Partial Release

October 8, 1982 SECY-82-410

ADJUDICATORY ISSUE

(Affirmation)

For: The Commissioners

From: Sheldon L. Trubatch
Acting Assistant General Counsel

Subject: NRDC AND SIERRA CLUB "PETITION TO THE COMMISSIONERS TO EXERCISE THEIR INHERENT SUPERVISORY AUTHORITY TO DELINEATE THE SCOPE OF THE LWA PROCEEDING FOR THE CLINCH RIVER BREEDER REACTOR"

Purpose:

Summary: On June 11, 1982, the Natural Resources Defense Council and the Sierra Club (Intervenors) directly petitioned the Commission for essentially interlocutory review of a Licensing Board order delineating the issues that could be litigated in the ongoing proceeding for a limited work authorization (LWA-1) for the Clinch River Breeder Reactor (CRBR). Unpublished Order of April 22, 1982, (Order). 1/ [Attachment 1]. Intervenors contended that the Board's decision will limit litigation on the incredibility of core-disruptive accidents to hypothetical material and will preclude the introduction of design studies for CRBR. [Attachment 2]. Intervenors believe that the limits on

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1/ This issue has not been mooted by the Commission's grant of an exemption pursuant to 10 CFR 50.12 because all the LWA-1 findings must be made before the applicants can obtain an LWA-2 as they have stated they interd to do.

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the issues which can be litigated will make the Licensing Board's eventual findings for an LWA-1 insufficient under NEPA and the NRC's LWA rule, 10 CFR 50.10(e)(2)(ii).

The Applicants opposed the petition as an improper attempt to obtain direct Commission interlocutory review of an evidentiary ruling. [Attachment 3]. Applicants and Staff also contended that the petition failed to satisfy the standard for granting interlocutory review, i.e., Intervenors have failed to demonstrate that the Licensing Board's decision either threatens them with immediate and serious harm which could not be remedied later on appeal or affects the basic structure of the proceeding in a pervasive or unusual manner. [Attachment 4]. Puget Sound Power and Light Co. (Skagit Nuclear Project, Units 1 and 2), ALAB-572, 10 NRC 693, 694 (1979).

Sheldon L. Trubatch
Acting Assistant General
Counsel

Attachments as stated:

Commissioners' comments should be provided directly to the Office of the Secretary by c.o.b. Tuesday, October 26, 1982.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT Tuesday, October 19, 1982, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional time for analytical review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

This paper is tentatively scheduled for affirmation at an open meeting during the week of November 1, 1982. Please refer to the appropriate weekly Commission Schedule, when published, for a specific date and time.

ATTACHMENT 1

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:
Marshall E. Miller, Chairman
Gustave A. Linenberger, Jr.
Dr. Cadet H. Hand, Jr.

SERVED APR 23 1982

In the Matter of	Docket No. 50-537
UNITED STATES DEPARTMENT OF ENERGY PROJECT MANAGEMENT CORPORATION TENNESSEE VALLEY AUTHORITY	
(Clinch River Breeder Reactor Plant)	April 22, 1982

ORDER FOLLOWING CONFERENCE WITH PARTIES

A conference with counsel was held pursuant to notice in this proceeding on April 20, 1982 at Bethesda, Maryland. Counsel representing the United States Department of Energy, Project Management Corporation and Tennessee Valley Authority (Applicants), the Staff, Natural Resources Defense Council and Sierra Club (Joint Intervenors), and the State of Tennessee participated in the conference.

The Board considered and heard arguments on the statements of position, filed by Applicants, Staff and Intervenors, that addressed the question of which issues within Contentions 1, 2 and 3 should be

deferred for purposes of discovery and litigation until after the LWA-1 evidentiary hearing and partial initial decision.

In addition, the Board ruled upon the Staff Motion for a Protective Order Relative to Discovery and addressed all matters of controversy among the parties regarding interrogatories and responses to interrogatories.

Contentions 1, 2 and 3

Contention 1(a)

The Board ruled that Subpart (a) of Contention 1, which challenges the ability of Applicants' reliability program to eliminate CDAs as DBAs, is litigable at the LWA-1 stage. However, the inquiry at this stage is limited to consideration of whether it is feasible to design CRBR to make HCDAs sufficiently improbable that they can be excluded from the envelope of design basis accidents for a reactor of the general size and type proposed. Specifically, discovery at the LWA-1 stage is limited to the following areas of concern:

1. The major classes of accident initiators potentially leading to HCDAs;
2. The relevant criteria to be imposed for the CRBRP;
3. The state of technology as it relates to applicable design characteristics or criteria; and

4. The general characteristics of the CRBRP design (e.g., redundant, diverse shutdown systems) (Tr. 548).

A full-scale inquiry into the specific design of the CRBR is inappropriate at the LWA-1 stage. 10 CFR §50.10(e) establishes that an LWA-1 may be issued only after the Board has conducted a full NEPA review and has determined that "based upon the available information and review to date, there is reasonable assurance that the proposed site is a suitable location for a reactor of the general size and type proposed from the standpoint of radiological health and safety considerations...."

In order to make the full NEPA findings, the Board must have before it "sufficient information regarding the proposed plant...in the applicant's environmental report and the record of the NEPA hearing in order to conduct a reasonable cost-benefit analysis as required by NEPA" (Statements of Consideration to 10 CFR §50.10(e) at 39 FR 14506). The applicants' environmental report must assess the "probable impact of the proposed action on the environment" (10 CFR §51.20(a)). This assessment involves analyses of the probable environmental impacts of postulated accidents and must be based on realistic assumptions and methods of analysis. However, the conservative methods of analysis employed in the NRC safety evaluation process are not necessary for the NEPA review (Gulf States Utilities (River Bend Station, Units 1 & 2), LBP-75-50, 2 NRC 419, 447-448 (1975)).

In order to fulfill the requirements of 10 CFR §50.10(e)(2)(ii), the Board must make a preliminary safety determination "that based on the available information and review to date there is reasonable assurance that the site is a suitable location for a reactor of the general size and type proposed from the standpoint of radiological health and safety considerations."

On its face, it is evident that 10 CFR §50.10(e)(2)(ii) does not require a complete safety review based on the completed, detailed design of the specific reactor proposed. Instead, a preliminary safety finding is contemplated "based on the available information and review to date" and based on "a reactor of the general size and type proposed." With respect to Contention 1(a) specifically, there must be a showing of reasonable assurance that the state-of-the-art technology permits the implementation of a design which would reduce the likelihood of CDAs so that they can be excluded or that the finding is to include CDAs.

In contrast to 10 CFR §50.10(e)(2), 10 CFR §50.35(a) contemplates a specific analysis of the facility at the CP stage. Thus, although a full NEPA review is mandated for the LWA-1 hearing phase, the finality of this review must of necessity await the completion of the CP evidentiary hearing where full design details and supportive analyses of the facility will be critiqued.

Contention 1(b)

The Board ruled that Subpart (b) of Contention 1, which questions Applicants' design, reliability program, methodology, and data base, is deferred for purposes of discovery and litigation until after the LWA-1 evidentiary hearing and partial initial decision. Subpart (b) involves matters of detailed design review and safety evaluation which, in accordance with the discussion in Contention 1(a) above, is more appropriately considered at the CP stage (Tr. 550-551). Applicants clarified that, in light of the Board's order, they would not rely on the information in this subpart for purposes of the LWA-1 hearing (Tr. (Tr. 576).

Contentions 2(a)-2(c)

The Board ruled that Subparts (a)-(c) of Contention 2, which broadly question the validity of the NRC Staff's postulated radiological source term for site suitability analysis, are litigable at the LWA-1 stage, subject to the same limitations set forth in the ruling on Contention 1(a).

The evidentiary record and its precedent discovery will be confined to considering whether the Staff's source term is likely to envelope the design basis accident envelope as defined under 1(a) for a reactor of the general size and type proposed (Tr. 607).

Contention 2(d)

The Board ruled that Subpart (d) of Contention 2, which broadly questions the adequacy of the containment design, is litigable at the

LWA-1 stage subject to the same limitations set forth in the ruling on Contention 1(a) (Tr. 607-608).

Contention 2(e)

No controversy existed among the parties with respect to Subpart (e) of Contention 2, which alleges that neither Applicants nor Staff has adequately calculated the guideline values for radiation doses from postulated CRBRP releases. Contention 2(e) is litigable and subject to discovery at the LWA-1 stage as admitted (Tr. 608).

Contentions 2(f)-2(h)

The Board ruled that Subparts (f)-(h) of Contention 2, which question the validity of the codes used by Applicants and Staff to date, are the basis for discovery at the LWA-1 stage as to the codes used, including their validity, foundation proof and the like Tr. (614).

Contention 3(a)

The Board ruled that Subpart (a) of Contention 3, which broadly questions the need for and adequacy of a probabilistic risk assessment of the CRBRP comparable to the Reactor Safety Study ("Rasmussen Report"), is deferred until after the LWA-1 evidentiary hearing and partial initial decision. Applicants will not rely on any analyses comparable to the Reactor Safety Study for purposes of the LWA-1 hearing (Tr. 625-626).

Contention 3(b)

Subpart (b) of Contention 3 alleges that neither Applicants' nor Staff's analyses of potential accidents, initiator sequences and events

are sufficiently comprehensive to assure that analysis of the DBAs will envelope the entire spectrum of credible accidents. The Board ruled that Contention 3(b) is litigable at the LWA-1 stage, subject to the same limitations set forth in our ruling on Contention 1(a) (Tr. 618-619).

Contention 3(c)

The Board ruled that Subpart (c) of Contention 3, which alleges that accidents associated with core melt-through following loss of core geometry and sodium-concrete interactions have not been adequately analyzed, is litigable at the LWA-1 stage subject to the limitations set forth in our ruling on Contentions 2(f)-(h) and on Contention 1(a) (Tr. 619- 620).

Contention 3(d)

The Board ruled that Subpart (d) of Contention 3, which alleges that neither Applicants nor Staff has adequately identified and analyzed the ways in which human error can initiate, exacerbate or interfere with the mitigation of CRBRP accidents, is litigable at the LWA-1 stage subject to the same limitations set forth in our ruling on Contention 1(a) (Tr. 622-625).

Matters Regarding Interrogatories

The Board denied the Staff's request (in its motion for a protective order, filed April 16, 1982) to set a numerical limit on the number of interrogatories filed by each party. An arbitrary limitation on the number of interrogatories is inappropriate at this time and in this kind of case (Tr. 643). The Board recognizes that there is a problem of too many interrogatories but does not believe that limiting the number on a mechanical basis would be fair to the parties nor would it be in the public interest (Tr. 660-661). In order for the parties to control this problem, the Board granted protective orders and struck the following pending interrogatories and requests to produce:

(1) Natural Resources Defense Council, Inc. and the Sierra Club Twenty-Fourth Set of Interrogatories and Request to Produce to Staff;

(2) Natural Resources Defense Council, Inc. and the Sierra Club Eighteenth Set of Interrogatories and Request to Produce to Applicants;

(3) NRC Staff First Round of Discovery to NRDC, et al.; and

(4) Applicants' Fourth Set of Interrogatories to Intervenors Natural Resources Defense Council, Inc. and the Sierra Club (Tr. 668).

The Board directed the parties through counsel to follow the procedures outlined in Comanche Peak[1/] and to negotiate all such discovery with reasonable dispatch. If parties are unable to resolve disputes, they shall file appropriate motions for a protective order which set forth verbatim the interrogatories or requests, the matters in controversy, and the differences between them that were discussed and negotiated. Such motions should be accompanied by points and authorities containing the authorities relied upon. Parties will have a total of eleven (11) days to reply to a motion (ten (10) days plus one (1) day delivery), and the Board will rule thereon promptly (Tr. 668-672).

If any discrepancies exist between statements or rulings made at the conference and this Order, this Order shall be controlling.

It is so ORDERED.

FOR THE ATOMIC SAFETY AND
LICENSING BOARD

Marshall E. Miller

Marshall E. Miller, Chairman
ADMINISTRATIVE JUDGE

Dated at Bethesda, Maryland
this 22nd day of April, 1982.

1/ Texas Utilities Generating Company, et al. (Comanche Peak Steam Electric Station, Units 1 and 2), LBP-81-22, 14 NRC 150, 155-157 (1981).

ATTACHMENT 2

Natural Resources Defense Council, Inc.

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WASHINGTON, D.C. 20006

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New York Office
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212 949-0049

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25 KEARNY STREET
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415 421-6561

June 11, 1982

Nunzio J. Palladino, Chairman
Victor Gilinsky, Commissioner
John F. Ahearne, Commissioner
Thomas M. Roberts, Commissioner
James K. Asselstine, Commissioner
United States Nuclear Regulatory Commission
Washington, D.C. 20555

Re: Clinch River Breeder Reactor. Docket No. 50-537

Gentlemen:

I am enclosing NRDC and Sierra Club Petition to the Commissioners To Exercise Their Inherent Supervisory Authority To Delineate the Scope of the LWA Proceeding for the Clinch River Breeder Reactor. The issues which NRDC seeks to have you consider concern the scope of the ongoing proceedings to determine whether a limited work authorization should be issued for the CRBR. In NRDC's view, those proceedings have been so restricted as to make the inquiry almost totally hypothetical and the answers which it can be expected to yield virtually meaningless.

Now that there are five Commissioners sitting, it is appropriate and vital for you to consider these questions that go to the core of the integrity of the licensing process. It is proposed to approve the CRBR site and to do the NEPA review (which must include, among other things, an assessment of the probability and consequences of serious CRBR accidents) without evaluating the information that currently exists on the CRBR design and the analyses done to date on the potential for a serious core disruptive accident for the CRBR.

New England Office: 17 ERIE DRIVE · NATICK, MA. 01760 · 617 655-1656
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Earlier in this proceeding, the Commission exercised its inherent supervisory authority to intervene and delineate its scope. The Commission's intervention is even more necessary now. We urge your attention to this matter.

Very truly yours,

Barbara A. Finamore

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Counsel for the Natural
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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before
THE COMMISSION

In the Matter of	
UNITED STATES DEPARTMENT OF ENERGY PROJECT MANAGEMENT CORPORATION TENNESSEE VALLEY AUTHORITY	Docket No. 50-537
(Clinch River Breeder Reactor Plant)	

NATURAL RESOURCES DEFENSE COUNCIL, INC. AND SIERRA CLUB PETITION TO THE COMMISSIONERS TO EXERCISE THEIR INHERENT SUPERVISORY AUTHORITY TO DELINEATE THE SCOPE OF THE LIMITED WORK AUTHORIZATION PROCEEDING FOR THE CLINCH RIVER BREEDER REACTOR

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INTRODUCTION

The licensing proceeding for the Clinch River Breeder Reactor ("CRBR") was suspended in 1977, after President Carter determined that the project was not in the best interests of the United States. The current administration disagrees. After a five year hiatus, the licensing process has been revived. Applicants are seeking a Limited Work Authorization ("LWA"). Several prehearing conferences have been held (February 9-10, 1982, April 6, 1982, and April 20, 1982) to rule on new and modified contentions.

The Atomic Safety and Licensing Board in the above-captioned proceeding issued an Order Following Conference with Parties on April 14, 1982 which ruled on the admissibility of the contentions of Intervenors Natural Resources Defense Council, Inc. and the Sierra Club. The Board admitted Intervenors' original Contentions 2, 3, and 4 as submitted, and redesignated them as Admitted Contentions 1, 2, and 3, respectively. The Contentions are reproduced infra, pp. 8 to 19. April 14, 1982 Order, supra, at 3-4.

Contentions 1, 2, and 3 raise the central safety and site suitability issues for the CRBR:

1. Has the core disruptive accident ("CDA") been properly excluded from the design basis for the CRBR?
2. Has the source term for purposes of the site suitability review been properly established?

3. Have the risks of serious CRBR accidents, including most prominently the CDA, been accurately assessed for purposes of the National Environmental Policy Act of 1969 ("NEPA")?

4. If the CDA should be included within the CRBR design basis, can the CRBR meet its programmatic objectives?

These issues are interrelated because the source term proposed by the Applicants is based on the proposition that a CDA is not a "credible" accident within the meaning of 10 CFR §100.11, fn. 1.

Unresolved by the April 14 Conference, however, was the extent to which Contentions 1, 2, and 3 were litigable at the LWA-1 stage of the proceeding. The Board reconvened with the parties on April 20, 1982, for consideration of and rulings on those issues.

On April 22, 1982, the Board issued an additional Order Following Conference with Parties, See Appendix A, which severely restricted the scope of consideration of Intervenors' Contentions 1, 2, and 3 at the LWA-1 stage. See pp. 8-21 infra. Intervenors contend that the Board's narrow view of the appropriate scope of this LWA proceeding does not permit compliance with the requirements of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§4231-4361, and does not permit the necessary findings for issuance of an LWA within the meaning and purpose of the LWA rule, 10 CFR §50.10(e).

As will be discussed in detail below, the effect of the Board's ruling applying the LWA rule to this proceeding was to prevent scrutiny of the extent to which the data and analyses already performed for the CRBR support or fail to support the conclusion that a CDA is of such exceedingly low probability that it can be excluded from the CRBR design basis.

The CRBR is the first of its kind. No Liquid Metal Fast Breeder Reactor ("LMFBR") of comparable size and type has ever been licensed in the U.S. It follows that neither the NRC Staff nor any Licensing Board has ever reviewed an application like this one nor approved a similar design. There is no long-established source term for breeder reactors comparable to that for LWRs. No Licensing board has ever determined the probability of a core disruptive accident for a comparable breeder reactor, or reviewed or approved a similar design, nor has the Advisory Committee on Reactor Safeguards ("ACRS").

The NRC Staff has not yet reviewed the CRBR design. It does not plan to issue a Safety Evaluation Report ("SER") until some time in 1983. No reactors of the "general size and type" of the CRBR have ever been designed, reviewed, built or operated in the U.S. See, Intervenors' May 6, 1982 Deposition of NRC Staff, at 39-40. (Pertinent pages are attached to Commissioners' copies at Appendix B for this and all subsequent citations to the deposition.)

Further compounding this situation, there are at the current time no definitive design criteria for judging the CRBR design. Nor are there general design criteria for fast reactors. The Applicants have proposed a set of broad, general criteria for CRBR which have not been approved by the NRC Staff. The Staff's review of these criteria will not be set out until the SER is published, well after the LWA proceeding. The general principle behind these proposed criteria is apparently that they should achieve comparability between the risks associated with light water reactors ("LWR") and the risks associated with CRBR. However, there is no way of judging whether the criteria will accomplish that, since they have not been finalized, nor has an analysis been performed by the Staff to match the existing LWR criteria against the proposed CRBR criteria. As the ACRS has observed, the questions of which LWR criteria should apply to CRBR, which should be adapted and how that should be accomplished, and what new criteria should be established in areas not covered by the LWR criteria, are not simple ones. See generally, Transcript, March 30-31, 1982 Meeting of the ACRS Subcommittee on CRBR.

Finally, it now appears very questionable that Congress will continue to authorize the Niagara of money required to complete the CRBR. The General Accounting Office has issued a report to Congress which concludes that the project is both hazardous and financially risky. Despite endemic steam

generator problems in LWRs and fast reactors alike, DOE is imprudently gambling on a steam generator design without sufficient testing, according to GAO. M. Mintz, "Citing Risks, GAO Urges Delay on Breeder Reactor," Washington Post, May 28, 1982, p. A9.

Given that there are no final design criteria, that there is no prior regulatory experience with a reactor of this general size and type, and given that the analyses to date of the CRBR design will be excluded from the hearing, the most definitive legitimate finding that the Board could make at the LWA-1 stage is that it is "feasible" to write hypothetical design criteria which, if met by a hypothetical reactor, would ensure that the site is suitable, that the risks of an accident are acceptable and that the programmatic objectives of DOE are met. That finding is so abstract as to be meaningless. It cannot support a decision to allow work to begin on a real reactor at a real site.

QUESTIONS PRESENTED

I. Does the Licensing Board's limitation of the scope of the LWA proceeding for CRBR comply with the requirements of NEPA?

II. Does the scope of the LWA proceeding as determined by the Licensing Board for CRBR permit reasoned site suitability findings under the LWA rule?

SUMMARY OF ARGUMENT

I. The Licensing Board's limitation of the scope of this LWA proceeding does not comply with NEPA. The LWA Rule requires the Board to make all the NEPA findings that would otherwise be made at the construction permit stage. NEPA requires a detailed statement of all probable impacts of the proposed action to the fullest extent possible. The Board's refusal to consider available information on CRBR, a first-of-a-kind facility, contravenes NEPA requirements. The Board's refusal to fully consider the issue of inclusion of CDAs in the CRBR design basis at the LWA stage prevents confidence that the probable environmental impacts as described are complete. The inherent uncertainty surrounding the environmental impacts of CRBR call for a more thorough analysis.

II. The scope of this LWA proceeding does not permit reasoned site suitability findings. The LWA Rule requires

reasonable assurance of site suitability. The Board's inappropriate use of a "design feasibility" standard proposed by the Applicants for this first-of-a-kind project prevents the reasonable assurance of site suitability required by the rule for an LWA and destroys confidence that any necessary design changes after full safety review will be inconsequential. The lack of previous experience with breeders argues for the use of all available information even at the LWA stage. Commission rules and decisions provide for such special treatment under these circumstances.

FACTS: THE LICENSING BOARD'S RULING

This section describes the Board's ruling with respect to each of the subsections of Intervenors' Contentions 1, 2, and 3. Contention 1(a) states:

1(a) Neither Applicants nor Staff have demonstrated through reliable data that the probability of anticipated transients without scram or other CDA initiators is sufficiently low to enable CDAs to be excluded from the envelope of DBAs.

Accepting in toto the arguments of the Applicants, the Board ruled that 1(a) is litigable at the LWA-1 stage, but that

> the inquiry at this stage is limited to consideration of whether it is feasible to design CRBR to make HCDAs sufficiently improbable that they can be excluded from the envelope of design basis accidents for a reactor of the general size and type proposed. Specifically, discovery at the LWA-1 stage is limited to the following areas of concern:
>
> 1. The major classes of accident initiators potentially leading to HCDAs;
>
> 2. The relevant criteria to be imposed for the CRBRP;
>
> 3. The state of technology as it relates to applicable design characteristics or criteria; and
>
> 4. The general characteristics of the CRBRP design (e.g., redundant, diverse shutdown systems)

April 22, 1982 Order, supra, at 2-3.

The Board's Order does not explain why these four particular areas of concern are the specific ones and the only ones which it is appropriate to consider at the LWA-1 stage.

In fact, they are lifted verbatim from Applicants' Statement of Position in Regard to NRDC Contentions 1, 2, and 3 (at pp. 13-14)(Appendix C). That submission likewise does not explain why these four particular factors should delimit the scope of consideration of these issues at the LWA-1 stage.

The Board ruled, in addition, that NRDC could not inquire into the extent to which the CRBR design has succeeded in achieving the goal of ensuring that the occurrence of a CDA is an event of such exceedingly low probability that it need not be included in the design basis for the CRBR. Perhaps the best example of the nature of the Board's rulings is as follows:

> MR. COCHRAN: In order for me to make a case with regard to whether it is feasible and within the state of the technology and so forth to site a reactor of the general size and type ... one still must go through the site suitability analysis and postulate a source term larger than anything deemed credible, and in order to determine what is deemed credible, ... one needs to look at the current available data with regard to computer analyses of CDAs. Those computer analyses by and large are CRBR specific.
>
> Now, I fear, I desperately fear that when I ask questions on discovery that really go to the issue of feasibility for a reactor of the general size and type but ... am seeking data with respect to a specific design, that is, the best data that we have got for a general reactor of this size and type, that Staff and Applicants are going to come back to you and say no, that is beyond the scope.
>
> . . . .
>
> JUDGE MILLER: We could give you the short answer, it would be beyond the scope, so don't bother to ask it in one of ten interrogatories. Live with what we have ruled because that is what we have ruled.

Transcript, April 20, 1982 ASLB Prehearing Conference, at 551-52. See, generally, Id. at 517-58 (Appendix D).

These four factors which have been posited by Applicants and subsequently adopted by the Board have only superficial relevance to the necessary determinations for an LWA. Consideration of "the major classes of accident initiators potentially leading to HCDAs" while necessary to determine whether the risks of a CDA have been properly treated by Applicants and Staff, is far from sufficient. The serious controversy for purposes of site suitability and NEPA determinations at the LWA-1 stage is whether the CDA is credible, which depends on the frequency with which those accident initiators can be expected to occur at CRBR and the frequency with which these can be expected to proceed to a CDA. Applicants have performed a probabilistic assessment, CRBRP-1, which addresses precisely those probabilities for CRBR, as well as an analysis of common mode failures. But under the Board's ruling, those sources of "available information" may not be considered at the LWA-1 stage because they are specific to the CRBR design.

As to "the relevant criteria to be imposed for the CRBRP," what those criteria are is certainly a relevant question, and one which the Staff has yet to decide upon, See infra; but the question which relates to the suitability of the site and NEPA analysis is whether CRBR will satisfy whatever criteria are eventually adopted. (Of course, if the criteria are "backfitted" to the plant, as appears to be the case, See

inf[illegible] then the satisfaction of them will not be a meaningful test.)

The Board's third permissible area of inquiry is "the state of technology as it relates to applicable design characteristics or criteria." Remarkably, the import of the Board's ruling is that virtually any technology may be considered except the technology of CRBR. If, by "state of technology", the Board means the technological ability to build, for example, a redundant, diverse shutdown system, that question is irrelevant. The real issue here is whether a redundant, diverse shutdown system, together with other safety features, affords sufficient reliability that CDAs are not credible. There can be little question but that the best "available information and review to date" on that subject is the analysis that has already been performed of the CRBR design. Under the Board's ruling, then, the best information on whether the safety systems of a plant of the general size and type proposed will satisfy whatever criteria are established cannot be considered at the LWA-1 stage.

