agency used to create the dialogue"). 9/

IV. Recommendation

That the Commission adopt the recommendations set forth on page 1 of this memorandum. A suggested modification to the S-3 Statement of Considerations to take account of the State of Minnesota decision is attached.

Attachment:
As stated

cc: OPE
ELD
SECY

9/ There are, of course, a whole range of procedural devices between bare bones notice and comment and a full blown adjudicatory hearing. A fair sampling have been listed in Judge Bazelon's Vermont Yankee opinion -- "informal conferences between intervenors and staff, document discovery, interrogatories, technical advisory committees comprised of outside experts with differing perspectives, limited cross-examination, funding independent research by intervenors, detailed annotation of technical reports, surveys of existing literature, [and] memoranda explaining methodology." NRDC v. NRC, 547 F.2d at 653.

Insert, page 5, preceding the first full paragraph

In response to a recent decision by the United States Court of Appeals for the District of Columbia Circuit, State of Minnesota v. NRC, Nos. 78-1269 and 78-2032 (May 23, 1979), the Commission intends to conduct a generic proceeding which will consider the most recent evidence regarding the likelihood that nuclear waste can be safely disposed of and when that, or some other off-site storage solution, can be accomplished. That new generic waste disposal proceeding will be separate and different in scope and purpose from further fuel cycle rulemakings dealing with an S-3 narrative and general update of S-3, but will in part review and update the conclusions regarding waste disposal which have been reached in the present rulemaking. The record compiled in the new generic waste disposal proceeding can be considered in, and made a part of the record in, the general update of S-3.

Insert, page 39a, following
"That issue has been separately addressed by the Commission."

Furthermore, the Commission intends in the near future to conduct a generic proceeding to reassess the outlook for the availability of safe waste disposal methods in light of new data and recent developments in the Federal waste management program. 25a/

25a/ The immediate occasion for this proceeding is the D.C. Circuit's remand to the Commission of State of Minnesota v. NRC, Nos. 78-1269 and 78-2032 (May 23, 1979) to consider whether there is reasonable assurance that an off-site storage solution for nuclear wastes will be available by the years 2007-09, the expiration dates for licenses of certain nuclear plants where the Commission has granted permits to expand on-site spent fuel capacities and if not, whether there is reasonable assurance that the fuel can be stored safely at the site beyond those dates. A continuing reassessment of the Commission's views on waste disposal is part of the commitment which the Commission has made to Congress. The final IRG report, which was available to the fuel cycle rulemaking participants only at the close of the rulemaking and only in draft form, will be part of the new information which the Commission will consider in its reassessment. The Commission will announce at a later date the specific procedures to be adopted for this proceeding and its precise scope.

CERTIFICATE OF SERVICE

I certify that I have served a copy of Vepco's Answer Opposing Intervenors' Motion to Amend Petition to Intervene on each of the persons named below by first-class mail, postage prepaid.

Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Chief, Docketing and Service Section

Valentine B. Deale, Esquire
1001 Connecticut Avenue, N.W.
Washington, D.C. 20036

Dr. Quentin J. Stober
Fisheries Research Institute
University of Washington
Seattle, Washington 98195

Mr. Ernest E. Hill
Lawrence Livermore Laboratory
University of California
Livermore, California 94550

Mr. Irwin B. Kroot
Citizens' Energy Forum, Inc.
P.O. Box 138
McLean, Virginia 22101

James B. Dougherty, Esquire
1346 Connecticut Avenue, N.W.
Suite 627
Washington, D.C. 20036

Gloria M. Gilman, Esquire
1508 28th Street, N.W.
Washington, D.C. 20007

Steven C. Goldberg, Esquire
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Anthony J. Gambardella, Esquire
Office of the Attorney General
Suite 308
11 South Twelfth Street
Richmond, Virginia 23219

Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Atomic Safety and Licensing Appeal Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

By /s/ James N. Christman
James N. Christman,
Counsel for Virginia
Electric and Power
Company

DATED: July 5, 1979