Consistent with the discussion in the preceding paragraph, consideration of "the general characteristics of the CRBRP design" is insufficient to answer the important questions in this proceeding. The example the Board gives -- the existence of a redundant, diverse shutdown system -- is not contested. The kind of design issues which must be resolved in

order to determine whether the CDA can be excluded from the design basis, what the source term should be for CRBR and whether the CRBR is likely to meet its programmatic objectives are much more concrete. For example, the reactor vessel for CRBR has been designed to withstand an energetic CDA of 661 megajoules. If, in fact, a vessel which can withstand 1200 megajoules is needed, as specified in the May 6, 1976 letter to Applicants from the NRC Staff (Denise-Caffey letter), the cost and time required to refabricate the reactor vessel to comply with that higher standard have major implications for the ability of the CRBR to achieve its objectives and thus for the NEPA cost-benefit balance.

In effect, the Board's ruling contains the implicit presumption that general design characteristics like redundant diverse shutdown systems will effectively satisfy any criteria that might be adopted. That proposition has never been subjected to serious scrutiny, much less demonstrated with reasonable assurance.

The Board applied the same limitations set forth in the ruling on Contention 1(a) to Contentions 2(a)-2(c), 2(d), and 3(b)-3(d).

Contentions 2(a)-2(c) state:

2. The analyses of CDAs and their consequences by Applicants and Staff are inadequate for purposes of licensing the CRBR, performing the NEPA cost/benefit

analysis, or demonstrating that the radiological source term for CRBRP would result in potential hazards not exceeded by those from any accident considered credible, as required by 10 C.F.R. §100.11(a), fn. 1.

a) The radiological source term analysis used in CRBRP site suitability should be derived through a mechanistic analysis. Neither Applicants nor Staff have based the radiological source term on such an analysis.

b) The radiological source term analysis should be based on the assumption that CDAs (failure to scram with substantial core disruption) are credible accidents within the DBA envelope, should place an upper bound on the explosive potential of a CDA, and should then derive a conservative estimate of the fission product release from such an accident. Neither Applicants nor Staff have performed such an analysis.

c) The radiological source term analysis has not adequately considered either the release of

fission products and core materials, e.g. halogens, iodine and plutonium, or the environmental conditions in the reactor containment building created by the release of substantial quantities of sodium. Neither Applicants nor Staff have established the maximum credible sodium release following a CDA or included the environmental conditions caused by such a sodium release as part of the radiological source term pathway analysis.

The Board ruled that Contentions 2(a)-2(c) are litigable at the LWA-1 stage, but subject to the same limitations set forth in the ruling on Contention 1(a):

> The evidentiary record and its precedent discovery will be confined to considering whether the Staff's source term is likely to envelope the design basis accident envelope as defined under 1(a) for a reactor of the general size and type proposed.

April 22 Order, at 5.

Contention 2(d) states:

> 2(d) Neither Applicants nor Staff have demonstrated that the design of the containment is adequate to reduce calculated offsite doses to an acceptable level.

The Board ruled that Contention 2(d) is litigable at the LWA-1 stage, but subject to the limitations set forth in the ruling on Contention 1(a). April 22 Order, at 5-6.

Contentions 3(b)-3(d) state:

b) Neither Applicants' nor Staff's analyses of potential accident initiators, sequences, and events are sufficiently comprehensive to assure that analysis of the DBAs will envelop the entire spectrum of credible accident initiators, sequences and events.

c) Accidents associated with core meltthrough following loss of core geometry and sodium-concrete interactions have not been adequately analyzed.

d) Neither Applicants nor Staff have adequately identified and analyzed the ways in which human error can initiate, exacerbate, or interfere with the mitigation of CRBR accidents.

The Board ruled that the matters in Contentions 3(b)-3(d) are litigable at the LWA-1 stage, but subject to the limitations set forth for Contention 1(a). April 22 Order, at 6-7.

The discussion above pertaining to the Board's ruling on Contention 1(a) applies equally to these additional contentions which have been subjected to the same limitations. The Board's ruling effectively precludes any meaningful consideration of the most important issues related to site suitability, the source term and the NEPA cost-benefit balancing. NRDC will be unable to make a case if we are not permitted to consider available data on CRBR.

While the Board's April 14, 1982 Order had admitted Intervenors' Contentions 1, 2, and 3 as submitted, in its April 22 Order the Board ruled that Contentions 1(b) and 3(a) should be deferred for consideration until after the LWA-1 hearing and partial initial decision.

Intervenors' Contention 1(b) states:

1(b) Neither Applicants nor Staff have established that Applicants' "reliability program" even if implemented is capable of eliminating CDAs as DBAs.

(1) The methodology described in the PSAR places reliance upon fault tree and event tree analysis. Applicants have not established that it is possible to obtain sufficient failure mode data pertinent to CRBR systems to validly employ these techniques in predicting the probability of CDAs.

(2) Applicants' projected data base to be used in the reliability program is inadequate. Applicants have not established that the projected data base encompasses all credible failure modes and human elements.

(3) Even if all of the data described in Applicants' projected data base is obtained, Applicants have not established that CDAs have a sufficiently low probability that they may be excluded from the CRBR design bases.

(4) Applicants have not established that the test program used for their reliability program will be completed prior to Applicants' projected date for completion of construction of the CRBR.

The Board ruled that Contention 1(b) is deferred for consideration until after the LWA-1 hearing and partial initial decision because it "involves matters of detailed design review and safety evaluation which ... is more appropriately considered at the CP stage." April 22 Order, at 5.

The "reliability program" referred to is described in Appendix C of the PSAR for CRBR. It is the basic analytical tool that is supposed to provide assurance that a CDA for CRBR is an exceedingly unlikely event. It is inconceivable to us

that the Board can find reasonable assurance that the CDA has been properly treated even at the LWA-1 stage without reliance on the "reliability program." However, the mere existence of such a program does not provide a reasoned basis for the conclusion that CDAs are not credible. Intervenors contend in 1(b) that Applicants' reliability program cannot work because, inter alia, the data base is insufficient to generate reliable conclusions. If this contention is correct, all assumptions concerning the excludability of CDAs from the design basis are incorrect, and an LWA cannot issue. Yet, under the Board's ruling, consideration of this crucial issue is forbidden at the LWA stage, and Intervenors are denied discovery on it. The effect of the Board's ruling is that the effectiveness of the reliability program is deemed irrelevant to the NEPA and site suitability analyses -- a result which is impossible to rationalize.

Intervenors' Contention 3(a) states:

> 3. Neither Applicants nor Staff have given sufficient attention to CRBR accidents other than the DBAs for the following reasons:
>
> a) Neither Applicants nor Staff have done an adequate, comprehensive analysis comparable to the Reactor Safety Study ("Rasmussen Report") that could identify other CRBR accident possibilities of greater frequency or consequence than the accident scenarios analyzed by Applicants and Staff.

The Board ruled that consideration of Contention 3(a) should be deferred until after the LWA-1 stage. April 22 Order, at 6.

This ruling is an excellent example of the Board's refusal to consider "available information and review to date." There exists a report, CRBRP-1, which includes a probabilistic risk analysis of accident probabilities for CRBR, along the lines of the Reactor Safety Study. Intervenors allege that this study devotes insufficient attention to accidents other than those within the design basis ("DBAs"), but we are prevented from considering that study or its sufficiency precisely because it deals with the facility which is seeking an LWA -- the CRBR.

The Commission has made it clear that probabilistic assessments of accident risks are an integral part of its NEPA reviews. In its June 13, 1980, Policy Statement on Nuclear Power Plant Accident Considerations Under NEPA, the Commission stated:

> In the analysis and discussion of such risks, approximately equal attention shall be given to the probability of occurrence of releases and to the probability of occurrence of the environmental consequences of those releases.
>
> . . . .
>
> Detailed quantitative considerations that form the basis of probabilistic estimates of releases need not be incorporated in the Environmental Impact Statement but shall be referenced therein.

45 Fed. Reg. 40103. The requirement that detailed probabilistic estimates shall be referenced in EISs clearly implies that such estimates shall exist, and that they are to

form part of the NEPA review. In the instant case, such a study -- CRBRP-1 -- exists. Intervenors contend it is inadequate, but the Board will not assess the adequacy of that or any other study at the LWA-1 stage because it is based on the specific design of CRBR.

The Board ruled that Intervenors' Contentions 2(f)-2(h) can be the basis for discovery at the LWA-1 stage. Intervenors' Contentions 2(f)-2(h) state:

> f) Applicants have not established that the computer models (including computer codes) referenced in Applicants' CDA safety analysis reports, including the PSAR, and referenced in the Staff CDA safety analyses are valid. The models and computer codes used in the PSAR and the Staff safety analyses of CDAs and their consequences have not been adequately documented, verified or validated by comparison with applicable experimental data. Applicants' and Staff's safety analyses do not establish that the models accurately represent the physical phenomena and principles which control the response of CRBR to CDAs.
>
> g) Neither Applicants nor Staff have established that the input data and assumptions for the computer models and codes are adequately documented or verified.
>
> h) Since neither Applicants nor Staff have established that the models, computer codes, input data and assumptions are adequately documented, verified and validated, they have also been unable to establish the energetics of a CDA and thus have also not established the adequacy of the containment of the source term for post accident radiological analysis.

The Board ruled that Contentions 2(f)-2(h) "are the basis for discovery at the LWA-1 stage as to the codes used, including their validity, foundation, proof and the like."

April 22 Order, at 6. This ruling, although it lacks logical consistency with the Board's other rulings, was based upon the Applicant's admission that it intended to use these codes to at least some as yet undefined but limited extent. Transcript, April 20, 1982 Prehearing Conference, at 609 (Remarks of Mr. Edgar) (Appendix D). Thus, the Applicants were permitted to determine the scope of the proceeding. The codes which they choose to rely upon are admissible to the extent they choose to rely upon them. However, NRDC is not permitted, by the Board's previous rulings, to inquire into any CRBR-specific data or analyses other than those specifically relied upon by Applicants. In addition, the Board ruled that Intervenors may obtain discovery from Applicants regarding their codes, but may not obtain discovery from the Staff regarding their independent evaluations of the accuracy of Applicants' codes. The Board deferred a ruling on the ultimate relevance of these issues at the LWA-1 stage. Transcript, April 20, 1982 Prehearing Conference, at 613-16.

The Staff is using these codes in their ongoing discussons with Applicants. See, Transcript, Intervenors' May 6, 1982 Deposition of NRC Staff, at 126, (Appendix B). The codes are fundamental to the merits of Applicants' case and to Intervenors' contentions regarding CDAs. Yet Intervenors are now denied inquiry of the Staff even as to whether they concur in Applicants' analyses with the codes.

The Licensing Board ruled that Intervenors' Contention 2(e) is litigable and subject to discovery at the LWA-1 stage as admitted, April 22 Order, at 6, so that contention is not in controversy here.

The overall effect of the Board's ruling is that the scope of the LWA-1 proceeding is defined by the scope of the affirmative case that Applicants choose to make: generalized and abstract assertions that it feasible to design a breeder reactor to make CDAs sufficiently improbable. Intervenors wish to show that many of those generalized findings do not stand up to scrutiny when available, concrete data are applied against them. The Board does not permit us to make that case, because it depends to some extent on "detailed design considerations" for CRBR.

Applicants have posited -- and the Board has adopted -- the mystifying proposition that "available information and review to date ... for a reactor of the general size and type proposed" cannot include information on the proposed reactor -- even if that proposed reactor is the only one of the general size and type for which concrete information is available. Intervenors submit that such imposed blindness to pertinent data is not the intent and purpose of the LWA rule, and will in fact make it impossible under the circumstances for the Board to make the reasoned findings of site suitability and acceptable environmental costs which that rule requires.

DISCUSSION

I. THE LICENSING BOARD'S SEVERE LIMITATION OF THE SCOPE OF THE LWA PROCEEDINGS FOR CRBR VIOLATES NEPA REQUIREMENTS.

Before the Licensing Board can issue a Limited Work Authorization (LWA), it must make all of the findings required by 10 CFR §§51.52(b) and (c) that would otherwise be made prior to issuance of the construction permit. 10 CFR §50.10(e)(2)(i). In addition, the Staff must have completed a final environmental impact statement ("EIS") on the issuance of the construction permit ("CP"). 10 CFR §50.10(e)(1). The Board must, among other things:

> (1) Decide those matters in controversy among the parties within the scope of NEPA and Part 51;
>
> (2) Issue a partial initial decision that may include findings and conclusions which affirm or modify the content of the final environmental impact statement prepared by the Staff;
>
> (3) Determine whether the requirements of sections 102(2)(A), (C), and (E) of NEPA and Part 51 have been complied with;
>
> (4) Independently consider the final balance among conflicting factors contained in the record of the proceeding with a view to determining the appropriate action to be taken;
>
> (5) Determine, after weighing the environmental, economic, technical, and other benefits against environmental and other costs, and considering available alternatives, whether the construction permit or license to manufacture should be issued, denied, or appropriately conditioned to protect environmental values; and
>
> (6) Determine, in a contested proceeding, whether, in accordance with Part 51, the construction permit should be issued as proposed.

10 CFR §§51.52(b) and (c).

The Commission made it clear when it proposed the new LWA rule in 1974 that it intended NEPA findings to be complete before issuance of an LWA. The Commission said that a Limited Work Authorization could issue

> if the presiding officer ... had, after appropriate hearing, made all the findings required for issuance of a construction permit with respect to the NEPA aspects of the construction permit proceeding. The required NEPA findings include
>
> . . . .
>
> (2) a finding, after independent consideration of the final NEPA balance among conflicting factors ... that with respect to NEPA matters, the construction permit should be issued. ...

39 Fed. Reg. 4582 (Feb. 5, 1974)(emphasis added). See, Boston Edison Company (Pilgrim Nuclear Power Station, Unit 2) ALAB-632, 13 NRC 91, 92 (1981). The LWA environmental findings must constitute the complete environmental record for the CRBR licensing proceedings. In every case Intervenors have found, the LWA partial decision on environmental issues has been incorporated into the CP decision itself. See, e.g., Houston Lighting and Power Company (South Texas Project, Units 1 and 2) LBP-79-10, ^ NRC 439 (1979). It is at the LWA-1 stage, therefore, that the Board is supposed to fully address the compliance of CRBR with NEPA.

The Licensing Board declines to comply with this requirement. The Board's April 22 Order states, at p. 4:

> [A]lthough a full NEPA review is mandated for the LWA-1 hearing phase, the finality of this review must of necessity await the completion of the CP evidentiary hearing where full design details and supportive analyses of the facility will be critiqued.

The Board's cryptic distinction between "full" and "final" NEPA review is nowhere suggested in pertinent regulations, or cases, and clearly contravenes the Commission's explanation of the LWA rule, supra, and the clear language of the rule itself:

> No such authorization shall be granted unless the staff has completed a final environmental impact statement on the issuance of the construction permit as required by Part 51 of this chapter.

10 CFR §50.10(e)(1) (emphasis added). Similarly, the Board must make "all the findings required by §51.52(b) and (c) ... to be made prior to issuance of the construction permit for the facility. ..." 10 CFR §50.10(e)(2)(i). Subsections 51.52(b) and (c), in turn, call for complete NEPA findings, consideration of the final NEPA balance among all the relevant factors, and a determination whether, with respect to NEPA matters, the CP should be issued. Nowhere in the pertinent regulations is there the slightest intimation that, as Applicants asserted and the Board apparently accepted, "information necessary for environmental ... [LWA] findings can and should be substantially more limited than those for the CP." Applicants' Statement of Position in Regard to NRDC Contentions 1, 2, and 3 (April 15, 1982), at 6 (Appendix C). This assertion is flatly wrong.

Even if the NRC had wished to "substantially limit" the environmental findings at the LWA-1 stage when it promulgated the LWA rule, it could not do so through administrative rulemaking as a matter of law. NEPA states, in the opening lines of its operative section: "The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter ...." 42 U.S.C. §4332(1). Council on Environmental Quality regulations implementing NEPA state:

> The phrase "to the fullest extent possible" in section 102 means that each agency of the Federal Government shall comply with that section unless existing law applicable to the agency's operations expressly prohibits or makes compliance impossible.

40 CFR §1500.6. Also:

> Parts 1500-1508 of this Title provide regulations applicable to and binding on all Federal agencies for implementing [NEPA] except where compliance would be inconsistent with other statutory requirements.

40 CFR §1500.3 [emphasis added]. Thus, it is clear that NRC could not, through administrative rulemaking such as promulgation of the LWA rule, limit or in any other respect modify NEPA requirements. Only Congress may affect such modifications; it has not done so with respect to the LWA rule.

NEPA requires not only a "detailed statement" of environmental impacts, 42 U.S.C. §4332(2)(C), but also that agencies explore the environmental ramifications of their proposed actions to the "fullest extent possible," 42 U.S.C. §4332(1), Scientists' Institute for Public Information v. Atomic Energy Commission, 481 F.2d 1079, 1092 (D.C.Cir. 1973). In discussing the proper scope of the environmental impact statement for the LMFBR Program, of which CRBR is a part, the U.S. Court of Appeals for the D.C. Circuit emphasized this point:

> [NEPA] "must be construed in the light of reason if it is not to demand what is, fairly speaking, not meaningfully possible ...." But implicit in this rule of reason is the overriding statutory duty of compliance with [environmental] impact statement procedures "to the fullest extent possible."

Id., quoting NRDC v. Morton, 458 F.2d 827, 834 (D.C. Cir. 1972).

The Board's refusal at the LWA-1 stage to go beyond abstract considerations of design feasibility also violates the NEPA requirement that the impacts of the "proposed action" be assessed. The proposed action in the present instance is construction of the CRBR plant -- not a hypothetical or "feasible" design. The Commission made it clear when it promulgated the LWA rule that it did not intend the NEPA hearing to be limited to considerations of design feasibility:

> [S]ufficient information regarding the proposed plant is required to be included in ... the record of the NEPA hearing in order

> to conduct a reasonable cost-benefit analysis as required by NEPA.

39 Fed. Reg. 14507 (April 24, 1974) (emphasis added).

Indeed, the FES which is to form the basis for the environmental review is for CRBR -- not a hypothetical design. Whether a hypothetical 350-mW LMFBR can be designed to satisfy hypothetical criteria intended to ensure that CDAs are sufficiently improbable is not entirely irrelevant, but neither does it answer the pertinent NEPA question: Will the proposed action -- construction of CRBR -- result in acceptable environmental risks compared to the benefits? This overarching NEPA question cannot be answered without first answering the question: Does the design of the CRBR make CDAs sufficiently improbable? The answer to this question is absolutely key to the environmental, site suitability, and cost/benefit findings which are necessary for an LWA decision.

There is no dispute that the potential risks and consequences of a CDA are a major issue in the CRBR licensing proceeding. The ACRS Subcommittee on CRBR has made its concern regarding the CDA issue abundantly clear in recent meetings:

> MR CARBON [Subcommittee Chairman]: I think at least some people within the technical community would maintain that an energetic event -- core meltdown with an energetic release coming from recriticality or some such thing could maybe happen....

Transcript, March 30, 1982, Meeting of the ACRS Subcommittee on CRBR, at 44 (Appendix E).

> MR. MORRIS [NRC Staff]: I agree that one of the main thrusts of our review must be to assure that CDA does not occur or at least is very improbable, and those more specific requirements or design measures that will be built into Clinch River will be designed just for that purpose.
>
> A large part of our review is related to avoiding CDAs.

Id. at 99

> MR. CHECK [NRC Staff]: Whether the CDA is a Class 9 or a DBA is an issue, a contention.
>
> That, of course, has implications, very direct implications on what the source term itself should be; and that is why we are re-examining what was done before and seeing if we can do less and still meet responsibility [sic] requirements for LWA-1 findings.

Id. (March 31, 1982) at 124.

> MR. MARK [Subcommittee Member]: What we are saying is we have to understand something about the progress of such an event. We have not been quite able to decide whether it is a design-basis event or not a design-basis event. We have not been able to decide whether it is a likely event or an unlikely event. But we have decided that we must understand it.
>
> We are going to have to face up, however, at some point to the extent to which we insist that this event be prepared for in the design. Is it or is it not design basis?
>
> In 1974, I believe it was a design basis. In 1976 it was set aside as not a design basis. Yesterday we heard it is not design basis. Usually, we do not really discuss things which are not design bases nor feel that it is necessary.
>
> Here, for some reason not totally clear to me, we are acting as it it were.

Transcript, May 5, 1982, Meeting of the ACRS Subcommittee on CRBR, at 381-82 (Appendix F).

It is also beyond dispute that the matter is not yet resolved:

> MR. CHECK: You said something about how it is classified here, whether (a CDA) is DBA or not. While I am not the ultimate historian, I think it has never really been classified as a design basis event. It has skirted it; it has come close. I think we are prepared to say that it is not a design-basis event without being able to prove that today, without wishing to make that case today.
>
> Ultimately, we will have to, we know that. And we will be prepared at the time of our SER to defend our position more fully. But for now, we state it as a requirement and an objective that the CDAs will not be design-basis events. And I believe that you will see the treatment we are giving them is consistent with that beyond the design-basis classification.

Id. at 382-83. See also, U.S. Dept. of Energy, Draft Environmental Impact Statement on the LMFBR Program (Supplement to ERDA-1535)(Dec. 1981, pp. 131-36). On May 27, 1977, the Staff wrote to Applicants (Letter from Richard P. Denise to Lochlin W. Caffey):

> As indicated in the Staff's letter of March 30, 1977, we are unable to agree with your analyses, evaluations, and conclusions for CRBRP on the accommodations of a core meltdown. The principal reasons for this position is [sic] that there is an insufficient technical basis to substantiate many of your claims. The phenomena and scenarios associated with the accident are complex, and uncertainties in these are neither addressed by technical information nor enveloped by conservative assumptions.

Essentially nothing has changed concerning these uncertainties and insufficiencies of data since that 1977 letter. NRC has not yet resolved the issues and it admits as much, supra. The only real difference now is that the Staff is attempting to use the LWA rule to allow work to begin without resolving these issues, despite the fact that they are central to the NEPA analysis.

> MR. CHECK: I am trying to string together a history and some rationalization for a logical approach to this which, quite frankly, is aimed at describing that minimum, that minimum that we must do for LWA-1 purposes.
>
> . . . .
>
> ... [W]e are re-examining what was done before and seeing if we can do less and still meet reponsibility [sic] requirements for LWA-1 findings.

Transcript, March 31, 1982, Meeting of the ACRS Subcommittee on CRBR, at 123-24 [emphasis added]. The following exchange evidences the ACRS's concern with this "minimum findings" approach by the NRC Staff:

> MR CHECK [NRC Staff]: If we proceed down this path of minimum finding, we are going to be leaning toward the finding of feasibility.
>
> MR. OKRENT [Subcommittee Member]: I think that is an inappropriate path if that is really the one you are planning to take for a variety of reasons, many of which have been said before, even at the Supreme Court.
>
> . . . .
>
> You have to have in mind, it seems to me, a reactor that resembles the one that the Applicant has in mind or it is just not ... meaningful --

Id. at 135-136.

If the Staff and Applicants are wrong about the probability of CDAs, it is most likely that the postulated source term does not bound all credible accidents. If the source term is wrong, the risk analysis and the Summary of Radiological Consequences of Postulated Accidents in Table 7.2 of the FES for CRBR are wrong, so NEPA and 10 CFR §§50.10(e)(2)(i) and 51.52(b) and (c) are not satisfied. Given the magnitude and obvious implications of the CDA issue for the

LWA NEPA analysis, it is imperative that the issue be decided fully and at the earliest possible stage. The Board's cramped view of the appropriate scope of the CDA issue at the LWA stage prevents confidence that the probable environmental impacts as described are complete, as NEPA requires.

The LWA rule was not intended to facilitate the evasion of NEPA requirements for an EIS prior to major federal actions. Indeed, such a purpose would be legally proscribed, supra. The purpose was rather to impose a structure on the previously ad hoc granting of exemptions under 10 CFR §50.12(a) to the requirement of 10 CFR §50.10(c) that prohibits commencement of construction of a nuclear power plant until a construction permit has been issued. When it proposed the new rule, the AEC commented:

> The amendments ... are intended to provide a more uniform basis for determining the extent to which limited site activities should be permitted prior to the issuance of a construction permit for a power reactor. They are designed to facilitate public participation in that process, to assure appropriate consideration of NEPA matters and to provide for timely decision-making.

39 Fed. Reg. 4582 (Feb. 5, 1974)(emphasis added). Rejecting suggestions remarkably similar to those of Applicants in the instant case, the Commission stated when it finally promulgated the rule:

> A number of comments ... suggested that the provisions in §50.10(e) requiring a full NEPA review and hearing prior to grant of authorization were unnecessary and would

> unduly delay plant construction. The Commission believes, however, that such provisions, which facilitate public participation and ensure appropriate consideration of NEPA matters, are in the public interest and should be retained in the rule.

39 Fed. Reg. 14507-08 (April 24, 1974) (emphasis added).

This rulemaking history of the LWA rule casts substantial doubt on the Licensing Board's present interpretation of it. The rule does not provide for partial, or incomplete, or "threshold" NEPA findings, as Applicants and the Board would have it. It provides for full NEPA review of the proposed plant. The LWA rule certainly does not provide that Applicants can define the precise limitations of the LWA hearing and preclude Intervenors from fully discussing issues -- such as CDAs -- which are the very core of NEPA considerations in this case. Rather, the rule is designed <u>to facilitate public participation in the NEPA decision-making process</u>, and to assure appropriate consideration of NEPA matters.

NRDC is aware that, in the licensing of light water reactors, design-specific safety data is generally deferred until the construction permit stage when a limited work authorization has been requested. It is possible to make the requisite NEPA findings without that detailed, design-specific safety data because for LWRs there are (1) established general design criteria, and an array of regulations and regulatory guides which govern the design of such plants (Appendix A to 10

CFR Part 50), and (2) years of experience with reactors of the same general size and type. Together, those two factors afford reasonable assurance that nothing discovered at the construction permit stage will make the site unsuitable or fundamentally alter the NEPA analysis of risks and the cost-benefit balancing. In other words, established regulatory criteria and experience afford reasonable certainty that the LWA findings will prove to be reasonably correct.

The extent to which LWA findings are based on prior experience is apparent in the cases. LWA decisions typically reference previously-licensed reactors as evidence supporting the finding that the proposed facility will meet environmental and site suitability guidelines. See, e.g., Gulf States Utilities Company (River Bend Station, Units 1 and 2), LBP-75-50, 2 NRC 419 (1975): "The new containment design concepts are refinements of previously approved boiling water reactor facilities now in operation or under construction." Id. at 456. Also: "Other nuclear power plants within the tectonic region have been designed for similar seismic conditions." Id. at 459. See also, Public Service Company of Indiana, Inc. (Marble Hill Nuclear Generating Station, Units 1 and 2), LBP-77-52, 6 NRC 294, 343 (1977); Washington Public Power Supply System (WPPSS Nuclear Project Nos. 3 and 5), LBP-77-25, 5 NRC 964, 1005 (1977); Tennessee Valley Authority (Hartsville Nuclear Plant, Units 1A, 1B, 2A, and 2B),

LBP-76-16, 3 NRC 485, 535 (1976), Houston Lighting and Power Company (South Texas Project, Units 1 & 2), LBP-75-46, 2 NRC 271, 328 (1975).

In addition, NEPA itself requires reasonable confidence that environmental findings at the LWA stage will remain valid. If substantial changes in the proposed action or significant new circumstances or information relevant to environmental concerns significantly diminish the validity of the NEPA findings, the environmental impact statement must be supplemented and recirculated, 40 CFR §1502.9(c), Natural Resources Defense Council v. Morton, 337 F. Supp. 170 (D.C.D.C. 1972). In other words, if subsequent developments make it clear that the original environmental findings were inadequate, those inadequacies are not overlooked, but must be remedied -- the correctness of the environmental assessment is important to the NEPA process. While the supplementation procedures underscore the importance of accuracy and completeness, they do not constitute "an excuse for partial compliance the first time around." W. Rodgers, Environmental Law 774 (1977). "A supplemental statement is, by definition, a late statement ...." Id. As such, it can rarely play the role in agency decision-making that is the true purpose of the EIS procedures, 40 CFR §1502.1. "Supplements should be discouraged by a judicial insistence on an early statement and a definitive statement on the first attempt." W. Rodgers, supra, at 774.

Thus, the possibility of later supplementation of the LWA environmental findings in the instant case does not excuse partial compliance with NEPA at the LWA stage, as argued by Applicants, Staff, and the Board.

In the instant case, there is no basis for confidence in the correctness of LWA findings based on a cursory review of the "feasibility" of designing a hypothetical breeder reactor, since there is no experience in licensing or operating reactors of the general size and type of CRBR. There is nothing to which the Board can point and say, "Experience to date with 250-500-mW LMFBRs gives some assurance that our assumptions regarding the probability of CDAs is correct."

In addition, there are no established LMFBR general design criteria, similar to those in Appendix A to 10 CFR Part 50 for LWRs, by which to judge the adequacy of CRBR. The Staff plans to first issue final Principal Design Criteria for CRBR at the same time it issues its Safety Evaluation Report ("SER"). See, Transcript, March 30-31, 1982, Meeting of the ACRS Subcommittee on CRBR, at 13-16, 21-25, 50 (Appendix E). In fact, the criteria by which CRBR is supposedly to be judged are being developed at the same time that the design for the plant is being finalized, and apparently on the basis of the plant's design rather than vice versa. As ACRS subcommittee member Myron Bender stated: "I think your timing is wrong. I think you have to get [the design criteria] out before you put

it in the SER." Id. at 31. "[T]here's no basis for judging unless you put the judgment criteria out before you present your case." Id. at 33.

Both the staff and the ACRS Subcommittee made it clear that the criteria being developed were heavily dependent on the design of CRBR. Id. at 57, 61. Subcommittee Chairman Max Carbon acknowledged that the way the criteria were being developed raised questions as to their meaningfulness when he remarked:

> [W]e have to be sure that these are viewed as standards by which CRBR is judged, rather than -- I think his words were something along the lines of prepared to help justify what we are doing.

Id at 63.

Moreover, there is no basis for the choices of the principal design design criteria which have been proposed by Applicants and are being considered by Staff. This omission has also been noted by the ACRS:

> The criteria are kind of bald right now. They just say, here are the criteria. But why they are criteria leaves a lot to the imagination, and while I am very comfortable with what I understand about LWRs, I do not think I have any reason to believe that anybody here should have less discomfort than me with the question of whether I understand why LMFBRs have certain criteria.

Id. at 64 (Remarks of Mr. Bender). Once again, Staff responded that it would defend its choice of criteria when it issues its SER. Id at 65.

Under the instant circumstances -- no experience, no standards -- there can be no confidence in the correctness of the Staff's assumption, and the Board's acceptance, of a "design feasibility" standard to exclude CDAs from the CRBR design basis. Deferring full consideration of the issue until the CP stage presents the very substantial possibility that the NEPA analysis, and therefore the LWA findings, will be fatally flawed, and that major design changes will be required after a more thorough safety review. In the LWA proceeding for River Bend Station, the Licensing Board Panel held that one of the findings required for an LWA was that

> 3) It is unlikely that any costs incurred in modifying the plant to meet [the standards] would be so large as to seriously disturb the cost-benefit or plant-vs-alternatives balances reached in the environmental hearings.

Gulf States Utilities Company (River Bend Station, Units 1 and 2), LBP-75-50, 2 NRC 419, 461 (1975). The Board found the standards met in that case. The other two findings the Board required were (1) that there is reasonable assurance that the plant can be designed to conform to the standards, and (2) that if it is so designed the radiological impact will be of small weight in the environmental balance. In the instant case, finding number 3 cannot possibly be met. If Staff's assumptions with regard to the probability of a CDA for a hypothetical breeder reactor prove incorrect for the CRBR, it is most likely that required design changes in CRBR would

"seriously disturb the cost-benefit or plant-vs-alternative balances reached in the environmental hearings." Staff has acknowledged that likelihood: "Between Class 9 and Class 8 and below that is a lot of money, a different design." Transcript, March 30-31, 1982 Meeting of the ACRS Subcommittee CRBR, at 104 (Remarks of Mr. Check). Likewise: "Whether the CDA is a ... DBA ... has implications, very direct implications on what the source term itself should be." Id. at 124.

NEPA requires that uncertainty be factored into environmental reviews, NRDC v. NRC, No. 74-1486, ___ U.S. App. D.C. ____ (April 27, 1982) slip op. at 11, 34, 46, and that the "cost of uncertainty -- i.e., the costs of proceeding without more and better information" be considered in the decisionmaking process, Alaska v. Andrus, 580 F.2d 465, 473 (1978). Furthermore, a "worst case analysis" is required "where there are gaps in relevant information or scientific uncertainty," North Slope Borough v. Andrus, 486 F.Supp. 332, 346 (1979), 40 CFR §1502.22.

In the instant case, there are crucial information gaps and scientific uncertainty. The Staff admits that it cannot "find" the rationale for the decision that was made (in the May 6, 1976, Denise-Caffey letter) to exclude CDAs from the CRBR design basis:

> MR. CHECK: [S]ome of our difficulty stems from the lack of that document which describes the bases for the decisions that were made.

Transcript, March 30-31, 1982, Meeting of the ACRS Subcommittee on CRBR, at 31. The Staff also admits that it does not know how to assure the exclusion of CDAs:

> MR. CHECK: I doubt there is anybody in this room who would not grab at the mechanism for excluding the CDA. I guess what we are doing is we are confessing to you we do not know how to do that.

Id. at 102. While the 1977 FES for CRBR deals perfunctorily with Class 9 accidents in section 7.1, the uncertainty surrounding the issue and the crucial relationship it bears to the assessment of the potential adverse environmental impacts of CRBR demand much more thorough analysis. Treatment of the issue to date does not begin to comply with the Commission's June 13, 1980, Policy Statement, 45 Fed. Reg. 40102, which requires probabilistic estimates of the risks of accidents including those which lead to core melting.* Id. at 40103. It would be the height of arbitrary and capriciousness to say that this post-TMI accident analysis does not apply to CRBR because the original application predates the change in policy, considering the 5-year hiatus in the CRBR proceeding and the first-of-a-kind nature of the question raised.

In NRDC v. NRC, supra, (Table S-3 case), the D.C. Circuit reaffirmed the importance of factoring uncertainty into

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* While the Commission's Policy Statement notes the CRBR review as an example of a case where Class 9 accidents were considered (45 Fed. Reg. 40102), that reference should not be taken as an indication that the consideration therein was sufficient for purposes of compliance with the new policy. NRDC argues that it clearly was not.

environmental reviews when it invalidated the Commission's Table S-3 Rule for assessing the environmental impacts of the nuclear fuel cycle. The court found that NRC had improperly prevented licensing boards from considering certain environmental costs of proposed projects by virtue of its assumption in Table S-3 that no radioactivity would be released from a nuclear waste repository once it was sealed. The court found that

> the risks entailed by the possible failure to develop a successful waste-disposal system were never part of any "balancing." They were considered alone, in a vacuum, and then excluded from the licensing boards' balancing.

Slip op. at 46. Because of the great uncertainty surrounding the waste disposal issue, the court found it improper for the Commission to exclude it from cost-benefit balancing on the grounds that waste disposal would have zero environmental impact. In the instant case, the Board's refusal to fully consider the CDA issue at the LWA-1 stage has the same effect that Table S-3 had: it prevents the Board from meaningfully including the environmental effects of CDAs -- or the uncertainty concerning them -- in the NEPA balancing which it must complete before issuing an LWA. By so limiting its consideration of CDAs in its balancing at the LWA-1 stage, the Board "directly contravenes NEPA's requirement that environmental costs be considered 'at every stage where an overall balancing of environmental and nonenvironmental factors

is appropriate.'". Id. at 46, quoting Calvert Cliffs' Coordinating Committee v. AEC, 449 F.2d 1109, 1118 (D.C. Cir. 1971). Such overall balancing is clearly required at the LWA-1 stage by 10 CFR §§50.10(e)(3) and 51.52(c).

The need to fully consider the CDA issue at the LWA-1 stage of this proceeding is dictated not only by the requirements of the LWA rule, but also by analogous considerations in NEPA case law. The licensing of nuclear power plants in (at least) three stages makes each plant a multistage project as far as federal government permitting procedures are concerned. The U.S. Court of Appeals for the Second Circuit has said, in regard to timing of analysis in multistage projects:

> [T]he extent to which treatment of a subject in an EIS for a multistage project may be deferred, depends on two factors: (1) whether obtaining more detailed useful information on the topic ... is "meaningfully possible" at the time when the EIS for an earlier stage is prepared, see Natural Resources Defense Council v. Morton, 458 F.2d at 837, and (2) how important it is to have the additional information at an earlier stage in determining whether or not to proceed with the project, see Natural Resources Defense Council v. Callaway, 524 F.2d at 88.

County of Suffolk v. Secretary of Interior, 562 F.2d 1368, 1378 (2d Cir. 1977). With respect to the first criterion presented by the court, it is clear in the instant case that Applicants and Staff already have very substantial detailed useful information on the CRBR design that would facilitate a more

meaningful determination concerning the probability of CDAs and their environmental consequences. Obtaining the information is thus no obstacle. The problem is, the Board declines to look at that information at the LWA-1 stage because it interprets the LWA rule to mean that plant-specific information cannot be considered.

The second part of the County of Suffolk test -- importance of the additional information at an earlier stage -- is also clearly met in this case, as discussed above. The Board cannot make reasoned LWA findings without additional information which confirms or denies Staff's CDA assumptions.

II. THE LICENSING BOARD'S INTERPRETATION OF THE SCOPE OF REQUIRED LWA FINDINGS DOES NOT PERMIT REASONED SITE SUITABILITY FINDINGS UNDER THE LWA RULE.

Before issuing an LWA, the Board must find:

> based upon the available information and review to date, [that] there is reasonable assurance that the proposed site is a suitable location for a reactor of the general size and type proposed from the standpoint of radiological health and safety considerations under the Act and rules and regulations promulgated by the Commission pursuant thereto.

10 CFR §50.10(e)(2)(ii).

In LWA proceedings for light water reactors, licensing boards have usually received evidence and made findings regarding compliance with every portion of 10 CFR Part 100, the applicable Commission siting regulations.

In virtually every case, the LWA Partial Initial Decision on site suitability has been incorporated into the CP decision, with only siting issues specifically left unresolved at the LWA stage to be litigated at the CP stage. See, e.g., Tennessee Valley Authority (Yellow Creek Nuclear Plant, Units 1 and 2), LBP-79-39, 8 NRC 602 (1978). Furthermore, despite Applicant's assertions that the CP decision is only preliminary, both Commission precedent and policy make it clear that the issue of site suitability is essentially closed -- except for significant new information -- after the construction permit stage. See, e.g., Houston Lighting and Power Company (South Texas Project, Units 1 and 2), LBP-79-10, 9 NRC 439 (1979). This conclusion is consistent with the Commission's recent

Statement of Policy on Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452 (1981), calling for more complete agency review and decision at the construction permit stage:

> [I]n ideal circumstances operating license proceedings should not bear the burden of issues that ours do now. Improvement on this score depends on more complete agency review and decision at the construction permit stage. That in turn depends on a change in industrial practice: submittal of a more nearly complete design by the applicant at the construction permit stage.

Id. at 458.

While site suitability findings at the LWA stage are generally based on a reactor of the general size and type proposed, rather than on the proposed reactor, that distinction renders the findings meaningless in the case of CRBR because no reactor of the general size and type proposed has ever been licensed. The Board has no experience whatsoever which provides reasonable assurance that its partial initial decision on site suitability will stand up after more thorough safety review. The Board cannot rely on its standardized assumptions derived from LWR experience. For example:

1) The Board cannot apply Part 50 design criteria to CRBR because it has not yet been decided which of them apply to LMFBRs, or what additional criteria should be applied to LMFBRs. (See, Transcript, March 30-31 Meeting of the ACRS Subcommittee on CRBR.)

2) The Board can have no confidence that the proposed source term for CRBR site suitability analysis (the standard LWR source term plus an addition of one percent of plutonium inventory) is the appropriate one to use, as the CDA issue has not been resolved.

This last issue requires some further discussion, as it is crucial to the LWA site suitability determination, and graphically illustrates the implications of the Licensing Board's ruling for the conduct of this proceeding. In order to determine the suitability of the site for a reactor of the general size and type proposed, one must first determine the appropriate site suitability source term. 10 CFR §100.11, fn. 1 provides that a source term shall be established

> based upon a major accident, hypothesized for purposes of site analysis or postulated from considerations of possible accidental events, that would result in potential hazards not exceeded by any accident deemed credible. Such accidents have generally been assumed to result in substantial meltdown of the core with subsequent release of appreciable quantities of fission products.

The source term for purposes of assessing site suitability is based upon a fission product release greater than that associated with the most severe "credible" accident. In the case of LWRs, it requires postulation of a substantial meltdown, an event not considered "credible" for purposes of the LWR design basis. Thus, the source term is dependent upon

a determination of what is the maximum "credible" accident, so that the source term can be set for a greater release. If a CDA is credible, the source term, according to 10 CFR §100.11, fn 1, must be greater than the release associated with the maximum credible CDA. The credibility or probability of the CDA is strongly design-dependent, and one's conclusion about it is strongly dependent on the confidence one has in the methodologies used to analyze the risks, i.e., the probabilities of CDAs and their consequences.

The best available data on probabilities and consequences of CDAs is the available information and review to date on the CRBR. As is the case for NEPA issues, supra, in order to make our affirmative case on the mistakenness of the proposed source term, Intervenors must use that available information on CRBR. The Board's ruling forbids Intervenors to make that case. Applicants are likely to make their case for "design feasibility" on the basis of general findings based on "engineering judgment," "positive" experience with LWRs or other breeders (foreign or experimental), and their reliability program. Intervenors will not be permitted to attack those general findings on the basis of negative experience or specific problems which have been identified in the CRBR review to date because, under the Board's ruling, such information will be considered "detailed design considerations which should be deferred until the CP stage." The net result, once again,

is that the scope of the LWA-1 proceeding is limited to Applicants' positive case. Intervenors submit that we ought to be permitted to make our relevant case in the manner we choose, regardless of how Applicants make theirs.

Staff seems to be unsure as to whether the proposed source term is final, or only preliminary. In questioning before the ACRS Subcommittee on CRBR, a Staff member indicated that the latter was the case:

> MR. MARK (Subcommittee Member): You said you will possibly arbitrarily include some plutonium in the source term. That takes more than melting, does it not? Does that not take fuel vaporization?
>
> MR. MORRIS (Staff): The source term is a non-mechanistic source term, and the only reason that I mention that it would involve some thing that could be connected to a CDA would be that you would imagine a CDA would have to occur in order to get one percent plutonium inventory into the source term.
>
> MR. MARK: You sure would have to imagine that.
>
> [Laughter.]
>
> MR. MARK: So it is a hypothetical source term, like the hypothetical core disruption that goes with that.
>
> [Laughter.]
>
> MR. MORRIS: It is chosen to provide a <u>preliminary</u> conservative bound to the kind of releases that could occur in containment, and because it is <u>preliminary</u> it has been chosen to be somewhat conservative.

Transcript, May 5, 1982 Meeting of the ACRS Subcommittee on CRBR, at 530-31 [Emphasis added].

In other contexts, Staff has indicated that the source term postulated in the May 6, 1976 Denise-Caffey letter is

firm. NRC Staff Response to NRDC et al. Eleventh Set of Interrogatories, at 3-4, par. (d). (Updates of these responses have indicated no changes in this conclusion.) The very day after he characterized the source term as "preliminary" at the ACRS, supra, the Staff's Mr. Morris told Intervenors in deposition that the source term was not being reconsidered because it is already sufficiently conservative. May 6, 1982 Deposition of William Morris by Intervenors, Transcript at 150 (See Appendix B). Mr. Morris conceded that the conservatism of the source term is dependent on the conclusion that CDAs are not credible, but maintained that it still might be found to be conservative even if CDAs with energetics exceeding 1200 megajoules were possible, Id. at 151. He admitted that the Staff could not be sure about that conservatism because they have not done the analysis:

> [MR. COCHRAN]: Then the conservatism with regard to the source term is dependent on a conclusion that CDAs are not credible events?
>
> [MR. MORRIS]: Yes. However, it is not beyond the possibility that if CDAs were considered credible, that the source term could still be found to be conservative.
>
> [MR. COCHRAN]: You don't know about it because you have not done the analysis?
>
> [MR. MORRIS]: That is right.

Id. at 152.

Mr. Morris' characterization of the source term as preliminary to the ACRS seems more readily supportable. It requires a considerable leap of faith to view the source term

as final when Staff admits they have not done the analysis which would affirm the sufficiency of its conservatism. Under the circumstances, Staff's assertions of conservatism of the source term are utterly unfounded.

The Staff, with the concurrence of the Licensing Board, proposes to make these final decisions on site suitability without ever looking at the CRBR design to determine that the source term chosen for the analysis in fact bounds the possible accidents for this plant.

The Staff's present postulated source term is clearly not bounding. The presence of one percent of plutonium inventory in the source term implies CDA activity, since that is the only mechanism for plutonium release. See ACRS Transcript, supra. However, the lack of conservatism of that source term is amply indicated by the fact that formerly the Staff considered a release including ten percent of plutonium inventory for the so-called "parallel design."*

In order to have any reasonable assurance that the site suitability determination at the LWA-1 stage is correct, there must be either 1) reasonable assurance, based on the CRBR design, that the postulated source term in fact bounds all

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* The Applicants originally submitted two alternative CRBR designs; the "Reference Design" and the "Parallel Design." The Parallel Design (described in PSAR Appendix F) assumed that CDAs would be included as design basis accidents. After several consultations with the NRC Staff, the Applicants withdrew the Parallel Design in PSAR Amendment 60.

accidents considered credible for CRBR or, 2) the source term must be made so conservative that it will bound any errors in assumptions concerning probabilities of CDAs. By eschewing both consideration of the CRBR design and adequate conservatism in the source term, Staff and the Board make it impossible to have any confidence in the correctness of the site suitability determination.

The confusion exhibited by the Staff is, in fact, embedded in the scope of the proceeding adopted by the Board. If the Board finds that the site is suitable, that finding is not preliminary; it is a final decision. All contentions as to site suitability will presumably be resolved. We cannot imagine that the Board would permit reauthorization of site suitability contentions at the CP stage. Yet the calculations necessary to determine site suitability are dependent upon use of a postulated source term. As discussed above, the appropriateness of the source term for the CRBR is a question of first impression which is intimately related to whether or not a CDA is "credible." And, to complete the circle, the CDA issues will not be resolved with any degree of certainty until the CP stage. Therefore, if the site suitability findings are "final" at this stage, NRDC will never have had an adequate opportunity to litigate them. If they are not final, the entire proceeding is wasteful.

Several factors argue for much greater-than-usual reliance on reactor-specific information at the LWA-1 stage of this proceeding:

1) the lack of experience with similar reactors.

2) the lack of general design criteria for LMFBRs,

3) the lack of a reasoned basis for the decision to exclude CDAs from the design basis, and uncertain genesis of that decision, and

4) the uncertain genesis of the proposed radiological source term.

Special, more thorough treatment of first-of-a-kind projects has support in Commission regulations and decisions. The 10 CFR Part 100 siting regulations explicitly require cautious application to such plants:

> In particular, for reactors that are novel in design and unproven as prototypes or pilot plants, it is expected that these basic criteria will be applied in a manner that takes into account the lack of experience. In the application of criteria which are deliberately flexible, the safeguards provided -- either site isolation or engineered features -- should reflect the lack of certainty that only experience can provide.

10 CFR §100.2(b). See, e.g., Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-422, 6 NRC 33, 52 (1977). The cautious approach is also supported by the Commission's ruling on another first-of-a-kind application in Offshore Power Systems (Floating Nuclear Power Plants), CLI-79-9, 10 NRC 257, 262 (1979):

> We are not compelled to treat Class 9 accidents in precisely the same fashion in the floating plant application as we treat such accidents in connection with ... land-based plants. Offshore's equal treatment argument applies only to parties similarly situated. Offshore's reactors will be afloat unlike any other electric power reactor we have ever licensed.... Their unique siting raises a host of issues, of which the Class 9 issue is only one, which clearly justify our treating Offshore's application differently than we treat an ordinary application. Therefore, our obligation, which we have fulfilled, is to treat Offshore in a fair and rational manner, but not necessarily in the same manner we treat applications which belong in different categories.

The CRBR represents an infinitely greater departure from land-based LWR experience than did the proposed Floating Nuclear Power Plants. The design of an LMFBR differs radically from LWRs. It has a power density in the core which is 4 to 8 times that in an LWR, and consequently the possibility of a recriticality event cannot be entirely discounted. Add to that the peculiar properties of metallic sodium when it comes into contact with water, air, concrete, or just about anything else in the environment, and it becomes clear that the application for CRBR deserves different treatment than that ordinarily given applications for LWRs. The efforts of Applicants, Staff, and now the Licensing Board, to reduce the LWA findings to the absolute minimum in this case do not accord either with the law or with common sense.

III. THESE ISSUES ARE APPROPRIATE FOR DIRECTED CERTIFICATION TO THE COMMISSION

Normally, an interlocutory order would not be appealable. 10 CRF §2.730(f). However, there are important exceptions to this general rule for extraordinary circumstances. A presiding officer may refer a ruling to the Commission when in his judgment it is necessary to prevent detriment to the public interest or unusual delay or expense. Id. In addition, a licensing board may certify questions to the Commission in its discretion or "on direction of the Commission." 10 CFR §2.718(i), Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-271, 1 NRC 478, 482-83 (1975). The Seabrook decision also recognizes the right of parties to petition for such certification, Id. at 483, and "the right of the Commission ... to have brought up to it for consideration any question raised before a licensing board which is thought deserving of early dispositive resolution." Id. at 482 [Emphasis in the original.]

Numerous decisions have established that interlocutory review would be undertaken

> where the ruling below either (1) threatened the party adversely affected by it with immediate and serious irreparable impact which, as a practical matter, could not be alleviated by later appeal or (2) affected the basic structure of the proceeding in a pervasive or unusual manner.

Public Service Company of Indiana, Inc. (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-405, 5 NRC 1190, 1192

(1977), Public Service Electric and Gas Company (Salem Nuclear Generating Station, Unit 1), ALAB-588, 11 NRC 533, 536 (1980). The present question clearly falls within the second part of this test. Here, the significant issue is the Licensing Board's excessively narrow view of the scope of the LWA-1 proceeding for this first-of-a-kind project. If that view is allowed to prevail, the result will be a severely constricted record that will not permit the Board rationally to make the LWA findings required by law. The basic structure of the proceeding will also be pervasively affected in that Intervenors will be prevented from making our affirmative case on NEPA and site suitability issues. The issue deserves "early dispositive resolution", Seabrook, supra at 482, so that this LWA proceeding is not so streamlined as to be made meaningless. Moreover, the Commission's inherent supervisory authority over the conduct of proceedings is extremely broad.

The Commission has previously exercised this authority in a ruling against Intervenors in this very case. U.S. Energy Research and Development Administration (Clinch River Breeder Reactor Plant), CLI-76-18, 4 NRC 67 (1976). The Commission, intervening sua sponte to reverse an Appeal Board ruling admitting certain of Intervenors' contentions, stated:

> While 10 CFR 2.786 (a) states the ordinary practice for review, it does not -- and could not -- interfere with our inherent supervisory authority over the conduct of adjudicatory proceedings before this Commission, including the authority to step

> in and rule on the admissibility of a contention before a Licensing Board.
>
> . . . .
>
> A contrary view could seriously dislocate the adjudicatory porocess within this agency and would imply a delegation of authority difficult to justify.
>
> No party has a vested right to the continuing effectiveness of an erroneous Licensing Board ruling which happens to favor it. In the interest of orderly resolution of disputes, there is every reason why the Commission should be empowered to step into a proceeding and provide guidance on important issues of law and policy.

Id. at 75-76 [Citations omitted]. The instant question presents very significant issues of law and policy for the Commission. The Licensing Board's view of the scope of required findings for issuance of an LWA might be correct when light water reactors -- with which there is considerable experience and for which there are well-established design criteria -- are being licensed. But, as shown above, it is a severe distortion of the purpose and intent of the LWA rule, and a violation of NEPA, to use the very same findings in the LWA proceeding for a first-of-a-kind project such as CRBR. The LWR/CRBR parallelism which seems to be the touchstone for the Commission Staff's whole approach to this project simply has its limits. Commission intervention at this point is required to clearly delineate those limits so that the remainder of this proceeding is not premised on an erroneous view by the Licensing Board.

Timeliness

Intervenors anticipate a protest tnat this petition is out of time, and that Intervenors have not complied with the provisions for objections to Prehearing Conference orders in 10 CFR §2.752(c). Intervenors concede that, but urge that this petition should not be rejected on those technical grounds in light of significant new information we have become aware of since the Order was issued and the time for resolution of these issues prior to commencement of the adjudicatory hearings in August.

Since the Order was issued, Intervenors have deposed the Staff and obtained the transcripts of several pertinent ACRS meetings dealing with the very issues in controversy here. As Intervenors' citations to it above show, that newly acquired information has made it much more apparent for the first time how little the Staff actually knows about the foundations for decisions regarding the CDA and other issues, and how sparse Staff expects the LWA-1 findings to be. In addition, there is only now a full complement of Commissioners and the time is therefore appropriate for the Commissioners' consideration of these issues of first impression. The Commission stepped in sua sponte during the earlier incarnation of this proceeding to prevent what it considered too broad-ranging an inquiry. Its involvement is more important now, when the Board is moving toward a hearing that would undermine the intergrity of the

licensing process by purporting to determine site suitability and compliance with NEPA while leaving unresolved what are conceded by the technical community to be the crucial issues related to the CRBR.

As the Licensing Board had already received Statements of Position concerning these issues from both Applicants and Intervenors, and spent an entire day in conference hearing arguments of the parties and ruling on the issues, Intervenors submit there would have been no utility in filing objections with the Board as provided in §2.752(c). More to the point, the issues in controversy in this petition are of first impression and raise issues of law and policy -- the proper interpretation of the meaning and purpose of the LWA rule in the context of the CRBR proceeding -- which it is the province of the Commission, not the Licensing Board, to decide.

In the alternative, the Commission may consider this as a petition for a waiver of the LWA rule as interpreted by the Board. 10 CFR §2.758, Consideration of Commission rules and regulations in adjudicatory proceedings, provides, in pertinent part, as follows:

> (b) A party to an adjudicatory proceeding involving initial licensing subject to this subpart may petition that the application of a specified Commission rule or regulation or any provision thereof, of the type described in paragraph (a) of this section, be waived or an exception made for the particular proceeding. The sole ground for a petiton for waiver or exception shall be that special circumstances with respect to the subject matter of the particular proceeding are

such that application of the rule or regulation (or provision thereof) would not serve the purposes for which the rule or regulation was adopted. The petition shall be accompanied by an affidavit that identifies the specific aspect or aspects of the subject matter of the proceeding as to which application of the rule or regulation (or provision thereof) would not serve the purposes for which the rule or regulation was adoopted, and shall set forth with particularity the special circumstances alleged to justify the waiver or exception requested. Any other party may file a response thereto, by counter-affidavit or otherwise.

(c) If, on the basis of the petition, affidavit and any response thereto provided for in paragraph (b) of this section, the presiding officer determines that the petitioning party has not made a prima facie showing that the application of the specific Commission rule or regulation or provisions thereof to a particular aspect or aspects of the subject matter of the proceeding would not serve the purposes for which the rule or regulation was adopted and that application should be waived or an exception granted, no evidence may be received on that matter and no discovery, cross-examination or argument directed to the matter will be permitted and the presiding officer may not further consider the matter.

(d) If, on the basis of the petition, affidavit and any response provided for in paragraph (b) of this section, the presiding officer determines that such a prima facie showing has been made, the presiding officer shall, before ruling theron, certify directly to the Commission for determination the matter of whether the application of the Commission rule or regulation or provision thereof to a particular aspect or aspects of the subject matter of the proceeding, in the context of this section, should be waived or an exception made. The Commission may, among other things, on the basis of the petition, affidavits, and any response, determine whether the application of the specified rule or regulation (or provision thereof) should be waived or an exception be made, or the Commission may direct such further proceedings as it deems appropriate to aid its determination.

The "standard" interpretation of the LWA rule in LWR cases which allows findings on the basis of "design feasibility," when applied in the CRBR case, does not serve the purposes for which the LWA rule was adopted. Intervenors, thus, do not challenge 10 CFR §50.10(e), but rather the interpretation of that rule as argued by Applicants and Staff and adopted by the Board.

The LWA rule was adopted to:

1) provide structure to the previously ad hoc procedure for granting applicants the right to perform limited work at their own risk prior to issuance of a construction permit:

2) facilitate public participation in that process;

3) assure appropriate consideration of NEPA matters; and

4) provide for timely decision-making.

39 Fed. Reg. 4582 (February 5, 1974). The Board's application of the "design feasibility" standard from LWR cases and its refusal to allow Intervenors to inquire into CRBR-specific data at the LWA-1 stage in the instant case clearly does not further the purpose of facilitating public participation in this process, as it effectively prevents Intervenors from making our affirmative case concerning the NEPA and site suitability issues. The Board's ruling also prevents appropriate consideration of NEPA matters, as it does not permit thorough consideration of the environmental impacts of the proposed action. See supra pp. 22-42. Thus, the Board's interpretation of the scope of LWA findings does not serve the purposes for which the LWA rule was adopted.

While 10 CFR §2.758(b)-(d) does not provide, in so many terms, for waivers or exemptions from agency interpretations of rules under special circumstances, these rules do make it clear that it is the Commission, rather than the Licensing Board or Appeal Board, which is ultimately to determine the appropriateness of the application of Commission rules and regulations in particular circumstances. 10 CFR §2.758(d), Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit No. 1) (Restart), LBP-80-1X, 11 NRC 37, 38-40 (1980). Since the "design feasibility" standard derives from agency case law rather than the regulations, it is appropriate for Intervenors to question this interpretation as applied in the instant case, and to ask the Commission to resolve the question. While §2.758(d) provides that such petitions should first be brought before the Board for certification, such a request would clearly be futile and wasteful of time.

Finally, favorable action by the Commission on this petition will not necessarily delay the proceeding. There is yet time for full discovery on the issues in Intervenors' Contentions 1, 2, and 3 prior to the commencement of scheduled adjudicatory hearings on environmental and site suitability issues for CRBR in August. While full consideration of Contentions 1, 2, and 3 at the LWA-1 hearings might be expected to prolong the actual hearings somewhat, that is certainly no argument against compliance with the legal requirements for LWA

and NEPA findings. "Such administrative costs are not enough to undercut the Act's requirements that environmental protection be considered "to the fullest extent possible...." Calvert Cliffs' Coordinating Committee v. United States Atomic Energy Commission, 449 F. 2d 1109, 1118 (1971).

Conclusion

The severe limitations which the Licensing Board has placed on the scope of the LWA proceeding with respect to Intervenors' Contentions 1, 2, and 3 prevent compliance with the requirements of NEPA, prevent the Board from being able to make the required findings for issuance of an LWA under Commission rules, and greatly enhance the possibility that the Board's LWA findings will ultimately prove incorrect. The Board's serious misreading of the law and Commission regulations calls for the Commission to exercise its inherent supervisory authority over the conduct of this adjudicatory proceeding.

Respectfully submitted,

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Dated: June 11, 1982
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APPENDICES

The Commissioners' copies of this submission include here the following appendices:

Appendix A-- April 22, 1982 Order Following Conference with Parties

Appendix B-- Transcript, Intervenors' May 6, 1982 Deposition of NRC Staff (selected pages)

Appendix C-- Applicants' Statement of Position in Regard to NRDC Contentions 1, 2, and 3 (4-15-82) (selected pages)

Appendix D-- Transcript, April 20, 1982 ASLB Prehearing Conference for CRBR Proceeding (selected pages)

Appendix E-- Transcript, March 30-31, 1982 Meeting of the ACRS Subcommittee on CRBR (selected pages)

Appendix F-- Transcript, May 5, 1982 Meeting of the ACRS Subcommittee on CRBR (selected pages)

In each case, the "selected pages" which are included in these appendices are those which are cited or quoted in the text of this submission.

APPENDIX B

ORIGINAL

NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

In the Matter of: :
:
U.S. DEPARTMENT OF ENERGY PROJECT MANAGEMENT:
CORPORATION TENNESSEE VALLEY AUTHORITY : DOCKET NO. 50-537
(Clinch River Breeder Reactor Plant) :

NRC STAFF'S UPDATED ANSWERS TO NATURAL RESOURCES DEFENSE COUNCIL AND THE SIERRA CLUB'S SET OF INTERROGATORIES TO THE STAFF DATED APRIL 15, 1982.

DATE: May 6, 1982 PAGES: 1 thru 236

AT: Bethesda, Maryland

DEPOSITION OF: WILLIAM MORRIS,
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that.

BY MS. FINAMORE:

Q The answer is "no"?

A I don't think that they are. I don't think that they fall within the range of what one considers as the general size and type when performing the CRBR LWA-1 review.

MS. WEISS: Perhaps we should note for the record that Mr. Cheek came into the room. Would you identify yourself for the reporter? Would you all identify yourselves? We are trying to keep a record of who is coming in and out.

MR. LONG: I am John Long, NRC.

MR. GOESLER: I am David Goesler, Westinghouse Electric Company.

Ms. SHUTTLEWORTH: I am Peggy Shuttleworth, NRC staff.

MR. CHEEK: I am Paul Cheek, NRC staff.

MS. WEISS: I have just a couple of more questions, five minutes maybe, and I understand your needs.

BY MR. COCHRAN:

Q In your review of the LWA-1 are you making a judgment with regard to the feasibility of siting a spectrum of reactors of the general size and type, or

A I think some of the changes that have been proposed are known, and they are in the PSAR. It isn't that they are not known. We do not depend upon them for making the findings.

Q The purpose of the LWA-1 is you will not determine whether in fact the design changes that have been proposed achieve the objectives which were outlined in the ~~declare~~? That is, do they allow the CRBR to meet the source terms?

A No.

BY MR. COCHRAN:

Q Are you reconsidering some of the objectives or requirements as outlined in the Denise letter? For example, whether to allow this after 24 hours?

A Yes.

BY MS. FINAMORE:

Q You are reconsidering the source term?

A No.

Q Why is that?

A We think the source term as it was previously identified is sufficiently conservative to meet all credible design bases on accidents, and to include a consideration of some core melting as prescribed by the regulations and therefore it is sufficient.

Q That is your conclusion, that it is

still answer that question.

Q Then the conservatism with regard to the source term is dependent on a conclusion that CDAs are not credible events?

A Yes. However, it is not beyond the possibility that if CDAs were considered credible, that the source term could still be found to be conservative.

Q You don't know about it because you have not done the analysis?

A That is right.

BY MS. WEISS:

Q Now we can move onto about page 29.

Can you tell me whether core disruptive accidents are currently treated as design basis accidents in the French Phenix breeder?

A I don't know.

Q And Super-Phenix?

A I don't know.

BY MR. COCHRAN:

Q Do you know about any foreign reactor?

A Yes.

Q Do you know about any domestic reactor other than the CRBR?

A I think for the reactors they have not been considered as deviates.

APPENDIX C

4/15/82

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	
UNITED STATES DEPARTMENT OF ENERGY	
PROJECT MANAGEMENT CORPORATION	Docket No. 50-537
TENNESSEE VALLEY AUTHORITY	
(Clinch River Breeder Reactor Plant)	

APPLICANTS' STATEMENT OF POSITION
IN REGARD TO
NRDC CONTENTIONS 1, 2, AND 3

Pursuant to the Board's instructions at the Prehearing Meeting of Counsel on April 6, 1982[1/] the United States Department of Energy and Project Management Corporation, acting for themselves and on behalf of the Tennessee Valley Authority (the Applicants), hereby file their Statement of Position in regard to NRDC Contentions 1, 2, and 3.

The Board directed the parties to present their specific positions on which subparts or issues within NRDC Contentions 1, 2, and 3 should be deferred until after the

1/ Tr. 464-65; 467.

B. Specific Positions

Contention 1a):

1. The envelope of DBAs should include the CDA.

a) Neither Applicants nor Staff have demonstrated through reliable data that the probability of anticipated transients without scram or other CDA initiators is sufficiently low to enable CDAs to be excluded from the envelope of DBAs.

While Contention 1a) broadly questions whether or not HCDAs should be included in the envelope of design basis accidents, the scope of the contention must be limited for the purposes of an LWA decision. It is only necessary for that decision to determine whether there is reasonable assurance that initiators of HCDAs can be made sufficiently improbable that HCDAs are excluded from the envelope of design basis accidents. Specifically, the inquiry should be confined to consideration of whether it is feasible to design CRBRP to make HCDAs sufficiently improbable that they can be excluded from the envelope of design basis accidents for a reactor of the general size and type proposed, in light of the following:

1. The major classes of accident initiators potentially leading to HCDAs.

2. The relevant criteria to be imposed for the CRBRP.

3. The state of technology as it relates to applicable design characteristics or criteria.

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:	:	
UNITED STATES DEPARTMENT OF ENERGY	:	
PROJECT MANAGEMENT CORPORATION	:	Docket Number
	:	50-537
TENNESSEE VALLEY AUTHORITY	:	
(Clinch River Breeder Reactor Plant)	:	

Nuclear Regulatory Commission

Room 550

4350 East-West Highway

Bethesda, Maryland

Tuesday, 20 April 1982

The conference in the above-entitled matter was convened, pursuant to notice, at 9:00 a.m. .

BEFORE:

MARSHALL E. MILLER, Chairman

Gustave A. Linenberger, Jr., Member

the basic point of difference.

JUDGE MILLER: All right, state it again and we will look at it and comment on it.

MS. WEISS: It's their position that the only issue which can be raised for the LWA is whether it is feasible to design a hypothetical breeder reactor such that a CDA could be excluded from the design basis, it's probability had been made sufficiently low that it could be excluded from the design basis.

JUDGE MILLER: You say a hypothetical reactor. You have told us there is none in this first of a kind, so I would say in any kind of fast breeder you are saying the same thing, aren't you? Is that supposed to have some significance or not? You are saying nothing unless you are saying something you are not delineating.

MS. WEISS: I think it's significant. For example, when this case was originally brought before you there were two designs.

JUDGE MILLER: Yes, alternatively, and there was a question we were going to explore into whether you could still have the two or not. That was an ongoing issue that we had not yet ruled upon. That was five years ago. I don't see how that has any bearing upon where you find yourself now.

Now we stated four things. Ms. Weiss's first point is we are looking at criteria only. That's not true. Criteria is one of the four.

Secondly -- and here I have to extrapolate somewhat on the Intervenor's position. I am not sure I understand it as expressed, but they say they want to look at everything, all analyses. What we are suggesting is, for example -- and it is jumping ahead, but they have already said it -- they want to get into the reliability program. Well, that is Contention 18. We are prepared to address that. The details of the reliability program are things of a very specific design nature that would come in as a confirmative R&D program at the CP or even the OL stage. So we think that you can define a scope here based on the four parameters of feasibility principle and a reactor of the general size and type.

In particular, let me emphasize one thing that Judge Miller's question pinpointed and I think indeed stripped away here. There is a fundamental legal flaw in the Intervenor's argument. It is now on the table. The Intervenor said with an LWR, in the LWA regulation context, you can look at previous LWRs. The question was, well, what did you do when LWRs were new? The answer wasn't very clear. The fact is when LWRs were

you have mixed questions of environmental and radiological health and safety matters, as you do every time you have an LWA, it is perfectly proper to make the findings that that Board did in confronting the situation such as Appendix I. That is, you don't have to complete the CP review; you have to make the findings that would be required at the CP stage in order to make a decision of whether or not an LWA should be issued. Rather, as the Board summarized on pages 442, 461 of that decision, you need to make three findings. The first finding I might indicate is really a summary of the four specific findings that the Applicant just specified on page 12.

JUDGE MILLER: Which were the pages of that decision?

MR. SWANSON: The general discussion of the Board is at 2 NRC 442. This is again their dealing with compliance, wit Appendix I.

JUDGE MILLER: River Bend?

MR. SWANSON: River Bend. Then they summarize those findings again on page 461. This is a case we cited in our letter of April 16. The first finding is not that the design complies with the regulations or that it is properly designed, but rather whether or not there is reasonable assurance that the plant can be

construction permit, are made at the radiological health and safety hearing.

I think when Ms. Weiss argues that the record is closed at the environmental stage and it would take significant new information to open it, and arguing that that is the basis for going all the way through the CP findings now, just runs counter to this approach taken by the Commission in its regulations on the Boards in deciding whether or not applications comply with LWA regulations.

That is, my understanding of the NRDC approach is that you cannot preclude the possibility that the applicants might fail at the CP stage to demonstrate that in fact the CRBR design does in fact comply with the regulations and comply with whatever requirements we assume they comply with at the LWA stage; that you have to go through the -- reverse the process and go through the full CP radiological health and safety considerations now. And then if you can find that they can do all that, then as a sort of lesser included finding you can find that there's also reasonable assurance that the plant can be designed, and therefore an LWA finding can be made. There is just no basis for twisting the requirements that way.

We submit, as we have stated previously, that

MS. WEISS: Mr. Chairman, I would like to briefly respond to that, if I may.

JUDGE MILLER: Yes, you may.

MS. WEISS: The staff continuously misstates our position. I just don't know if they don't understand it or if they like to state it in a way that makes it easier to dismiss. To cite River Bend, River Bend said it is not required that the Board make findings as to whether the specific design conforms to the radiological health and safety requirements of Part 50.

JUDGE MILLER: Which River Bend?

MS. WEISS: That is the River Bend decision cited by --

JUDGE MILLER: Well, you know there are two or three here. You cite them all over the place. There is 6 NRC, for example, which went into the -- 6 NRC 760 in the River Bend, and it has got some language in there that could have some applicability, so River Bend is getting to be generic.

MS. WEISS: The one I am citing, I understood them to cite, was LBP 75--

JUDGE MILLER: Licensing Board Panel decision. And what was that? 2 NRC? What is your cite?

of the controversy.

MS. WEISS: Yes. That is the heart of the controversy.

JUDGE MILLER: Well, then, when you define it, use the same terms that they are using, and vice versa. You are giving me apples and oranges. You may get fruit salad, but you won't get very far into delineating issues.

MS. WEISS: I am just trying to first discard what is not before you.

JUDGE MILLER: Tell me what is before us, and we will discard those things that do not come within that.

MS. WEISS: You need to make a finding that, A, there is reasonable assurance that a reactor of this general size and type be located at this site. In order to do that, you have to determine whether the source term is appropriate.

JUDGE MILLER: I ask you again to define -- I don't want to use shorthand. What do you mean by "source term as appropriate"? What does that mean in this proceeding?

MS. WEISS: Well, maybe we should get the regs out.

JUDGE MILLER: Well, I am willing to let you

postulated releases of radioactivity into the secondary containment, and under the 10 CFR 100 regulations is a requirement that that release for purposes of assessing the suitability of the site should not be exceeded by any accident deemed credible.

Now, I would very much after the recess like to walk you through the chronology of the last two years very quickly to show you the extent of the argument between staff and applicant over these particular issues. Should the CDA be a design basis event? What should the source term be? There was great dispute all the way through mid-'74 prior to even docketing the license through '77, and it still has not been resolved specifically for the CRBR.

Now, if you look back through some of that correspondence, you will see statements that I totally agree with, and they go to this effect. If we continue, the phenomenon and scenarios associated with the accident are complex. The uncertainties of these are neither addressed by technical information nor enveloped by conservative assumptions. We would continue to believe that satisfactory resolution of this problem can be achieved through a combination of approved design base, on meaningful data, conservative engineering assumptions where uncertainties are large, and research

issue, at the LWA 1 proceeding. We want to be able to go back and use all of the available information developed to date with the specific reactor in making our presentation to the Board as to whether one has reasonable assurance that for a general reactor of the size and type one can do a limited work authorization.

JUDGE MILLER: Well, what limitation is there on a limited work authorization of this type? Why do we have to go over the minute detail of everything that has transpired in the last six or twelve years in order to have this more limited type of inquiry?

MR. COCHRAN: You don't have -- it is obvious that I am not going to be wasting my time looking at minutia that I think the Board is not going to be reasonably persuaded by at an LWA 1 proceeding. However, the staff and the applicant are defining these guidelines for purposes of scoping discovery in such a way that they can come back and object to me asking any question on, say, the realiability program which goes to the R&D program necessary to determine whether one has reasonable assurance you are going to be there by the CP stage. There are programs like documented in a document called CRBR P 1, which is similar to a Rasmussen analogy for the Clinch River reactor, specifically for the Clinch River reactor.

to the CRBR, because I think that is the best type of data to use.

JUDGE MILLER: I know you want to look at a lot of things, Mr. Cochran. We have got 1,000 interrogatories pending now, and Lord knows how many more that are going to be backed up pending this afternoon, but let's get right down to the gut factors. What are the things you think are really necessary for the Board to look at? I have asked you about these four. What about the first one, Number 1, the major classes of accident initiator potentially leading to CDA's. Is that reasonable?

MR. COCHRAN: One should be able to look at all of these things, but one should be able to look at more than that, Judge Miller.

JUDGE MILLER: All right. Never mind the history at the moment. Let's get right down to the "more". Give me the description, give me the parameters. Let's have it in a nutshell.

MR. COCHRAN: All right. Let's give some examples.

JUDGE MILLER: Before you give me examples --

MR. COCHRAN: In October of 1974, the applicants issued a document identified as Ward D-005-3. That is a Westinghouse document in which the

sufficiently different from what one has determined one can achieve in terms of reliability through the light water reactor analyses of anticipated transients without scram.

(Board conferring.)

JUDGE MILLER: Just as a matter of information, let me interrupt you for a moment. I will give you a full opportunity to go back. What is the status of the Board's report in terms of the current, present, and future issues in terms of this proceeding? Tell us very shortly and quickly. I would like to hear both the applicant and staff on that, and then I would like to get back to Mr. Cochran.

(Pause.)

MR. EDGAR: Mr. Goeser can answer that directly, Judge Miller.

MR. GOESER: Judge Miller, I believe that the reference report has been superseded by the submittal of Appendix C, the last submittal of Appendix C to the PSAR that was described, the applicant's current as of that time reliability program. That would have been in the neighborhood of 1976 or early '77. I don't remember the exact date of that revision.

MR. COCHRAN: I don't dispute that.

JUDGE MILLER: All right. I had asked you now

Rasmussen reference design. The parallel design and the reference design submitted by the applicant in the 1975 period had different source terms, had different source terms.

JUDGE MILLER: Are you aware, Dr. Cochran, that the Board was not going to allow that to continue?

MR. COCHRAN: Not going to allow what to continue?

JUDGE MILLER: The two. Why are we going back over something the Board at that time was not going to permit to be the subject of inquiry? Get to the present.

MR. COCHRAN: Because the source term is relevant. The designs that were submitted are relevant to the question of what the source term should be today. Let me just finish the argument. They submitted two designs with different source terms. Then the staff did their own analysis subsequently, and they proposed two different source terms, and the source term was resolved by the staff on May 6th, 1976, in a letter from Denise DeKalb. The applicant then appealed that decision, asked for different source terms. They appealed to management and they lost.

Now they want to come in and argue, I presume, with regard to a hypothetical reactor for the purposes of the suitability of the site whether their source term

MR. COCHRAN: We are trying to determine what the scoping credible accident is for purposes of assessing what the source term is. Now, if I can convince the Board that a CDA, core disruptive accident, is a credible event, and that it should be in the design basis, then I can perhaps convince the Board that one should not be talking about the reference design for purposes of licensing the Clinch River reactor and assessing the suitability of the site, but one should be talking about the parallel design as well. After all, that is the more conservative of the two designs, and --

JUDGE MILLER: Wait a minute. I am not following you there. Why do we have to go through that tedious exercise? The issue is what the proposed design is, with the limitations that are built in, the fullness of the scrutiny that is there, but that is really what we are looking at.

MR. COCHRAN: Excuse me. The issue is, what is the source term that one should assume for purposes of assessing the suitability of the site for a reactor of the general size and type. Is it the source term for the Phoenix reactor? Is it the source term for the British reactor? Is it for the CRBR reference design? Is it for the parallel design? Is it only for the reference design and not for these other designs? I

JUDGE MILLER: Mr. Edgar -- we will take about a 10 or 15 minute recess, and then we will ask Mr. Edgar and Mr. Swanson to respond to the position that is now being delineated by Dr. Cochran.

(Recess.)

JUDGE MILLER: We will resume please.

Had Dr. Cochran finished?

MR. COCHRAN: I will ask Ellyn to finish for me.

JUDGE MILLER: Ms. Weiss.

MS. WEISS: I have been thinking in the recess about the Board's remark that it has never been the Board position that we cannot rely on the CRBR information in the record.

JUDGE MILLER: That you can't rely on it? What do you mean?

MS. WEISS: I understood the Board to have said, I thought, the issue was to what extent can we bring before the Board questions relate to all of the analyses which have been done for the CRBR because that is the only basis of information we have.

JUDGE MILLER: If it is relevant, you can. We had a question about relevance in scope.

MS. WEISS: Right. And looked some more at that page 13 of the Applicant's argument, and it strikes

reactor core, which our information indicates is the most recent work on assessing CDA energetics, asking them to identify what they will review for the LWA, what they intend to rely on for the LWA, what they will review at the CP stage.

I would ask whether the parties think, whether the Licensee believes that that is within the scope and ought to be permissible discovery, and the Staff, or whether it isn't. We have also asked for production of the documents which are referenced in that G.E. report because that is the kind of thing that we intend to explore on discovery as a basis for cross-examination and for the direct case on the analyses of CDAs.

I think it would be useful, certainly, for us to find out whether the other parties think that that is permissible discovery at this stage. If it is, maybe we could decide that we will move beyond that question.

JUDGE MILLER: Mr. Edgar.

MR. EDGAR: Let me try to go back and address several of Dr. Cochran's points first, and then I will proceed to address the point which counsel just made. I must confess that when I read NRDC's pleading, that I had some difficulty in capturing the precise nature of their differences with us, but after hearing Dr. Cochran, I think we are a little bit better able to

involves Contention 2, and specifically Subparts (a) through (c). If we can distill the thing to a point of fundamental difference, it is the Applicants and the Staff believe, on the one hand, that the controlling standard involves whether Clinch River can be designed or whether it is feasible to design to exclude CDAs. That is, as I understand it, where NRDC has a fundamental legal difference.

Finally, coming to the question of Interrogatory 15, apparently the Intervenors believe that if we had this interrogatory answered it would be useful. We regard that as essentially an attempt to postpone a ruling here today. We are in the process of obtaining the old discovery. The parties were advised to come prepared to discuss the limitations on the scope of Contention 1(a). We have done so.

We have heard nothing and absolutely nothing that would convince us that this isn't (a) a reasonable scope and (b), in light of the controlling legal standards, an appropriate scope for limiting Contention 1(a).

JUDGE MILLER: Does Staff have anything to add?

MR. SWANSON: Just briefly. I won't repeat the other arguments that have been made thus far, but we in agreement with the statements that Mr. Edgar just

specific amount for Clinch River.

JUDGE MILLER: Well, the Board believes that the limitations set forth on page 13 are reasonable. In other words, that the LWA-1 inquiry should be limited to considering the feasibility of designing a fast breeder reactor so that it would be sufficiently improbable that there would be HCDAs which could be and can be excluded from the envelope design basis accident for a reactor of the general size and type proposed with the four limiting factors that were there described: namely, the major classes of accident initiators potentially leading to HCDA's, number one; number two, the relevant criteria to be imposed for the Clinch River breeder reactor project; three, the state of technology as it relates to the applicable design characteristics of criteria; and four, the general characteristics of the Clinch River design, such as redundancy, diverse shutdown systems and the like.

Dr. Linenburger, do you care to add anything?

JUDGE LINENBURGER: Perhaps add to it, but not alter it. I really continue to find that the basic difference between Intervenors and Applicant and Staff lies in the question or issue that was flushed up a little earlier, namely, the question of fullness versus finality of the NEPA review at the LWA phase.

JUDGE MILLER: No, that is not what we are saying. We have said that a full NEPA review will be required. It was the finality that was the subject of question as pointed out by Judge Linenburger. The full NEPA review, yes, we intend to make it.

MS. WEISS: And on the issue of finality, you will not make any more NEPA findings at the CP stage unless --

JUDGE MILLER: Well, we do not know. We will cross that stage when we come to it. Now the last time we were in a collision course with the law, it was at the behest of the NRDC. We got reversed by the Commission back in 1976, whatever it was. So if we are going to be on a collision course and get reversed again, it is only fair that we spread it around.

(Laughter.)

MS. WEISS: We might as well do it for the other side this time.

JUDGE MILLER: So whoever has led us into error has led us into error, but we are going to have to adhere to our ruling because we do believe that it is reasonably within the scope of what we intend to have at the LWA-1 stage; and I think the same reasoning is going to apply to the contentions and arguments both ways or three ways on 1(b). In other words, we believe that

seeking data with respect to a specific design, that is, the best data that we have got for a general reactor of this size and type, that Staff and Applicants are going to come back to you and say no, that is beyond the scope.

So I don't, even with your order, I do not think you have resolved the problem I foresee, unless Staff and Applicant can agree that one can make some fairly broad --

JUDGE MILLER: We could give you the short answer, it would be beyond the scope, so don't bother to ask it in one of ten interrogatories. Live with what we have ruled because that is what we have ruled. We have already ruled. I asked you if there was anything new and different. I don't think your analysis of your problems is new and different. It may be that as we discuss interrogatories you will come up with some specific matters that we are going to go into in the next phase.

MR. COCHRAN: Let's do number 15.

JUDGE MILLER: Pardon me?

MR. COCHRAN: Did we resolve --

JUDGE MILLER: No, we are going to go right ahead into 1(b). Where we have already ruled, unless there is something significantly different, our same ruling will apply to the scope and limitations upon inquiry, LWA-1, of the matters that are set forth in

systems. At least it is included in there.

JUDGE MILLER: That is the Rasmussen report? We don't think we want to get into that now for an LWA-1. We just want to go with the issues on the LWA-1. Whatever you want to put on the table for a CP, fine, put it there. Not now. That is all we are saying.

MR. COCHRAN: I don't think you understand what the Applicant's and the Staff's case is at the LWA-1 proceeding stage. They have got to come in and demonstrate to you that for a general hypothetical reactor, a general reactor as they described it, that they can make core disruptive accidents sufficiently incredible by incorporating certain design features like independent redundant shutdown systems --

JUDGE MILLER: They can or they can't. You are going to put on evidence one way, they are going to put on evidence the other.

MR. COCHRAN: I am going to put on evidence that will utilize WASH-1400 and the Commission's order with regard to WASH-1400 as it applies to probabilities. Now, I would like, for example, to get an admission from Staff with regard to the Commission's order. It deals with WASH-1400 on light water reactors. But am I permitted to do that?

JUDGE MILLER: I would doubt it. I mean if

of probabilistic assessments" need not themselves be incorporated into the FES, they must be referenced therein, meaning that is the level of detailed analysis which is required to make the NEPA analysis of the risk of accidents, and certainly to the extent that those quantitative considerations would be challenged by an intervenor, they are relevant at an LWA-1 stage where the NEPA will be discussed.

What you are saying today is anything that looks like a probabilistic estimate, that looks in detail at the design of the breeder and what the accident risks are and what the accident probabilities are is to be put off to the CP stage, and I say that that is fundamentally inconsistent with NEPA as it is clearly interpreted in this policy statement. That represents the Commission statement of how NEPA is to be interpreted.

I brought it up because the FES includes reference to WASH-1400. That is one of the references. That is the major reference. Just because something looks like a probabilistic analysis or a quantitative assessment, that does not mean that it is not relevant for a NEPA review.

MS. WEISS: The consequence of your ruling is we cannot make a record.

JUDGE LINENBERGER: Not true.

MS. WEISS: Because you have ruled this is all irrelevant.

JUDGE LINENBERGER: Not so. The question is where in the proceeding do what parts of that record belong. That is what we are trying to sort out.

MS. WEISS: And that is 50.10 is definitive. You must make the findings under Part 50.1. You must make the NEPA findings. There is no question about that, and if you must make them we must have an opportunity to make a record on them.

JUDGE MILLER: We would like to have our record at this time complete. We would like to hear on this point which has been made by Ms. Weiss and Dr. Cochran, both from Applicants and from Staff.

MR. EDGAR: We believe that the Board's ruling was well found and we believe that any attempts now to rehash the basis for that ruling, which is indeed what has just gone on, are to no avail. The essential issue here on Contention 1(b) is whether or not it is necessary for the purposes of an LWA hearing to go into the details of Applicant's reliability program.

We believe that the Contention is plain on its

MS. WEISS: But the question is not whether -- we are not asking for final safety findings on the basis of these codes. The question is the validity of the code relevant to the issue before the Board, and you say an issue before the Board properly at the LWA stage. You say you concede relevance. You are going to be discussing them. Then --

JUDGE MILLER: Pardon me just a minute. If these codes, in whole or in part, are used, then I don't see any reason why they are not therefore relevant for these discovery purposes.

MR. EDGAR: I agree.

JUDGE MILLER: All right. Then what is the disagreement as to (f), (g) and (h).

MR. EDGAR: The disagreement as to (f), (g) and (h) as to the Applicant -- Staff has explained their difference, and it is different because of the methods, but as to the Applicants, the only point that we are trying to make is that for discovery, just keep it open. We are not troubled by that. We don't think it is necessary for the Board, though, at the LWA stage, to reach ultimate findings on these codes.

JUDGE MILLER: We will get to ultimate facts when we get there. The Board is a long way from that. And we are not barred as such in discovery. So the

1(b). There are codes in 1(b) just like there are in 2.

(Board conferring.)

JUDGE MILLER: I don't see there is inconsistency in the ruling. Maybe somebody can enlighten me. I think we will let the record stand there unless somebody can point out -- the fact that we are talking about different purposes and different codes is a wholly different subject, I believe.

Right now what we are ruling on is that (f), (g) and (h) may be the subject of -- and are contentions, admitted contentions -- and may be the subject of reasonable discovery within the bounds of relevancy by the Intervenors or others, period.

MR. SWANSON: Maybe I could clarify something for the Staff. It is obviously a legitimate inquiry for Intervenors then to verify that we have only used two codes at this stage of the proceeding?

JUDGE MILLER: Yes.

MR. SWANSON: And I would assume then it would be a legitimate response once we have made a threshold showing that we are not using any other code, that we do not have to go on and explain what these other codes are?

JUDGE MILLER: I think that is correct.

APPENDIX E

T-20

NUCLEAR REGULATORY COMMISSION

ORIGINAL

In the Matter of: ADVISORY COMMITTEE ON REACTOR SAFEGUARDS

SUBCOMMITTEE ON CLINCH RIVER BREEDER REACTOR

DATE: March 30, 1982 PAGES: 1 - 114

AT: Washington, D. C.

TR 04
delete d' G. White

ALDERSON REPORTING

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are added, then I have to say in a procedural sense we are deciding that some of the criteria that the regulations said apply do apply and others do not.

MR. CHECK: All will be addressed.

MR. BENDER: How?

MR. CHECK: In the application, for one, and in our SER this whole process will be laid out.

MR. BENDER: I'm thinking in slightly different terms. The SER and the application both must deal with the Commission rules.

MR. CHECK: That's correct.

MR. BENDER: And we have agonized for months and years sometimes over trivial changes in the rules as they exist. And I'm saying now we're dealing with something that represents somewhere near wholesale changes in the way in which LWR's are dealt with. I think they have to be done and I want to know what the procedural aspects are that enable us to say that the Commission's regulations permit you to invent new criteria and put them into the rules through the SER process.

MR. CHECK: Okay, we'll talk about that.

MR. BENDER: It's just a matter of understanding.

MR. CHECK: When first Rich begins to talk a

the agenda, will outline how we will get to the principle design criteria that will be described in the SER. And just before I turn it to Rich, I will comment on that core dump.

We had at the outset a wonderful new idea that we could put the agenda aside and start picking through that and probably be here on Saturday. The good things to talk about and that I think sets the right tone for this meeting, what is it we're trying to do and why is it okay. And then once we can agree or get a consensus on what is the right approach, then we can go on and start filling in some of the holes.

MR. ZUDANS: Mr. Bender's question raised turmoil in my mind. What is it that CRBR will have to satisfy? Is it Appendix A or the new set of criteria or both, or Appendix A with some modifications to the criteria that are discussed in the PDC of CRBR?

MR. CHECK: We'll try to show that it's a derivative process and the rule is Appendix A, and then we will derive from it something that fits here.

I would add one comment -- maybe it's a request -- that I think the applicant participate in some of this. I'm sure he's got good ideas. He's got a safety philosophy that rivals our own, and I hope we are converging on a common one. So as it seems appropriate,

there. With regard to the chicken and the egg, if we look at how the general design criteria themselves were established, then if reactors are chickens chickens came before eggs. General design criteria were a codification of good practice.

And you're right. You're right, you correctly perceive the tighter loop that we're in. But I wouldn't torture myself with making the case that this came first and that came second. It's in the nature of things that we sort of learn by doing. These are evolutionary processes.

MR. ZUDANS: I understand the light water reactor was an evolutionary aspect, and to use the best experience from a couple of them. This is a specific CRBR. It's not likely it will ever be repeated.

MR. CHECK: The more reason we should be more restrictive, in our view.

MR. ZUDANS: But that's in the safety review. It has nothing to do with criteria. Why not make a larger set of criteria apply to CRBR, such as LMFBR criteria?

MR. CHECK: I don't know how practical that is. It would mean I would have to endorse the larger set. I don't know how long that would take and what would be involved. And the regulation is -- look in

agency having a basis for judgment, and I think some attention needs to be given to whether that basis is one with which we are comfortable. I wouldn't be surprised if you ought not to get the Commissioners concurrence in whatever that set is, or at least the method of evolution. That's all.

MR. CHECK: Bill Morris feels the need to add to this.

MR. MORRIS: With regard to whether you can have a set of criteria developed of the sort that we deal with in the GDC and PDC before you know a good deal about the design, I intend to try to show later on that there is an intimate relationship between the kinds of events that can be experienced and the kind of criteria that you impose. And until you know something about th design in some general form, you cannot adequately demonstrate what those kinds of events might be.

And so it seems to me that it would be an artificial thing to do to try to take the separation to far. If you did it, what you would come up with, I believe, would be a set of criteria that would look different from our GDC's and the PDC's for Clinch River. That is, they would be very generalized. And I think this attitude that you take could be addressed to the GDC's as well as to the PDC's.

up against light-water criteria. But I just haven't seen the closure point yet. And when you're dealing with things in a legal framework, I think the closures need to be identifiable.

MR. CHECK: We must not have made our point earlier.

First, we couldn't agree with you more. In fact, some of our difficulty stems from the lack of that document which describes the bases for the decisions that were made.

MR. MARK: That's going to be essential.

MR. CHECK: It will certainly be, and it will be a significant part of our SER. It will be in there. I know we can't avoid that.

MR. BENDER: I think your timing is wrong. I think you have to get that out before you put it in the SER. That's what I think needs to be done. So that when the SER is put out there is no opportunity to challenge the question of whether you had a suitable set of criteria to judge the plant by.

MR. CHECK: That's why we're doing certain things in parallel. We're having a meeting such as this so we can be as informed as we can. But there are questions of practicality. I cannot string everything out in series.

I don't know offhand a single event that threatens both the core and the containment of CRBR in the way that a major LOCA threatens the containment and core of a light water reactor. There is probably an analogy up to a point, but at some point, the processes are different.

And I think, if you look at containment I think a major sodium fire such as those described in the PSAR in Section 50.6 would be the design basis event for judging whether containment within the design basis is adequate, and perhaps some other event might be the limiting event for the core, and I don't offhand know what that is. In fact, that is part of our review, to determine what those events really are.

MR. CARBON: I think at least some people within the technical community would maintain that an energetic event -- core meltdown with an energetic release coming from recriticality or some such thing could maybe happen and certainly, that would be the equivalent or more to a double-ended pipe break.

MR. MORRIS: The distinction is that for the CRBR, an event for light water reactors involves that large amount of core melting. That is a Class 9 event, and the major LOCA is a design basis event for Clinch River -- I mean for the light water reactor. So I

not seem on the surface to have that potential impact. We are going to go through a review to evaluate what the impact of those breaks will be, and I will show you something about the schedule for that work in a few minutes.

(Slide)

There has been some question I think about how we go, within the NRC, about institutionalizing these criteria, and I just wanted to remind you of some of the factors that go into this process. As I said before, the applicant has proposed principal design criteria. They are in the PSAR in Chapter 3 and in each case he has indicated how he thinks he has implemented and met those criteria. And those are related to the proposed design basis events.

The review of the various criteria will be done within NRR in a manner similar to the reviews for light water reactors. Various branches play lead and secondary roles in evaluating these events and the criteria that are related to them. In this, we have pointed out one must take into account the 10 CFR general design criteria and the ANS criteria in evaluating the acceptability of these criteria.

We have consultants in research that have a bearing on this review. The evaluation would be subject

developed without design. I understand that point. It is a circle and it is a very questionable thing whether you ought to do what you have been doing.

MR. STARK: It does function as a good checklist for us, though, because in referring to what hurdles the light water people have to pass over, I think we make sure that this applicant or this application looks at the same bases or the same thinking anyway, so it is still a key ingredient.

MR. CARBON: Yes, it is worthwhile. It establishes some standards, some minimum requirements, and many of those are very good. I do not question its value.

(Slide)

MR. MORRIS: Just to give you an indication of the degree of similarity between the CRBR principal design criteria and the GDC criteria, I have indicated in this table that 38 of the principal design criteria are identical to the 10 CFR criteria. Ten are similar with only a slight variation. That gives a total of approximately 86% comparability between the light water reactor criteria and the LMFBR criteria.

And I do not think, as Dr. Carbon suggested, I don't think it is a trivial set of criteria because here included are criteria to contend with seismic events,

do not see the need for it right now. It may work out that way, we could probably put one on.

MR. ZUDANS: Well, it doesn't hurt.

MR. CHECK: Well, I take exception to adding things that are not necessary.

MR. ZUDANS: You are removing things in this case. It is already there. It is unfortuntely design specific. The criteria are so general that they are beautiful, like quality assurance, protection against natural phenomenon, all of those things have general criteria. They are really a general description of an environment. That is what I would call really general design criteria.

MR. CHECK: Which is not what we are doing.

MR. ZUDANS: Many things are very specific and design-dependent.

MR. CHECK: I don't think we are leaving --

MR. ZUDANS: You have to review it, it is already done. I think the same defect is with the general design criteria. They are also not sacred in that sense.

MR. LIPINSKI: They are looking at a design that has certain features that are inherently safe on reactivity, but if the designer were free to design -- and let us assume that he elects to put pneumatic drives

MR. CARBON: I don't think there really is a technical problem here. We all recognize the importance of it technically. I think the question is, what do these criteria mean. And going back I guess to me, probably Mike expressed it best way back there in pointing out or making the statement that we have to be sure that these are viewed as standards by which CRBR is judged, rather than something that -- I think his words were something along the lines of prepared to help justify what we are doing.

It is a credibility problem in part. It really is not a technical problem, I don't think. I know the design has certain limits to it and so on.

MR. ZUDANS: It is interesting what Walt just said. The designers recognize the need for this protection, but that does not mean that should be a reason to remove that criteria. Clearly, such a problem would be postulated by improper design.

MR. BENDER: Well, let me offer an analogous -- not specifically analogous but comparable kind of circumstance in the LWR criteria. I don't think there is anything that says pressure vessels cannot fail in the LWR criteria. It is implicit, and there will be a lot of implicit criteria here because you really don't want criteria to state the obvious all the time.

created afterwards. When Fort S. Vrain was built, the regulatory system was in transition. It was treated as a special case, and this could be treated as a special case if the law did not say that the CPSR must be put through the licensing process. That is the thing that I keep asking myself about and it is the thing you guys need to think about in terms of what the regulatory challenges will be when you want to stand up before the hearing boards or the courts and say, we are ready to license this because --. I don't put it forth as a technical argument at all; I just say it is something you need to be sure you do.

MR. CHECK: We do think about that a lot. We are plotting strategy right now. Cecile Thomas is not here because he is home working on that. We have announced -- and I will say it again -- that unlike perhaps any other case, we plan to postulate and defend the same criteria for this plant.

Now, the timeliness of that defense is perhaps troublesome to some, but it will be in our SER if not sooner.

MR. MORRIS: Again, let me point out that we do not consider the issue in criterion 28 closed. We have a review in progress to determine whether we think it should be added, and its potential omission is what

However, we believe that we should then check the design to determine that if a CDA occurred that there would not be an early containment failure and hence an unacceptable consequence from that event that is inevitable if the CDA is initiated. And we believe that it is practical and feasible to impose design features on the plant to assure that the CDA is an improbable event sufficient to exclude it from the design basis.

That is part of our effort.

MR. MARK: I did not mean to be challenging your approach. I knew a little bit about it, I suppose, and I think the way you have put it sounds very good to me. You have got to consider it. I realize that.

MR. CHECK: I doubt there is anybody in this room who would not grab at the mechanism for excluding the CDA. I guess what we are doing is we are confessi to you we do not know how to do that.

MR. MARK: And neither do I.

MR. CHECK: So we are going to do what we ca to minimize the probability and we are going to look a ways to accommodate it even if it were to occur.

MR. MARK: For the latter, it is not immediately clear to me that you need to describe the way the fuel drips, slumps, glops, drizzles from here

consequences of this reactor undergoing some event. It becomes a more difficult thing to decide precisely what we have to do, what has to be shown to move forward.

The previous team adopted a strategy of development of a source term. They called it a site suitability source term, but I would imagine that they meant in the sense of Part 100 and TID 14.844. It is a source term that would be used in the ultimate determination of site suitability for Part 100 purposes.

MR. MARK: You mentioned yesterday, I think, that there will be a hearing perhaps starting in August and that intervenors are going to meet on the question of CDA, for example. Is the question of the site expected to be in contention?

MR. CHECK: Yes, yes. I have not quite finished. I realize I am rambling, but I am trying to string together a history and some rationalization for a logical approach to this which, quite frankly, is aimed at describing that minimum, that minimum that we must do for LWA-1 purposes.

I could clearly understand if one went ahead and made all the findings one needs for a CP. That I would have done enough for an LWA-1, but I want to do something a great deal less for the kinds of reasons that we have given you before. We are simply not going

in my opinion, a different reactor. You do not just go in and put a 60 psi containment building where you had been planning a 10 psi.

The other thing is, as you well recall, the staff had on some arbitrary basis said if we can hold a large release for 24 hours or some time like that, that would be acceptable with regard to containment performance. That issue was never really discussed with the ACRS.

It seems to me implicit in that there has to be some likelihood, what is the likelihood that you will accept that release at. It is certainly not acceptable if it is a frequency of 1 in 1,000 per year. It may be at that level at some substantially smaller frequency, but that was not in -- there was something like 10^{-6} in that statement, but I know of no basis to assume that that 10^{-6} number was rigid or would be met or so forth.

So I have, as I say, these kinds of questions in trying to know, in looking at the agenda items, how one goes from general design criteria to acceptance criteria as it relates to the site, the kinds of things I have just indicated on seismic and possibly on hydrology.

MR. CHECK: Well, I am going to take the comments as advice as much as I will as questions,

that seem with a good degree of confidence safe statements to make. Is this a capable site? Without dwelling on the LMFBR as the reactor to be put there in all its nuances, is this a capable site?

And then go on, bridge the gap, handle the question of the size and type reactor with words that are going to be an expression of engineering confidence, confidence in technology to surmount any problems that may be encountered.

You mentioned the containment. That probably can be viewed as two kinds of problems, one of practicality and one of feasibility. If we proceed down this path of minimum finding, we are going to be leaning toward the finding of feasibility.

MR. OKRENT: I think that is an inappropriate path if that is really the one you are planning to take for a variety of reasons, many of which have been said before, even at the Supreme Court.

MR. CHECK: Well, I would like to hear more on it because I am trying to distinguish in my mind the quality, the quantity, the nature of the finding that needs to be made for an LWA-1 or site suitability and a construction permit.

MR. OKRENT: You have to have in mind, it seems to me, a reactor that resembles the one that the

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

ADVISORY COMMITTEE ON REACTOR SAFEGUARDS

SUBCOMMITTEE ON THE CLINCH RIVER BREEDER REACTOR

Room 1046
1717 H Street, N.W.
Washington, D.C.

Wednesday, May 5, 1982

The Subcommittee on Clinch River Breeder Reactor met, pursuant to notice, at 8:35 a.m., Dr. Max W. Carbon, Chairman of the Subcommittee, presiding.

ACRS MEMBERS PRESENT:

M.W. Carbon, Chairman
J.C. Mark, Member
W.M. Mathis, Member
M. Bender, Member
Z. Zudans, Consultant
W. Kastenberg, Consultant
W. Lipinski, Consultant

DESIGNATED FEDERAL EMPLOYEE:
P. Boehnert

* * *

design basis?

In 1974, I believe it was a design basis. In 1976 it was set aside as not a design basis. Yesterday we heard it is not design basis. Usually, we do not really discuss things which are not design bases nor feel that it is necessary.

Here, for some reason not totally clear to me, we are acting as if it were.

MR. CHECK: I am glad you bring this up. It is worth discussing. I agree with much of what you said, but I disagree with parts of it. I think you will find a consistency in our approach with what is being done in water reactors. The committee has listened to the staff, not this Staff, on questions of hydrogen in containment that takes place beyond the design basis, much of that does.

So it is in that same sense that we are looking at the CDAs here. You said something about how it is classified, whether it is DBA or not. While I am not the ultimate historian, I think it has never really been classified as a design basis event. It has skirted it; it has come close. I think we are prepared to say that it is not a design-basis event without being able to prove that today, without wishing to make that case today.

an energetic core disruptive accident in general terms, one in fact that exceeded the capability of the primary system and one therefore that involved some release of plutonium and fission products to the containment.

It was a conceptual and representative event that was considered, and therefore in treating the environmental impact of CDA's or Class 9 accidents, we have taken a representative case and incorporated that into the FES. And in treating the site suitability report, we have not included a mechanistic bound for CDA's in the site suitability source term.

In summary, the CDA energetics -- the siting effort is not sensitive to CDA energetics.

MR. MARK: You said you will possibly arbitrarily include some plutonium in the source term. That takes more than melting, does it not? Does that not take fuel vaporization?

MR. MORRIS: The source term is a non-mechanistic source term, and the only reason that I mentioned that it would involve something that could be connected to a CDA would be that you would imagine a CDA would have to occur in order to get one percent plutonium inventory into the source term.

MR. MARK: You sure would have to imagine that.

CERTIFICATE OF SERVICE

I hereby certify that copies of NATURAL RESOURCES DEFENSE COUNCIL, INC. AND THE SIERRA CLUB PETITION TO THE COMMISSIONERS TO EXERCISE THEIR INHERENT SUPERVISORY AUTHORITY TO DELINEATE THE SCOPE OF THE LIMITED WORK AUTHORIZATION PROCEEDING FOR THE CLINCH RIVER BREEDER REACTOR were served this 11th day of June, 1982 on the following:

Marshall E. Miller, Esquire
Chairman
Atomic Safety & Licensing Board
U.S. Nuclear Regulatory Commission
4350 East West Highway
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* Atomic Safety & Licensing Appeal Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

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

* Docketing & Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555
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APPENDIX A

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:
Marshall E. Miller, Chairman
Gustave A. Linenberger, Jr.
Dr. Cadet H. Hand, Jr.

SERVED APR 23 1982

In the Matter of	Docket No. 50-537
UNITED STATES DEPARTMENT OF ENERGY PROJECT MANAGEMENT CORPORATION TENNESSEE VALLEY AUTHORITY	
(Clinch River Breeder Reactor Plant)	April 22, 1982

ORDER FOLLOWING CONFERENCE WITH PARTIES

A conference with counsel was held pursuant to notice in this proceeding on April 20, 1982 at Bethesda, Maryland. Counsel representing the United States Department of Energy, Project Management Corporation and Tennessee Valley Authority (Applicants), the Staff, Natural Resources Defense Council and Sierra Club (Joint Intervenors), and the State of Tennessee participated in the conference.

The Board considered and heard arguments on the statements of position, filed by Applicants, Staff and Intervenors, that addressed the question of which issues within Contentions 1, 2 and 3 should be

deferred for purposes of discovery and litigation until after the LWA-1 evidentiary hearing and partial initial decision.

In addition, the Board ruled upon the Staff Motion for a Protective Order Relative to Discovery and addressed all matters of controversy among the parties regarding interrogatories and responses to interrogatories.

Contentions 1, 2 and 3

Contention 1(a)

The Board ruled that Subpart (a) of Contention 1, which challenges the ability of Applicants' reliability program to eliminate CDAs as DBAs, is litigable at the LWA-1 stage. However, the inquiry at this stage is limited to consideration of whether it is feasible to design CRBR to make HCDAs sufficiently improbable that they can be excluded from the envelope of design basis accidents for a reactor of the general size and type proposed. Specifically, discovery at the LWA-1 stage is limited to the following areas of concern:

1. The major classes of accident initiators potentially leading to HCDAs;
2. The relevant criteria to be imposed for the CRBRP;
3. The state of technology as it relates to applicable design characteristics or criteria; and

4. The general characteristics of the CRBRP design (e.g., redundant, diverse shutdown systems) (Tr. 548).

A full-scale inquiry into the specific design of the CRBR is inappropriate at the LWA-1 stage. 10 CFR §50.10(e) establishes that an LWA-1 may be issued only after the Board has conducted a full NEPA review and has determined that "based upon the available information and review to date, there is reasonable assurance that the proposed site is a suitable location for a reactor of the general size and type proposed from the standpoint of radiological health and safety considerations...."

In order to make the full NEPA findings, the Board must have before it "sufficient information regarding the proposed plant...in the applicant's environmental report and the record of the NEPA hearing in order to conduct a reasonable cost-benefit analysis as required by NEPA" (Statements of Consideration to 10 CFR §50.10(e) at 39 FR 14506). The applicants' environmental report must assess the "probable impact of the proposed action on the environment" (10 CFR §51.20(a)). This assessment involves analyses of the probable environmental impacts of postulated accidents and must be based on realistic assumptions and methods of analysis. However, the conservative methods of analysis employed in the NRC safety evaluation process are not necessary for the NEPA review (Gulf States Utilities (River Bend Station, Units 1 & 2), LBP-75-50, 2 NRC 419, 447-448 (1975)).

In order to fulfill the requirements of 10 CFR §50.10(e)(2)(ii), the Board must make a preliminary safety determination "that based on the available information and review to date there is reasonable assurance that the site is a suitable location for a reactor of the general size and type proposed from the standpoint of radiological health and safety considerations."

On its face, it is evident that 10 CFR §50.10(e)(2)(ii) does not require a complete safety review based on the completed, detailed design of the specific reactor proposed. Instead, a preliminary safety finding is contemplated "based on the available information and review to date" and based on "a reactor of the general size and type proposed." With respect to Contention 1(a) specifically, there must be a showing of reasonable assurance that the state-of-the-art technology permits the implementation of a design which would reduce the likelihood of CDAs so that they can be excluded or that the finding is to include CDAs.

In contrast to 10 CFR §50.10(e)2, 10 CFR §50.35(a) contemplates a specific analysis of the facility at the CP stage. Thus, although a full NEPA review is mandated for the LWA-1 hearing phase, the finality of this review must of necessity await the completion of the CP evidentiary hearing where full design details and supportive analyses of the facility will be critiqued.

Contention 1(b)

The Board ruled that Subpart (b) of Contention 1, which questions Applicants' design, reliability program, methodology, and data base, is deferred for purposes of discovery and litigation until after the LWA-1 evidentiary hearing and partial initial decision. Subpart (b) involves matters of detailed design review and safety evaluation which, in accordance with the discussion in Contention 1(a) above, is more appropriately considered at the CP stage (Tr. 550-551). Applicants clarified that, in light of the Board's order, they would not rely on the information in this subpart for purposes of the LWA-1 hearing (Tr. (Tr. 576).

Contentions 2(a)-2(c)

The Board ruled that Subparts (a)-(c) of Contention 2, which broadly question the validity of the NRC Staff's postulated radiological source term for site suitability analysis, are litigable at the LWA-1 stage, subject to the same limitations set forth in the ruling on Contention 1(a).

The evidentiary record and its precedent discovery will be confined to considering whether the Staff's source term is likely to envelope the design basis accident envelope as defined under 1(a) for a reactor of the general size and type proposed (Tr. 607).

Contention 2(d)

The Board ruled that Subpart (d) of Contention 2, which broadly questions the adequacy of the containment design, is litigable at the

LWA-1 stage subject to the same limitations set forth in the ruling on Contention 1(a) (Tr. 607-608).

Contention 2(e)

No controversy existed among the parties with respect to Subpart (e) of Contention 2, which alleges that neither Applicants nor Staff has adequately calculated the guideline values for radiation doses from postulated CRBRP releases. Contention 2(e) is litigable and subject to discovery at the LWA-1 stage as admitted (Tr. 608).

Contentions 2(f)-2(h)

The Board ruled that Subparts (f)-(h) of Contention 2, which question the validity of the codes used by Applicants and Staff to date, are the basis for discovery at the LWA-1 stage as to the codes used, including their validity, foundation proof and the like Tr. (614).

Contention 3(a)

The Board ruled that Subpart (a) of Contention 3, which broadly questions the need for and adequacy of a probabilistic risk assessment of the CRBRP comparable to the Reactor Safety Study ("Rasmussen Report"), is deferred until after the LWA-1 evidentiary hearing and partial initial decision. Applicants will not rely on any analyses comparable to the Reactor Safety Study for purposes of the LWA-1 hearing (Tr. 625-626).

Contention 3(b)

Subpart (b) of Contention 3 alleges that neither Applicants' nor Staff's analyses of potential accidents, initiator sequences and events

are sufficiently comprehensive to assure that analysis of the DBAs will envelope the entire spectrum of credible accidents. The Board ruled that Contention 3(b) is litigable at the LWA-1 stage, subject to the same limitations set forth in our ruling on Contention 1(a) (Tr. 618-619).

Contention 3(c)

The Board ruled that Subpart (c) of Contention 3, which alleges that accidents associated with core melt-through following loss of core geometry and sodium-concrete interactions have not been adequately analyzed, is litigable at the LWA-1 stage subject to the limitations set forth in our ruling on Contentions 2(f)-(h) and on Contention 1(a) (Tr. 619- 620).

Contention 3(d)

The Board ruled that Subpart (d) of Contention 3, which alleges that neither Applicants nor Staff has adequately identified and analyzed the ways in which human error can initiate, exacerbate or interfere with the mitigation of CRBRP accidents, is litigable at the LWA-1 stage subject to the same limitations set forth in our ruling on Contention 1(a) (Tr. 622-625).

Matters Regarding Interrogatories

The Board denied the Staff's request (in its motion for a protective order, filed April 16, 1982) to set a numerical limit on the number of interrogatories filed by each party. An arbitrary limitation on the number of interrogatories is inappropriate at this time and in this kind of case (Tr. 643). The Board recognizes that there is a problem of too many interrogatories but does not believe that limiting the number on a mechanical basis would be fair to the parties nor would it be in the public interest (Tr. 660-661). In order for the parties to control this problem, the Board granted protective orders and struck the following pending interrogatories and requests to produce:

(1) Natural Resources Defense Council, Inc. and the Sierra Club Twenty-Fourth Set of Interrogatories and Request to Produce to Staff;

(2) Natural Resources Defense Council, Inc. and the Sierra Club Eighteenth Set of Interrogatories and Request to Produce to Applicants;

(3) NRC Staff First Round of Discovery to NRDC, et al.; and

(4) Applicants' Fourth Set of Interrogatories to Intervenors Natural Resources Defense Council, Inc. and the Sierra Club (Tr. 668).

The Board directed the parties through counsel to follow the procedures outlined in Comanche Peak[1/] and to negotiate all such discovery with reasonable dispatch. If parties are unable to resolve disputes, they shall file appropriate motions for a protective order which set forth verbatim the interrogatories or requests, the matters in controversy, and the differences between them that were discussed and negotiated. Such motions should be accompanied by points and authorities containing the authorities relied upon. Parties will have a total of eleven (11) days to reply to a motion (ten (10) days plus one (1) day delivery), and the Board will rule thereon promptly (Tr. 668-672).

If any discrepancies exist between statements or rulings made at the conference and this Order, this Order shall be controlling.

It is so ORDERED.

FOR THE ATOMIC SAFETY AND
LICENSING BOARD

Marshall E. Miller

Marshall E. Miller, Chairman
ADMINISTRATIVE JUDGE

Dated at Bethesda, Maryland
this 22nd day of April, 1982.

1/ Texas Utilities Generating Company, et al. (Comanche Peak Steam Electric Station, Units 1 and 2), LBP-81-22, 14 NRC 150, 155-157 (1981).

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Barbara A. Finamore

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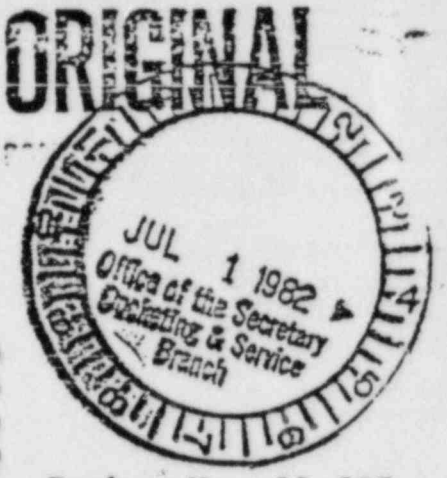
* Denotes hand delivery.

ATTACHMENT 3

ORIGINAL



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
UNITED STATES DEPARTMENT OF ENERGY	)	
PROJECT MANAGEMENT CORPORATION	)	Docket No. 50-537
TENNESSEE VALLEY AUTHORITY	)	
(Clinch River Breeder Reactor Plant)	)	

APPLICANTS' RESPONSE TO NATURAL RESOURCES DEFENSE COUNCIL, INC. AND SIERRA CLUB PETITION TO THE COMMISSIONERS TO EXERCISE THEIR INHERENT SUPERVISORY AUTHORITY TO DELINEATE THE SCOPE OF THE LIMITED WORK AUTHORIZATION PROCEEDING FOR THE CLINCH RIVER BREEDER REACTOR

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DATED: July 1, 1982

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The United States Department of Energy and Project Management Corporation, acting for themselves and on behalf of the Tennessee Valley Authority (the Applicants), hereby respond to National Resources Defense Council, Inc.'s Petition to the Commission dated June 11, 1982.

INTRODUCTION

Intervenors' Petition to the Commission is an improper attempt to obtain interlocutory review of an evidentiary ruling by the Licensing Board in this proceeding. Intervenors have failed to set forth any legally sufficient grounds for seeking such review. The issues presented do not involve matters of major policy or law, and review at

this time will create rather than avoid delay in the proceedings. This is simply a classic case of a complex evidentiary ruling which, by reason of its familiarity with the record and expertise, the Licensing Board is uniquely equipped to decide.

In their lengthy discourse, Intervenors merely argue the merits of why a Limited Work Authorization should not issue for CRBRP. Intervenors, in effect, request the Commission to decide, without benefit of any record established at an evidentiary hearing, that because of the Board's evidentiary rulings, the evidence which will be presented at the LWA hearing will not permit the Board to make the requisite site suitability and environmental findings necessary for the issuance of an LWA. Implicit in Intervenors' request is the conclusion that the Board will disregard the burden of proof established by the LWA regulations and improperly issue an LWA.[1/] Not surprisingly, Intervenors fail to explain how, prior to an evidentiary hearing, they are able to discern the evidence which Applicants will introduce. Nor do Intervenors explain

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1/ That the Board will improperly issue an LWA is a logical implication of Intervenors' argument. Because Intervenors oppose the issuance of an LWA, if Applicants' evidence were insufficient to support appropriate LWA findings and the Board denied Applicants' request, Intervenors' Petition would be meaningless.

how they are able to conclude that the Board will improperly issue an LWA.[2/]

Intervenors' attempt to obtain interlocutory review is particularly inappropriate in this instance because of the advanced stage of this proceeding. At the present time, the discovery period is closed, the Staff has issued the Site Suitability Report (SSR) and the update to the Final Environmental Statement (FES) is expected to issue in the very near future. All of the major milestones of the Licensing Board's schedule have been met and hearings on Applicants' request for an LWA are scheduled to commence on August 24, 1982. Although the Board made its evidentiary rulings on April 20, 1982 and issued its Order on April 22, 1982, Intervenors-inexplicably and in violation of applicable Commission regulations-have delayed seeking review of the Board ruling and Order for over six weeks. Review at this juncture will only serve to delay the proceedings and impede the Board's authority to regulate their course. For

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2/ It is ironic that Intervenors are complaining about the scope of the LWA issues in light of Intervenors' conclusion that, because of the scope, Applicants will be unable to introduce evidence sufficient to permit the Board to make the necessary site suitability and environmental findings. It is, after all, Intervenors who oppose the issuance of an LWA. Unlike Intervenors, Applicants believe that the Licensing Board will fulfill its responsibility and act in accordance with the requirements of law.

this reason alone, Intervenors' Petition should be summarily dismissed.

In short, in seeking interlocutory review, Intervenors have not only failed to state any legally sufficient grounds, but more importantly are asking the Commission to prejudge both the merits of the evidence which will be presented at the hearing, and the Board's future findings of fact and conclusions of law regarding that evidence. Applicants submit that the factually complex issues raised by Intervenors Petition can and should be reviewed by the Commission only after the conclusion of the evidentiary hearing on Applicants' request for a Limited Work Authorization, and the issuance of the Licensing Board's Partial Initial Decision.

BACKGROUND

On April 5-6, 1982, the Licensing Board convened a prehearing meeting of counsel in order to rule on Intervenors' contentions as well as various pending motions. During the course of that meeting, the Board, recognizing that the scope of Intervenors' Construction Permit contentions went beyond the more limited scope of issues which must be considered at an LWA hearing, requested the parties to state their position as to which issues encompassed by Intervenors' contentions should be considered at the LWA hearings and which should be deferred until the Construction

Permit or even the Operating License stage of the hearing process.

Although the parties and the Board were in agreement as to the deferral of a number of issues, because of the factual complexity of Intervenors' Contentions 1-3, the Board scheduled a meeting for April 20, 1982 for the sole purpose of deciding which issues encompassed within Intervenors Contentions 1-3 were appropriate for consideration at the LWA stage. The Board requested the parties to provide written statements of their positions and to bring any experts necessary to a full discussion of these contentions.

Subsequently on April 15, 1982, Applicants submitted a detailed statement of their position regarding Contentions 1-3.[3/] The NRC Staff submitted a statement which was in substantial agreement with the Applicants' position. In their Statement, Applicants pointed out that for an LWA proceeding, it is not necessary to conduct a full scale, in-depth review of all elements of the plant design. Such a review is proper for the Construction Permit proceeding. At

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3/ Inasmuch as Intervenors have quoted from and attached to their petition only selected portions of Applicants' Statement of Position, a copy of Applicants Statement of Position is attached to this Response as Appendix A. That Statement sets forth in detail Applicants position with regard to the scope of review at the LWA stage, and in the interest of accuracy, Applicants commend its entire contents to the Commission's attention.

the LWA proceeding, the applicable standard contemplates a finding of reasonable assurance, based on available information, that the proposed site is a suitable location for "a reactor of the general size and type proposed." As for the requisite environmental findings, the scope of review is limited to the probable impacts of the proposed action, including the environmental impacts of accidents. The limited nature of the LWA findings necessarily imposes limitations on the scope of analyses, systems, structures and components which must be considered, and the level of detail which must attend that consideration.

On April 20, 1982, Intervenors submitted their statement of position regarding the scope of the LWA proceedings. As in their Petition to the Commission, Intervenors argued that the Board must conduct a detailed review of the CRBRP plant design -- in effect conduct a construction permit proceeding -- in order to issue an LWA.[4/]

4/ Intervenors had previously contended that an LWA could not issue to CRBRP because it is a "first-of-a-kind reactor." This contention was grounded on the notion that all elements of the design must be known and reviewed before any decision can be made. Intervenors' contention was dismissed by the Board and Intervenors did not seek review of that ruling. In arguing that the Board must conduct a CP type proceeding in order to issue an LWA, Intervenors in effect are again raising the previously dismissed contention that an LWA cannot issue to CRBRP.

On April 20, 1982, the Board convened a meeting which lasted approximately seven hours and permitted all parties to present their respective positions. After hearing the arguments of all parties, the Board ruled, in accordance with applicable NRC regulations, that the detailed design review sought by Intervenors would be conducted at the Construction Permit stage of the licensing proceeding, and that the review at the LWA stage would be limited to that required by 10 C.F.R. § 50.10(e). On April 22, 1982, the Board issued its Order deferring certain of Intervenor's contentions until the CP stage and limiting the scope of certain other contentions in accordance with NRC regulations. On June 11, 1982, six weeks later, Intervenors' filed their Petition.

RESPONSE

I. INTERVENORS' PETITION FOR REVIEW OF AN INTERLOCUTORY EVIDENTIARY RULING IS WHOLLY IMPROPER

The Nuclear Regulatory Commission has a long standing policy, reflected in its regulations, against interlocutory review of Licensing Board orders and rulings. 10 C.F.R. § 2.730(f), for example, provides "No interlocutory appeal may be taken to the Commission from a ruling of the presiding officer." The basis for this rule is the avoidance of "piecemeal litigation." and the delays which

inevitably result therefrom.[5] As the Appeal Board stated in Boston Edison Co. (Pilgrim Nuclear Generating Station, Unit 2), ALAB-209, 1 NRC 411, 413 (1975):

> It has long been determined, all things considered, that proceedings can be conducted most efficiently if the right to obtain appellate review of interlocutory orders is deferred to an appeal at the end of the case. The Commission's Rules of Practice so provide and we must follow them.

Similarly in Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-271, 1 NRC 478, 483 (1975) the Appeal Board stated:

> The general policy of the Commission does not favor the singling out of an issue for appellate examination during the continued pendency of the trial proceeding in which that issue came to the fore.

Although the Commission may consider interlocutory matters, it has chosen to do so "most sparingly"[6] and

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5/ See Catlen v. United States, 324 U.S. 229, 233 (1945):

> The foundation of this policy is not in merely technical conceptions of finality. It is one against piecemeal litigation. The case is not to be sent up in fragments ... Reasons other than conservation of judicial energy sustain the limitation. One is elimination of delays caused by interlocutory appeals.

6/ Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-514, 8 NRC 697, 698 (1978).

only in "exceptional circumstances."[7] Because of the extraordinary nature of interlocutory review, a party seeking such review has a particularly heavy burden to surmount. Interlocutory review is appropriate only

> where the ruling below either (1) threatened the party adversely affected by it with immediate and serious irreparable impact which as a practical matter, could not be alleviated by later appeal or (2) affected the basic structure of the proceeding in a pervasive or unusual manner.

Public Service Company of Indiana, Inc. (Marble Head Nuclear Generating Station, Units 1 and 2), ALAB-405, 5 NRC 1190, 1192 (1977).[8]

7/ Consumers Power Co. (Midland Plant, Units 1 and 2), ALAB-382, 5 NRC 603 (1977).

8/ In their Petition, Intervenors state that "numerous decisions have established that interlocutory review would be undertaken" citing Public Service Company of Indiana, Inc. (Marble Hill Nuclear Generating Station, Units 1 and 2) ALAB-405, 5 NRC 1190, 1192 (1977) and Public Service Electric and Gas Company (Salem Nuclear Generating Station, Unit 1), ALAB-588, 11 NRC 533, 536 (1980). Intervenors fail to point out that in both cases the Appeal Board refused to entertain interlocutory review. In fact, the only case cited by Intervenors in which interlocutory review was undertaken by the Commission is United States Energy Research and Development Administration (Clinch River Breeder Reactor Plant), CLI-76-18, 4 NRC 67 (1976). In that decision, the Commission conducted a sua sponte review of a Board ruling because of "important issues of law and policy", i.e., the relationship of the NRC with EDRA, an issue which the Commission believed might "recur in future licensing of ERDA facilities." Id. at 76. In contrast, the issue raised by Intervenors' Petition deals with technical issues, rather than law and policy, and would have no impact on the relation-

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As will be demonstrated, neither circumstance is present in this case. Any imagined error in the Board Order can be raised on appeal of the Board's final order as well as at subsequent stages of this proceeding before the Board. Further, the Board Order, which strictly adheres to NRC's regulations and case law, can hardly be considered a ruling which "affects the structure of the proceeding in a pervasive or unusual manner." Indeed, only if the Board had ruled in the manner suggested by Intervenors could it so affect the structure of this proceeding.

II. ANY ALLEGED ERROR IN THE BOARD'S RULING CAN BE RAISED ON APPEAL

Although Intervenors complain in various sections of their Petition that they will somehow be foreclosed from raising certain issues at later stages of this proceeding, in discussing the standard for interlocutory review, Intervenors only claim that the Board's ruling will affect the structure of the LWA proceeding in a "pervasive manner."

In any event, Intervenors will be provided ample opportunity to challenge the Board's Order on appeal.

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ship between two federal agencies. Furthermore, in its 1976 decision, the Commission noted tht the decision of the Licensing Board itself threatened substantial delay for the proceeding, delay which could not be recaptured by later correction of error. "Id. In the present situation, however, as Intervenors must concede, Commission intervention would result in delaying, rather than expediting, the course of the proceedings.

Pursuant to the NRC regulations and case law, a party to an initial licensing proceeding, may appeal the initial decision of the Licensing Board, including an initial partial decision, and take exception to the Board's findings of fact and conclusions of law. 10 C.F.R. § 2.762(a). In addition, a party may raise both errors of fact and law on appeal. Id. Thus, NRDC is free to appeal the Licensing Board's ruling regarding the scope of contentions 1, 2, and 3 should the Board ultimately recommend the issuance of an LWA-1. Moreover, the Appeal Board has the authority to exercise sua sponte review in order to insure that environmental and safety issues are fully and properly addressed. Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-509, 8 NRC 679 (1978). Thus, any error which might be committed by the Board affecting the environmental or safety findings may be subject to review even if not raised by any party.

It should also be emphasized (as discussed in detail infra), that the LWA proceeding is merely the first step in the CRBRP licensing process. To the extent that any new information or changed circumstances arise during subsequent proceedings, the Board is free to review that

information or changed circumstances in light of its previous LWA findings.

In summary, Intervenors will have ample opportunity to obtain review of the Board's evidentiary rulings regarding Contentions 1, 2 and 3. NRDC must, however, be required to await the issuance of a partial initial decision before raising these issues before the Commission.

III. THE BOARD'S RULING DOES NOT AFFECT THE BASIC STRUCTURE OF THE PROCEEDING IN A PERVASIVE OR UNUSUAL MANNER

Although conceding that the Board's evidentiary rulings "might be correct" for light water reactors,[9/] Intervenors nonetheless request the Commission to undertake the extraordinary procedure of interlocutory review of the Licensing Board's evidentiary ruling on two grounds. First, the result of the Licensing Board ruling "will be a severely constricted record that will not permit the Board rationally to make the LWA findings required by law."[10/] Secondly, "the basic structure of the proceeding will also be pervasively affected in that Intervenors will be prevented from making our affirmative case on NEPA and site suitability issues."[11/]

9/ Intervenors Petition at 55.

10/ Id. at 54.

11/ Id. at 54.

It is ironic that Intervenors, who oppose the issuance of an LWA on the ground that the procedure should not be available for "first-of-a-kind reactors", request review on the ground that the Board will not be able to make rational site suitability and environmental findings. If Intervenors are correct, the Board will refuse to recommend the issuance of an LWA. Moreover, should the Board erroneously recommend an LWA, the Appeal Board, and if necessary, the Commission can review and reverse that recommendation. Obviously, the Commission should not prejudge the Licensing Board's actions prior to the creation of a record in this proceeding.

Intervenors' second ground is even more perplexing than the first. Intervenors claim, without explanation, that because of the Board ruling they will be unable to make their affirmative case.[12/] As a preliminary matter, it

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12/ Intervenors continually complain that they are hampered in their preparation because they will be unable to obtain discovery on the details of a probabilistic risk analysis of accident probabilities. Yet, at a deposition of Dr. Thomas Cochran, Intervenors' primary witness on Contentions 1-3, Dr. Cochran stated that such an analysis could not be relied upon to exclude HCDAs from the envelope of design basis accidents. (Tr. of Cochran deposition at 176-177 (June 22, 1982)). Thus, Intervenors apparently would like to engage in discovery concerning an analysis upon which Applicants will not rely at the LWA hearing and which Intervenors believe cannot be relied upon. Applicants can hardly conceive of a more inappropriate area of discovery.

should be noted the Intervenors have engaged in discovery of unprecedented scope. To date, Intervenors have submitted and received responses to 19 sets of Interrogatories directed to Applicants, 25 sets of Interrogatories directed to the NRC Staff, 10 sets of Admissions directed to Applicants and 10 sets of Admissions directed to the NRC Staff. Intervenors have also deposed more than fifteen persons, and have had production of more than one hundred thousand pages of documents. Under these circumstances, it is difficult to understand the basis for Intervenors' argument that the Board's ruling will prevent Intervenors from preparing their affirmative case.

More importantly, any perceived difficulties which Intervenors may have in preparing their case is due solely to their insistence that the Board, at the LWA proceeding, must conduct a detailed review of all elements of the design of CRBR. Not surprisingly, Intervenors fail to cite any relevant authority for the proposition that a detailed review of all elements of the CRBR design is mandated by the LWA regulations. In fact, as Intervenors are well aware, the LWA regulations specifically preclude the type of review upon which Intervenors insist.

A. The Board Ruling On the Scope of the LWA Proceeding Was Correct

Intervenors' complaint with the Board ruling is not that the Board has somehow misread or misapplied the LWA regulations.[13/] Indeed, Intervenors fail to cite any relevant authority which in any way casts doubt upon the Board ruling. Rather, Intervenors apparently contend that regardless of the clear language of the LWA regulations, and the clear holdings of various Appeal Boards, the Board must engage in a far reaching and detailed review of the design of CRBRP. In effect, Intervenors would have the Board conduct a Construction Permit proceeding, and at the conclusion of that proceeding, as a lesser included finding, issue an LWA.

Before discussing the Board ruling, it is important to understand what the Board did not decide. Throughout their Petition, Intervenors continually mischaracterize the Board ruling and Order and state that the only evidence permitted by the Board is of a "hypothetical reactor" meeting "hypothetical design criteria". Contrary to Intervenors' statement, the Board did not so limit the review of CRBRP at the LWA proceeding. In particular, as its primary limitation on the Contentions 1-3, the Board held that

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13/ Intervenors concede as noted earlier that the Board's ruling "might be correct" for light water reactors. Intervenors' Petition at 55.

discovery at the LWA stage is limited to the following areas of concern:

1. The major classes of accidents initiators potentially leading to HCDAs;

2. The relevant criteria to be imposed for CRBRP;

3. The state of technology as it relates to applicable design characteristics or criteria; and

4. The general characteristics of the CRBRP design (e.g., redundant, diverse shutdown systems).

Board Order at 2-3.

As demonstrated in the Board Order quoted above (No. 4) and the recently issued Site Suitability Report, the pertinent design characteristics specifically proposed for CRBRP will be subject to review at the LWA hearing -- not the design of a hypothetical reactor. For example, pertinent elements of the CRBRP containment design, shutdown systems, decay heat removal systems, fuel failure detection systems, and systems for assuring primary system integrity will be considered at the LWA stage to the extent that those systems relate to findings of site suitability. Because of the limited nature of the activities permitted pursuant to an LWA and because those activities are taken at the Applicants' risk, it is simply not necessary to conduct a detailed review of all elements of the design of those systems. Such a review can await the Construction Permit

proceeding. As provided in the NRC regulations, the Board need only have reasonable assurance that the specific systems of the CRBRP can be designed to meet the site suitability requirements contained in NRC regulations[14/] and that the probable environmental impacts from construction and operation of such a reactor are properly analyzed.[15/]

Similarly, CRBRP design criteria are not hypothetical. The Board's ruling contemplates that the review will include consideration of pertinent design criteria. The PSAR contains the detailed design criteria for the CRBRP as does the NRC Staff's recently issued SSR.[16/] While these criteria are not final, they can hardly be characterized as hypothetical. Moreover, there is nothing to indicate that these criteria will change or that if a change is necessary, such changes cannot be accommodated at later stages of this proceeding.

Thus, the Board clearly did not rule that it would only consider a hypothetical raactor and hypothetical design criteria. Rather, the Board simply ruled that the detailed

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14/ 10 CFR § 50.10e (1982).

15/ Natural Resources Defense Council Inc. v. Morton, 458 F.2d 827, 836 (D.C. Cir. 1972).

16/ Site Suitability Report (Clinch River Breeder Reactor Plant), NUREG-0786 (June, 1982) (Appendix A).

design review sought by Intervenors must await the Construction Permit proceeding. As the Board stated in its Order:

> A full-scale inquiry into the specific design of the CRBR is inappropriate at the LWA-1 stage. 10 C.F.R. 50.10(e) establishes that an LWA-1 may be issued only after the Board has conducted a full NEPA review and has determined that 'based upon the available information and review to date, there is reasonable assurance that the proposed site is a suitable location for a reactor of the general size and type proposed from the standpoint of radiological health and safety considerations.' 17/

Broadly stated, Intervenors complain of the Board rulings in two respects: (1) "The Licensing Board's interpretation of the scope of required LWA findings does not permit reasoned site suitability findings," and (2) "The Licensing Board's severe limitation of the scope of the LWA proceedings for CRBRP violates NEPA." Based on these two

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17/ United States Department of Energy (Clinch River Breeder Reactor Plant), Docket No. 50-537 at 3 (April 22, 1982). The Board's ruling in this case is amply supported by NRC case law. In Gulf States Utilities Company (River Breed Station Units 1 & 2) LBP-75-50, 2 NRC 419, 461 (1975) the Board discussed the scope of review for an LWA in the following terms.

> It is not required that the Board make findings at present as to whether the specific design of the River Breed Station conforms to the radiological health and safety requirements of 10 C.F.R. 50, the regulations with which Appendix I is associated. Whether or not the specific design can be expected to meet Appendix I requirements will be the subject of further hearings.

complaints, Intervenors apparently contend that the structure of the LWA proceeding will be pervasively affected and accordingly, interlocutory review is appropriate. As will be demonstrated, both complaints are entirely meritless.

1. Site Suitability

Intervenors' concern regarding site suitability is premised entirely on its misconception of the extent to which site suitability findings are final. Repeatedly throughout its argument, Intervenors state that the "issue of site suitability is essentially closed" after the LWA hearing. Indeed, Intervenors go so far as to suggest the following:

> If the Board finds that the site is suitable, that finding is not preliminary; it is a final decision. All contentions as to site suitability will presumably be resolved. We cannot imagine that the Board would permit reauthorization of site suitability contentions at the CP stage. 18/

Thus, based on their belief that all site suitability issues are final at the conclusion of the LWA proceeding, Intervenors contend that they should be permitted to engage in a full scale inquiry into the specific CRBRP design.

Intervenors' argument regarding finality is somewhat curious in light of counsel for Intervenors' statement

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18/ Intervenors' Petition at 50.

at the hearing before the Licensing Board regarding this very issue:

> ... I don't doubt that this Board will be able to raise any safety issue that it believes is important at any stage. That is a requirement of the Atomic Energy Act, and the Commission and Appeal Board have made it clear time and time again the Board members are not to close their eyes to new information.
>
> So I am not implying that when you make this LWA - when you make these LWA findings that that closes the record totally on your responsibilities or on the parties responsibilities from that point on. (Tr. at 510)

Thus, while advising the Licensing Board that its site suitability findings were not final, Intervenors now provide the Commission precisely the opposite advice.

Regardless of the patently inconsistent positions which Intervenors have taken on this issue, the NRC regulations and case law clearly establish that site suitability findings may be reopened at any stage of the proceeding for good cause. At the time the Commission promulgated its LWA regulation, the Commission specifically stated that the conclusions reached after an LWA proceeding could, under appropriate circumstances, be revisited during the Construction Permit[19/] or even Operating License stage.

19/ In arguing that a detailed design review should be undertaken at the LWA stage, Intervenors rely upon the Commission's recent Statement of Policy on Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452 (1981). Continued

> The rules adopted herein would not preclude the presiding officer from reopening the NEPA and limited safety hearing after grant of authorization under § 50.10(e) to consider new information upon motion by an interested party or on its own initiative. 20/

Moreover, the Commission noted that "any grant of authorization to conduct on-site activities could not serve to prejudice the outcome of the radiological safety review itself." 21/

The Commission regulations mirror this view. 10 C.F.R. § 50.10(e)(4) provides:

> Any activities undertaken pursuant to an authorization granted under this paragraph shall be entirely at the risk of the applicant and, except as to matters determined under paragraphs (e)(2) and (e)(3)(ii), the grant of the authorization shall have no bearing on the issuance of a construction permit with respect to the requirements of the Act, and rules and regulations, or orders promulgated thereto.

In summary, the entire basis for Intervenors' argument regarding site suitability is premised on a faulty

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Far from supporting Intervenors, the Statement of Policy clearly states that the detailed design review sought by Intervenors should be undertaken at the Construction Permit proceeding not at the LWA proceeding.

20/ 39 Fed. Reg. 14506, 14507 (April 24, 1974).

21/ Id. at 14507. It should be noted that Dr. Cochran has testified that, in his opinion, it is not necessary to engage in a detailed design review in order to establish the suitability of a site. (Tr. of Cochran deposition at 182-183).

assumption -- that all site suitability findings are final at the conclusion of the LWA proceeding. To the extent that the detailed review conducted at the CP or OL proceeding indicates to Intervenors that the LWA site suitability findings require modification, that issue can be raised before the Board.[22/]

2. Environmental Findings

Intervenors' various arguments that the Board ruling somehow violates NEPA highlights and reaffirms the necessity for the Commission policy against interlocutory review of evidentiary rulings. The Licensing Board in this proceeding has stated, in accordance with NRC regulations and case law, that it intends to conduct a "full NEPA review" during the LWA hearing phase. The Board recognized, however, as required by the LWA regulations, that:

> the finality of this review must of necessity await the completion of the CP evidentiary hearing where full design details and supportive analyses of the facility will be critiqued.

22/ To the extent that Intervenors are suggesting that, on the merits, the Board cannot make the required site suitability findings, that issue is clearly premature and must await the outcome of the LWA proceeding itself. Obviously, the Commission cannot prejudge the merits of this case absent a factual record.

Intervenors do not seriously argue[23/] that the Board's formulation of the legal principle regarding NEPA is incorrect. Rather, at the hearing, as well as in their Petition to the Commission, Intervenors have argued the merits of their case using the following logic:

> 1. The NRC Staff and Applicants have concluded that CDAs can be excluded from the envelope of DBAs;
>
> 2. Intervenors have concluded that CDAs should be included in the envelope of DBAs;

23/ Intervenors make the somewhat disingenuous statement that the distinction between "full" and "final" NEPA review is "nowhere suggested in pertinent regulations or cases and clearly contravenes the Commission's explanation of the LWA rule ... and the clear language of the rule itself." In fact, the Commission's explanation of the LWA rule and the rule itself clearly provide that the NEPA findings are not final and can be reopened. See 39 Fed. Reg. 14506, 14507 (April 24, 1974). Moreover, at the hearing, counsel for Intervenors specifically agreed that a full rather than final NEPA review was required:

> JUDGE MILLER: You make them full rather than final, don't you?
>
> MS. WEISS: That's right. (Tr. at 514)
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> * * *
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> JUDGE MILLER: In that event, a full review then would be sufficient from your point of view.
>
> MS. WEISS: Absolutely, absolutely. (Tr. at 515)

> 3. If the Staff and Applicants are wrong about the probability of CDAs, it is most likely that the postulated source term does not bound all credible accidents; 24/
>
> 4. If the source term is wrong, the risk analyses and the Summary of Radiological Consequences of Postulated Accidents in in Table 7.2 of the FES for CRBR are wrong so NEPA and 10 C.F.R. §§ 50.10(e) (2)(i) and 50.52(b) and (c) are not satisfied; and finally, 25/
>
> 5. If Applicants' and Staff's assumptions with regard to the probability of a CDA are incorrect, it is most likely that required design changes in CRBR would change the cost/benefit analysis. 26/

Based on this "logic", Intervenors conclude that there should be no limitations on the scope of Contentions 1-3 because the speculative sequence of events listed above might occur.

Plainly, the Commission cannot engage in the kind of absurd speculation suggested by Intervenors. In order for the Commission to accept Intervenors' argument, the Commission would have to (1) accept at face value and without any factual record, all of the factual premises implicit in Intervenors' argument (i.e., that a CDA should be a DBA); (2) assume that despite these factual premises the Board

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24/ Intervenors Petition at 30.

25/ Id. at 30.

26/ Id.

recommended the issuance of an LWA and (3) assume that the Board decision would be incorrect and in violation of NEPA.

Given the factual complexity of the issues, and the facts that no hearing has been held, no evidence has been introduced, no environmental findings have been made and no decision has been issued, it is virtually impossible to understand how any action taken by the Board to date violates NEPA.

The logical extension of Intervenors argument underscores its absurdity. If a "full NEPA" review cannot tolerate possible future changes in circumstances as Intervenors suggest, then the NRC's longstanding two-step licensing process is invalid. If all decisions must be definitive and final -- not subject to change -- then neither CRBRP nor any other reactor can be granted a CP much less an LWA. Indeed, NRC would be required to conduct an OL proceeding which would subsume both the CP and LWA stages.

The Board has clearly stated that it will conduct a full NEPA review. The Board's ruling regarding Contentions 1-3 does not in any way lessen or eliminate the Board's responsibility to make full environmental findings. In the context of Contentions 1-3, the Board must find (1) that there is reasonable assurance that the plant can be designed to conform to NRC standards; (2) that "if the plant is so designed, the radiological impact will be of

small weight in the environmental balance," and (3) "it is unlikely that any costs incurred in modifying the plant to meet [the standards] would be so large as to seriously disturb the cost/benefit or plant vs. alternatives balances reached in the environmental hearings." Gulf States Utilities Company (River Bend Station Units 1 & 2), LBP-75-50, 2 NRC 619, 663 (1975).

If the evidence adduced at the hearing is insufficient to permit the Board to make these findings, an LWA either will not be issued or the Board decision will be reversed on appeal. If, on the other hand, the Board finds, and the Commission agrees that the environmental record permits the issuance of an LWA, Intervenors can hardly complain. In either case, nothing is gained by attempting to prejudge the ultimate outcome of the LWA proceeding.

IV. INTERVENORS' PETITION VIOLATES THE COMMISSION'S RULES AND PROCEDURES

The Commission, recognizing "the public interest in the timely and orderly conduct of [its] proceedings," [27] has established well defined procedures for review of interlocutory matters. The Intervenors have chosen to ignore those procedures, giving as their reason that compliance

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27/ Nuclear Fuel Services, Inc. (West Valley Reprocessing Plant), CLI-75-4, 1 NRC 273, 275 (1975).

would have "no utility" and be "wasteful of time."[28/] In particular, Intervenors have failed to adhere to the required time periods for seeking an interlocutory review, failed to submit objections to the Licensing Board, and failed to seek review in the first instance from the Appeal Board. Accordingly, for the reasons which follow, Intervenors' Petition should be summarily dismissed.

A. Intervenors' Petition is Untimely

In discussing the time periods prescribed by its regulations the Commission has stated:

> the Commission's adjudicatory system requires a certain discipline to keep it operating efficiently. It assumes that parties will assert their own interests in a timely fashion with adequate support, and that they will live with the costs of their decisions.

Consolidated Edison Company of New York (Indian Point Station, Units 1, 2 and 3), CLI-77-2, 5 NRC 13, 15 (1977). Intervenors now ask the Commission to ignore its own procedures, and allow Intervenors to raise issues before the Commission one and a half months after the matters should have been presented to the Licensing Board.

The Order objected to by the Intervenors was issued on April 22, 1982. Yet, the Intervenors failed to respond or seek any relief from that Order until June 11,

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28/ Intervenors' Petition at 57 and 60.

1982. Intervenors seek to excuse their delay because (1) of "significant new information" which they have become aware of since the order was issued, (2) "there is only now a full complement of Commissioners", and (3) "there would have been no utility in filing objections with the Board as provided in § 2.752(c)".[29/]

Interlocutory review may be appropriate where, in addition to establishing a strong legal basis, the petitioner also demonstrates that early review will avoid delay. See United States Energy Research and Development Agency, supra. Here, Intervenors, by their failure to seek review in a timely fashion have created the conditions for delay. If review is granted, the inevitable result will be delay in the commencement of hearings, development of a record and meaningful review.

Moreover, none of Intervenors' rationalizations justify allowing the Intervenors to circumvent Commission regulations. Intervenors allude to "significant new information", of which they became aware for the first time after April 22, but provide no specifics. Certainly, the selected quotations from Intervenors' May 6, 1982 Deposition of the NRC Staff and from the March 30-31 and May 5, 1982 ACRS

29/ Intervenors' Petition at 55-56. In the later event, Intervenors have five days following an order under 10 CFR § 2.752 in which to file objections and seek review.

Meetings demonstrate no new information of such significance that Intervenors were compelled only after six weeks delay to pursue extraordinary measures of relief.

Intervenors in their petition, continue to rely upon precisely the same arguments which failed before the Licensing Board. They have presented no significant new information. As the Appeal Board observed in Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-359, 4 NRC 619, 620 (1976):

> After a decision has been rendered, a dissatisfied litigant who seeks to persuade us -- or any tribunal for that matter -- to reopen a record and reconsider "because some new circumstance has arisen, some new trend has been observed or some new fact discovered," has a difficult burden to bear.

Intervenors not only have not borne that burden, they have not even attempted to shoulder it.

Intervenors' other rationales for ignoring Commission procedures -- that the matters raised are such that only a five-member Commission can appropriately consider them and that there would have been "no utility" in following Commission procedures -- are presumptuous as well as unjustifiable. Certainly, parties to Commission proceedings do not have the luxury of deciding when the Commission

is properly configured or what procedures are worthy of being followed.[30/]

V. NO WAIVER OF THE LWA REGULATIONS IS JUSTIFIED

Intervenors alternatively suggest that the Commission consider their Petition as a request for a waiver pursuant to 10 C.F.R. § 2.758. In requesting a waiver, Intervenors make the novel argument that they are not seeking a waiver of 10 C.F.R. 50.10(e), but are seeking to waive the Board's interpretation of that regulation. The net effect of this argument is, of course, that any interlocutory ruling made by a Licensing Board, although not subject to direct review by the Commission may nonetheless be "waived" by the Commission. If this argument is accepted, interlocutory review would thus become the norm rather than the

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30/ Intervenors improperly moved the Commission to take interlocutory action. The petition rather should have been addressed to the Appeal Board. The Commission has delegated its interlocutory review authority to the Atomic Safety and Licensing Appeal Board, 10 C.F.R. § 2.785, with the Commission reserving the right to review the Appeal Board decision on certification from the Appeal Board, or in cases of "exceptional legal or policy importance", 10 C.F.R. § 2.786(a) to review the decision on its own motion. As the Commission stated in Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), Docket Nos. 50-443, 50-444, unpublished Memorandum and Order dated March 23, 198 , "[t]he Rules of Practice specifically preclude the appeal of interlocutory decisions to the Commission or any other request for Commission review of such a decision." (Emphasis added). See, also, Consumer Power Co. (Midland Plant, Units 1 and 2), CLI-77-12, 5 NRC 725, 726 (1977).

exception. Although Applicants believe that this nonsensical argument should be dismissed out of hand, Applicants nonetheless will address the merits of the request.

A. Intervenors Failed to Follow the Procedures Mandated by 10 C.F.R. § 2.758

In requesting that the Commission also consider their petition to be a request for waiver of a Commission rule as provided for by 10 C.F.R. § 2.758, Intervenors failed to follow any of the procedures called for by that regulation. 10 C.F.R. § 2.758(a) states that "any rule or regulation of the Commission ... shall not be subject to attack by way of discovery, proof, argument, or other means in a adjudicatory proceeding involving initial licensing" except as provided in § 2.758(b), (c) and (d). Section 2.758(b) requires that a waiver petition shall be accompanied by an affidavit setting forth with particularity the special circumstances requiring waiver of Commission rules. No affidavit accompanies the Intervenors' petition. The petition and affidavit are to be submitted to the presiding officer. 10 C.F.R. § 2.758(c). Intervenors have not done so.

Moreover, the regulations provide that the presiding officer shall decide, based on the petition, affidavit and any responses, if the petitioning party has made a prima

facie showing that application of the rule in question "would not serve the purposes for which the rule or regulation was adopted" and should be waived. Id. Only if such a showing has been made will the presiding officer certify the matter directly to the Commission. Section 2.758(d). Obviously, since Intervenors have failed to submit any petition or affidavit to the Licensing Board, the determinations necessary for waiving a Commission regulation cannot be made.

Intervenors justify ignoring the clear requirements for requesting a waiver of Commission regulations by declaring that following such requirements "would clearly be futile and wasteful of time."[31/] Applicants submit that Intervenors cannot be allowed to pick and choose the Commission regulations they will follow or ignore. Those regulations and the procedures they mandate must be applied in an even handed manner in order to ensure the orderly and fair administration of NRC proceedings.

B. The LWA Rules are Fully Applicable to This Proceeding

In requesting a "waiver" of the LWA rules, Intervenors are in effect challenging the applicability of the LWA procedures to CRBR. In asserting such a challenge,

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31/ Intervenors Petition at 60.

Intervenors neglect to inform the Commission that the Licensing Board has recently dismissed its contention raising precisely this issue. On April 14, 1982, the Licensing Board, issued an Order dismissing Intervenors' former Contention 1 which asserted that as a matter of law the LWA procedure is inapplicable to first-of-a kind reactors such as the CRBR. In its Order, the Board stated that:

> The Board believes that as a matter of law, the LWA procedures do apply to the CRBR proceeding. Further, the denial of this contention as a pleading will not prejudice Intervenors because the applicability of LWA regulations can be challenged by proposed conclusions of law after a factual record has been developed at the evidentiary hearing. The contention as framed presents an ultimate legal question for the Board following the taking of evidence, rather than a factual issue or pleading. (Tr. 98). 32/

In now requesting that the Commission waive § 50.10(e), (or the Board's interpretation of 50.10(e)) Intervenors are attempting to circumvent the Board ruling and obtain interlocutory review of that ruling. For the reasons stated earlier, such review is patently inappropriate. As the

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32/ United States Department of Energy (Clinch River Breeder Reactor Plant), Docket No. 50-537 (April 14, 1982) (Order following Conference with Parties at 8.

Board noted in its Order, "the applicability of LWA regulations can be challenged by proposed conclusions of law after a factual record has been developed. ... "

Aside from the improper nature of the request, Intervenors have failed to meet the heavy burden imposed on parties attempting to waive agency regulations. WAIT Radio v. FCC, 418 F.2d 1153, 1157 (D.C. Cir. 1969). ("An applicant for waiver faces a high hurdle even at the starting gate.") In order to meet that burden, Intervenors must establish that the application of the LWA rule "would not serve the purposes for which the rule or regulation was adopted." Intervenors attempt to meet this burden merely by bootstraping their previous arguments regarding NEPA and site suitability findings into an argument that the LWA rule "as interpreted" will not serve its intended purpose. For the reasons stated in the previous sections of this Response, this argument should be rejected.

CONCLUSION

Intervenors Petition does not raise any important issues of law or policy requiring immediate intervention by the Commission. Rather, the issue raised here is a highly technical and complex evidentiary matter which can be

resolved only after completion of hearings and the development of a factual record. For their part, Intervenors have wholly failed to meet the requisite standard for interlocutory review, and their Petition should be denied.

Respectfully submitted,

George L. Edgar
Attorney for Project
Management Corporation

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Department of Energy

ATTACHMENT 4

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of

UNITED STATES DEPARTMENT OF ENERGY
PROJECT MANAGEMENT CORPORATION
TENNESSEE VALLEY AUTHORITY

(Clinch River Breeder Reactor Plant)

Docket No. 50-537

NRC STAFF RESPONSE TO "NATURAL RESOURCES DEFENSE COUNCIL, INC. AND SIERRA CLUB PETITION TO THE COMMISSIONERS TO EXERCISE THEIR INHERENT SUPERVISORY AUTHORITY TO DELINEATE THE SCOPE OF THE LIMITED WORK AUTHORIZATION PROCEEDING FOR THE CLINCH RIVER BREEDER REACTOR"

Bradley W. Jones
Counsel for NRC Staff

July 12, 1982

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	
	)	
UNITED STATES DEPARTMENT OF ENERGY PROJECT MANAGEMENT CORPORATION TENNESSEE VALLEY AUTHORITY	)	Docket No. 50-537
	)	
(Clinch River Breeder Reactor Plant)	)	

NRC STAFF RESPONSE TO "NATURAL RESOURCES DEFENSE COUNCIL, INC. AND SIERRA CLUB PETITION TO THE COMMISSIONERS TO EXERCISE THEIR INHERENT SUPERVISORY AUTHORITY TO DELINEATE THE SCOPE OF THE LIMITED WORK AUTHORIZATION PROCEEDING FOR THE CLINCH RIVER BREEDER REACTOR"

I. INTRODUCTION

On June 11, 1982 the Natural Resources Defense Council, Inc. and Sierra Club (Intervenors) filed the above-styled request with the Commission. That pleading (hereinafter referred to as Certification Petition) argues that the Commission should direct certification to it of the question of whether limitations put on the litigation of contentions in the LWA hearing contained in the Licensing Board's April 22, 1982 Order were incorrect. For the reasons discussed below, the Staff believes that the Licensing Board's rulings were correct and certification should be denied.

II. BACKGROUND

On October 11, 1974, the Project Management Corporation (PMC) and the Tennessee Valley Authority (TVA), hereinafter referred to as Applicants, submitted to the Atomic Energy Commission (AEC) an application for a

construction permit and a Limited Work Authorization (LWA-1)[1/] under Section 104(b) of the Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2011 et seq. Extensive discovery and prehearing activities took place after filing of the application until April 25, 1977 when the Licensing Board suspended the proceeding at the request of Applicants. On January 18, 1982 the Licensing Board, at the request of Applicants, and without objection, lifted the suspension and resumed consideration of the application including the request for an LWA-1.

On April 5 and 6, 1982, the Licensing Board heard arguments on the Revised Statement of Contentions and Bases which had been filed by the Intervenors on March 5, 1982. The Licensing Board ruled on the revised contentions in its April 14, 1982 Order, admitting certain contentions. No objections were filed to this Order and the Certification Petition is not directed toward the April 14 Order. Arguments were heard on April 20, 1982 as to which issues within the first three admitted contentions should be deferred for purposes of discovery and litigation until after the LWA-1 evidentiary hearing and Partial Initial Decision. Intervenors argue that all of the issues within its first three contentions substantially address adequacy of the proposed CRBR design and, therefore, should be litigated at the LWA-1 hearing. Certification Petition. On the other hand, Applicants argue that they could demonstrate, in the LWA-1 phase of licensing, the feasibility of designing the CRBR so that hypothetical core disruptive accidents (HCDAs) can be sufficiently limited in their

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1/ Under agency practice the site preparation activities under 10 C.F.R. § 50.10(e)(1) and (2) have been designated as LWA-1 activities and installation of structural foundations, etc. under Section 50.10(e)(3) have been designated LWA-2 activities.

probability of occurrence as to exclude them from the design basis and, based upon this premise, Applicants contend it is not appropriate to deal with all issues embraced by the first three contentions in the LWA-1 phase. Applicants assert that their presentation in connection with their LWA-1 request would be limited to a showing based on a reactor of the general size and type proposed, in light of certain factors:

1. The major classes of accident initiators potentially leading to HCDAs;

2. The relevant criteria to be imposed for the CRBRP;

3. The state of technology as it relates to applicable design characteristics or criteria; and

4. The general characteristics of the CRBRP design (e.g., redundant, diverse shutdown systems).

Tr. 489-91 (April 20, 1982 Prehearing Conference).

In its April 22, 1982 Order the Licensing Board ruled that certain issues could be litigated at the LWA-1 stage subject to being limited as proposed by Applicants.[2/] The Board deferred other portions of admitted contentions to the CP stage.[3/] The Licensing Board gave as the basis for the above limitations the position that "inquiry at the LWA stage is

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2/ Contentions 1(a) and 2(a) which question whether CDA has been properly excluded from design basis accidents; and Contentions 3(b)-3(d) which question whether accidents other than design basis accidents have been sufficiently considered could be litigated at the LWA stage subject to being limited as specified by the Licensing Board.

3/ Contention 1(b), which dealt with the specifics of the Applicants' design was deferred until the CP stage since the Applicants had indicated they would not rely on the design specifics in meeting their burden in the LWA hearing. Order at 5. Contention 3(a), which broadly questions the need for and adequacy of a probabilistic risk assessment comparable to the Rasmussen Report, was similarly deferred to the CP hearing based on Applicants' representation that they would not rely on any analyses comparable to the Rasmussen study in support of their application for an LWA-1. April 22, 1982 Order at 2-6.

limited to consideration of whether it is feasible to design CRBR to make HCDAs sufficiently improbable that they can be excluded from the envelope of design basis accidents for a reactor of the general size and type proposed." April 22, 1982 Order at 2.

Intervenors did not file objections to, or seek reconsideration by the Licensing Board of its April 22 Order nor did they seek certification from the Licensing Board for Appeal Board or Commission review of the April 22 Order. Intervenors now, however, seek to have the Commission direct the Licensing Board to certify to the Commission the ruling in the Licensing Board's April 22, 1982 Order to exclude explicit design consideration of HCDAs at the LWA-1 stage. Certification Petition at 6. Interlocutory review is sought under 10 C.F.R. §2.718(i) and the Commission's inherent supervisory authority over the conduct of NRC adjudications. Certification Petition at 53-54.

The Certification Petition should be denied.

III. DISCUSSION

Intervenors' request is for interlocutory review by the Commission. Interlocutory review of a licensing board ruling through directed certification is discretionary and infrequently granted.[4/] A party seeking directed certification of an interlocutory issue must demonstrate that the Board's action "either (a) threatens the party adversely affected with immediate and serious irreparable harm which could not be remedied by later appeal or (b) affects the basic structure

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4/ See Cleveland Electric Illuminating Co. (Perry Nuclear Power Plants, Units 1 and 2), ALAB-675, 15 NRC ____ Slip op. at 9 (May 17, 1982).

of the proceeding in a pervasive or unusual manner." Puget Sound Power and Light Co. (Skagit Nuclear Power Project, Units 1 and 2), ALAB-572, 10 NRC 693,694 (1979). Moreover, in order to justify Commission review of an interlocutory matter where relief has not first been requested from the Appeal Board, Intervenors must demonstrate extraordinary circumstances justifying such exceptional Commission action. Pennsylvannia Power and Light Co. (Susquehanna Steam Electric Station, Units 1 and 2), CLI-80-17, 11 NRC 678 (1980).

Intervenors claim that the Board's rulings on the scope of the LWA-1 proceeding will result in a "severely constricted record" that will not enable the Board to make proper LWA-1 findings in a rational manner. Certification Petition at 54. They assert that the basic structure of the proceeding will be pervasively affected in that Intervenors will be prevented from making their affirmative case on NEPA and site suitability issues. Id. Intervenors argue that the instant question presents the Commission with the significant issue of law or policy as to whether the same findings required for issuance of an LWA-1 for a light water reactor are appropriate for a "first-of-kind" project such as the CRBR.[5/] Certification Petition at 55.

A. Intervenors Have Failed to Demonstrate that Interlocutory Review Should Be Granted.

Intervenors have failed to meet the standard for granting interlocutory review because they have failed to demonstrate they are threatened with serious and immediate harm which cannot be remedied on appeal.

5/ Id., citing Public Service Electric and Gas Company (Salem Nuclear Generating Station, Unit 1), ALAB-558, 11 NRC 533, 536 (1980); See South Carolina Electric Gas Company (Virgil C. Summer Nuclear Station, Unit 1), ALAB-663, 15 NRC ___, Slip op. at 17 (December 14, 1981).

Although Intervenors repeatedly assert that the Board's ruling seriously impacts Intervenors' ability to argue their case, they offer no concrete showing of the asserted harm.

First, this is not a situation where Intervenors will not have an opportunity to argue as to whether the specific design at the CRBR is adequate. Intervenors' contentions as to adequacy are already admitted and can be litigated fully at the CP stage. Intervenors have failed to present any basis for concluding they are irreparably harmed by having to litigate certain issues at the CP stage rather than at the LWA-1 stage.

Second, Intervenors have not been denied the opportunity to litigate those aspects of their contentions which are relevant to matters that the Applicants, the party with the burden of proof, put in issue in Applicants' attempt to satisfy the standards applicable to an LWA-1. As to Intervenors' argument that the Board's ruling would leave it with inadequate information to challenge Applicants' case, the Staff believes there is a substantial body of technical information available concerning the LMFBR, in general, and CRBR, in particular.[6/] This includes documented consideration of alternative LMFBR design characteristics,[7/] LMFBR siting factors[8/], and the possible impacts associated with postulated accidents (including HCDAs) beyond the design basis.[9/] There has

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6/ See, e.g., LMFBR FES (December 1975) CRBR FES (February 1977) updated CRBR Site Suitability Report (June 1982).

7/ LMFBR FES § 4.2.5

8/ Id. § 4.2.2

9/ LMFBR FES, § 4.2.7.8; CRBR FES, Chapter 7.

also been an extraordinary amount of discovery. In addition, a complete update of the FES for the CRBR will be issued prior to the commencement of the LWA-1 hearing. Despite the impression one might get from Intervenors' Petition, the FES which has been prepared for Clinch River, and which is being updated, is not for some nebulous theoretical reactor. The analysis in the FES is for the general design features of the specific Clinch River plant. While Intervenors would have it proved that the design is adequate to meet all design criteria at the LWA state, the level of certainty they desire would frustrate the ability to ever issue an LWA prior to completion of the safety review. Such a result is inconsistent with the purpose of 10 C.F.R. § 50.10(e) to allow restricted site prepration activities. The available information provides a substantial factual basis upon which the adequacy of Applicants' case in support of its LWA-1 request can be assessed and challenged.

Third, Intervenors provide no explanation as to why any harm to them cannot be adequately remedied on appeal. The grant of an LWA-1 is subject to appeal. Intervenors' presentation fails to provide a basis for departing from normal procedure where questions as to the actual conduct of a proceeding by a licensing board, including questions such as are involved here which deal with the scope of evidentiary presentations, are not subject to interlocutory appeal, but must await the normal agency appellate process. Moreover, even if the Licensing Board were to grant an LWA-1 on the basis of evidence which Intervenors believe is inadequate to satisfy NEPA, Intervenors have made no showing why the Commission's appellate review process, and the procedural protections it affords, would be inadequate to rectify any serious error.

In addition to their failure to demonstrate serious irreparable harm, Intervenors have not established that an interlocutory review is warranted under the cited standard because they have failed to show that the Licensing Board's ruling affects the basic structure of this CRBR construction permit proceeding in either a "pervasive" or "unusual" manner. On the contrary, the ruling preserves the purpose of an LWA-1 by which limited preconstruction activities can be conducted at an applicant's risk before completion of the radiological safety review which must precede the grant of a construction permit.[10/] There is nothing unusual about a phased consideration of substantive licensing requirements.[11/] It is not the Board's decision which is "unusual" in the present context, but the departure from the LWA-1 rule urged by Intervenors.

The grant of an LWA-1 does not guarantee eventual receipt of a construction permit. The risk that preconstruction work authorized under an LWA-1 may prove unnecessary should a construction permit be denied is borne by the Applicant. 10 C.F.R. § 50.10(e)(4); 39 Fed. Reg. 14506 (April 24, 1974). Moreover, the LWA hearing may be reopened on NEPA or site suitability grounds to consider new information, if necessary, on appropriate motion. Id.

In sum, the Licensing Board's Order does not deny Intervernors the opportunity to fully litigate their contentions in the CP proceeding nor to litigate in the LWA-1 proceeding those aspects of their contentions which relate to the standards for an LWA-1. Nor have they alleged any

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10/ See, Statement of Consideration, 39 Fed. Reg. 14506 (April 24, 1974).

11/ Cf. Commonwealth Edison Co. (Carroll County Site), ALAB-601, 12 NRC 18 (1980) (early site review).

other harm which cannot be cured by the Commission's appellate process. Thus, they have not met the standards for interlocutory review. Additionally, Intervenors have not demonstrated any extaordinary circumstances justifying the Commission's accepting this interlocutory review where relief has not first been sought from the Appeal Board.

Rather than focusing on the requirements for granting interlocutory review, Intervenors' petition focuses on the argument that, under NEPA, the Licensing Board in the Clinch River Proceeding must conduct a safety review of the Clinch River Breeder Reactor in order to satisfactorily complete the environmental review. They make the same basic argument with respect to the site suitability determination required by 10 C.F.R. § 50.10(e)(2). An examination of the LWA rule and NEPA, as they apply to Clinch River, does not support Intervenors' assertions.

B. Neither the Commission's LWA Regulations nor NEPA Require a Safety Review of CRBR at This Time

In order for the Licensing Board to authorize issuance of an LWA-1 the Board must:

1) make the required NEPA findings[12/] and

2) determine that based upon the available information and review to date, there is reasonable assurance that the site is suitable for the facility of the size and type proposed.

12/ 10 C.F.R. § 50.10(e)(2) requires the Board to make all the findings required by 10 C.F.R. § 51.52(b) and (c). 10 C.F.R. § 51.52(b) and (c) requires the presiding officer to make findings as to: (1) matters in controversy between the parties, (2) whether the requirements of section 102(2) (A), (C) and (E) of NEPA and 10 C.F.R. Part 51 have been met, (3) the final balance between conflicting factors in the record, (4) the ultimate cost/benefit balance, (5) whether in accordance with Part 51, the construction permit should be issued and, (6) in an uncontested proceeding, whether the Staff's NEPA review is adequate.

In Public Service Company of Oklahoma (Black Fox Station, Unit 1 and 2), ALAB-573, 10 NRC 775 (1979), the Appeal Board addressed the scope of the NEPA review required under the LWA rule. The Appeal Board, citing NRDC v. Morton, 458 F.2d 827, 834 (D.C. Cir. 1972), stated that while Section 102 of NEPA, which must be satisfied under the LWA provisions, required that agencies explore the environmental ramifications of their proposed actions to the fullest extent possible, that d rection was subject to a rule of reason. The Appeal Board also stated that the rule of reason applied not only to the consideration of alternatives to the proposed action, but applied generally to the entire NEPA evaluation. Id. at 779. In Tennessee Valley Authority (Hartsville Nuclear Plant, Units 1A, 2A, 1B, and 2B), ALAB-367, 5 NRC 92, 102 (1977), the Appeal Board indicated that it is appropriate, in an environmental review for analyzing alternatives to the proposed action, ~~environmental effects~~ is to examine the feasibility of the proposed action and alternatives to the action.

In its April 22 Order in this proceeding, the Licensing Board ruled that feasibility of eliminating HCDAs is an appropriate area of concern in the LWA proceeding. Nonetheless, the Licensing Board clearly recognized and went on to specifically point out that ultimately, in order to make the required NEPA findings, they must have sufficient information to conclude that the cost/benefit analysis reasonably addresses the environmental effects of CRBR. April 22, 1982 Order at 2-3. The Intervenors do not appear to disagree as to the use of the above standard, rather, the focus of their position on both the NEPA and site suitability determinations seems to be on the factual determination as to what information is necessary to make those determinations. Certification Petition at 3-5.

Intervenors' argument fails to recognize that the burden is on the Applicants to demonstrate that the design assumptions which form the basis for their evaluations of environmental effects, and which are relied upon by the Staff in the FES, are reasonable assumptions. That is, they have the burden to show that it is reasonable for the environmental analysis to assume that the probability of a HCDA can be reduced to a level where it need not be considered a design basis accident. Applicants have stated that they do not intend to rely on CRBR's specific design characteristics to demonstrate the reasonableness of the assumptions made. Rather, they intend only to discuss the CRBR design in general, while establishing design criteria for the plant and demonstrating that the state of technology will allow a meeting of that criteria. Applicants April 15, 1982 Statement of Position at 13-14. Applicants apparently believe that on the basis of a discussion concerning the general design criteria, and the state of technological capability to meet such criteria, that an adequate demonstration can be made concerning the probability of HCDAs to satisfy NEPA needs, without the need for specific design details. The fact that the burden is on Applicants to make the showing of reasonableness in the environmental analysis cannot be understated. If the state of technology is so sparse as Intervenors claim, then it would follow that Applicants will have difficulty meeting their burden. If, after the evidence is presented, Applicants have not demonstrated that the environmental review reasonably assesses environmental impacts by using general information about the

state of technology, then the Board must deny the LWA request. If Applicant makes the required showings the LWA-1 would be authorized by the Licensing Board. In either event, the Licensing Board's ruling as to the scope of the LWA-1 hearing does not change the finding which the Licensing Board must make as to whether the environmental effects of CRBR have reasonably been assessed.

The principal flaw in Intervenors' argument is that the very determination which must be made by the Licensing Board in determining the adequacy of the environmental review is whether the Applicants have presented adequate information for the Licensing Board to conclude that the information and assumptions in the FES are reasonable and provide a reasonable basis for concluding that the FES adequately assesses the environmental effects of CRBR. Intervenors, by their overly restricted view of the NEPA process,[13/] would require the Licensing Board to rule, before receiving evidence, on the ultimate question of whether Applicants can present sufficient evidence to show they have reasonably

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13/ Intervenors argue that because this is to be the final NEPA review the Licensing Board must resolve design issues whose resolution might conceivably change the environmental effects. Certification Petition at 23-25. In spite of Intervenors' argument to the contrary, the fact that the safety review could reveal an inadequacy in the design, which might change the environmental effects of the project, does not justify delaying completion of the NEPA process until safety review issues are resolved. The Commission pointed out in the Statement of Consideration accompanying the LWA rule that "[t]he rules adopted herein would not preclude the presiding officer from reopening the NEPA... hearing after a grant of authorization under § 50.10 (e) to consider new information... 39 Fed. Reg. 14506 (April 24, 1974). The Licensing Board noted the possibility that resolution of design issues could result in significant information justifying a reopening of the NEPA review. April 22, 1982 Order at 4, Tr. 509-516 (April 20, 1982 Prehearing Conference).

addressed the environmental effects of CRBR. Having lost this argument before the Licensing Board,[14/] they now seek to have the Commission, also in the absence of an evidentiary record, so rule. Intervenors have presented no basis for concluding the resolution of this issue is appropriate now, rather than when the Licensing Board has a full evidentiary record on which to base its conclusions as to the appropriateness of applying the LWA rule to the CRBR.

C. Timeliness

Although the regulations do not provide any time limit in which to file or respond to a petition for certification, the Intervenors' request is, in effect, an appeal from the Licensing Board's April 22, 1982 Pre-Hearing Conference Order. Intervenors admit that they did not comply with the provisions governing objections to prehearing conference orders contained in 10 C.F.R. § 2.752(c). Certification Petition at 56. That rule provides time limits for filing objections to prehearing conference orders and provides that in ruling on objections

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14/ In this connection, it should also be noted that the Licensing Board specifically rejected one of Intervenors' contentions which sought to litigate whether the LWA rule should apply to a first of a kind reactor. In rejecting that contention the Licensing Board stated that ". . . [T]he denial of this contention as a pleading does not prejudice Intervenors because the applicability of LWA regulations can be challenged by proposed conclusions of law after a factual record has been developed at the evidentiary record. The contention as framed presents an ultimate legal question for the Board following the taking of evidence, rather than a factual issue or pleading." April 14, 1982 Order at 3; see also Tr. 98 (April 5-6, 1982 prehearing conference). Intervenors' argument as to the need to address the specific CRBR information at this time is nothing more than a restatement of their challenge to the regulations.

to a prehearing conference order the Board may review the order in consideration of the objection and certify matters raised therein pursuant to 10 C.F.R. § 2.718(i). Successful objections from Intervenors' standpoint could have obviated any necessity for immediate appellate review[15/] and, at a minimum, permitted the Licensing Board the benefit of Intervenors' extensive arguments.

Intervenors argue that objections would have been futile, that this failing should be overlooked in light of additional relevant information assertedly acquired by them since the Board's Order, and that the Commission has subsequently achieved its full complement of Commissioners. Certification Petition at 56-57. Intervenors also stress the importance of present Commission consideration of the scope of an LWA in the CRBR context. Id. at 57. As discussed below, these reasons are unavailing to justify Intervenors' failure to first interpose objections to the subject order or otherwise seek interlocutory review on a timely basis.

Intervenors litigative position in the certification petition on the scope of an LWA-1 in this CRBR proceeding is the same as that advanced during the April 20, 1982 prehearing conference which gave rise to the Board's April 22 Order. Despite the subsequent acquisition of information which Intervenors contend reinforce that position, if they felt aggrieved by the decision, they should and could have taken the necessary steps to rectify the situation on a timely basis.

15/ Cf. Toledo Edison Co. (Davis-Besse Nuclear Power Station), ALAB-297, 2 NRC 727, 728-29 (1975).

Further, it is scarcely a valid excuse for deferring a timely request for interlocutory review that the Commission had only four members at the time. That situation had existed for some time during which Commission adjudicatory and non-adjudicatory functions were carried out on an uninterrupted basis. This situation has occurred on past occasions. A party cannot unilaterally assign a time period within which appellate relief is sought without destroying the orderliness of the administrative process. The Certification Petition should not be permitted to circumvent the time limits prescribed for more appropriate procedural remedies, by attempting to invoke the extraordinary remedy of directed Commission interlocutory review.

IV. CONCLUSION

In sum, Intervenors have not demonstrated that the Commission should accept Intervenors interlocutory appeal because Intervenors have not shown they will suffer immediate and serious irreparable harm from the Licensing Board's ruling. Intervenors will not suffer irreparable harm because 1) they may fully litigate the issues contained in their contentions, which have been deferred, at the CP stage of the proceeding, 2) Intervenors are not restricted in arguing whether the evidence presented by Applicant at the LWA-1 stage meets the requirements of 10 C.F.R. § 50.10(e), and 3) there is no basis for concluding that, if any errors exist in the Licensing Board's rulings, those errors cannot be adequately remedied through formal appellate procedures.

Further, the basis advanced by Intervenors to justify interlocutory review calls for the Commission to prematurely resolve the factual

question of whether Applicants have met their burden to show that the environmental analysis reasonably assesses the environmental effects of CRBR, prior to the Applicants presenting their case on that questions.

For the above reasons the Staff believes the Intervenors Certification Petition, which requests an interlocutory review of the Licensing Board's April 22, 1982 Prehearing Conference Order, should be denied.

Respectfully submitted,

Bradley W. Jones
Counsel for NRC Staff

Dated at Bethesda, Maryland
this 12th day of July, 1982

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	
	)	
UNITED STATES DEPARTMENT OF ENERGY PROJECT MANAGEMENT CORPORATION TENNESSEE VALLEY AUTHORITY	)	Docket No. 50-537
	)	
(Clinch River Breeder Reactor Plant)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of NRC STAFF RESPONSE TO "NATURAL RESOURCES DEFENSE COUNCIL, INC. AND SIERRA CLUB PETITION TO THE COMMISSIONERS TO EXERCISE THEIR INHERENT SUPERVISORY AUTHORITY TO DELINEATE THE SCOPE OF THE LIMITED WORK AUTHORIZATION PROCEEDING FOR THE CLINCH RIVER BREEDER REACTOR" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or, as indicated by an asterisk, through deposit in the Nuclear Regulatory Commission's internal mail system, this 12th day of July, 1982:

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ATTACHMENT 5

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	
UNITED STATES DEPARTMENT OF ENERGY PROJECT MANAGEMENT CORPORATION TENNESSEE VALLEY AUTHORITY	)	Docket No. 50-537
(Clinch River Breeder Reactor Plant)	)	

INTERVENORS' REPLY TO APPLICANTS' AND STAFF'S RESPONSE TO INTERVENORS' PETITION TO THE COMMISSIONERS TO DELINEATE THE SCOPE OF THE LWA PROCEEDING

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INTERVENORS' REPLY TO APPLICANTS' AND STAFF'S RESPONSES TO INTERVENORS' PETITION TO THE COMMISSIONERS TO DELINEATE THE SCOPE OF THE LWA PROCEEDING

Intervenors Natural Resources Defense Council, Inc., and the Sierra Club (hereafter "Intervenors" or "NRDC") hereby reply to the respective Responses of Applicants and Staff to Intervenors' Petition to the Commission to Exercise Their Inherent Supervisory Authority to Delineate the Scope of the Limited Work Authorization Proceeding for the Clinch River Breeder Reactor (hereafter "Intervenors' Petition").

Part I briefly discusses fundamental misrepresentations which the respective Responses of Applicants and Staff share in common. Part II replies to specific points in Applicants' Response. Part III replies to specific points in Staff's response.

I. FUNDAMENTAL DISTORTIONS IN BOTH RESPONSES

Contrary to the repeated assertions of Applicants and Staff, Intervenors do not seek a complete safety review at the LWA stage. NRDC is not seeking to inquire into the vast majority of safety issues in the LWA proceeding. For example, our complaint does not concern Applicants' quality assurance program, their environmental qualifications program, or their discussion of measures to prevent and mitigate accidents in classes 1 through 8. In addition, our instant concerns in no way involve radiological discharges from normal operations, emergency planning, personnel selection and training, or testing and

maintenance. We do not seek to inquire into whether specific design criteria or other regulations governing design have been met.

Rather, Intervenors seek only to deal in a concrete way with the one safety issue which is fundamental to the requisite NEPA and site suitability findings at the LWA stage: the core disruptive accident and whether or not it is "credible" for CRBR. As Intervenors demonstrated in our Petition, if the CDA is a credible accident, the site suitability source term is not sufficiently conservative to allow confidence in the LWA site suitability finding and NEPA balance.

Also, both Applicants and Staff characterize Intervenors as complaining about the sufficiency of evidence before it is presented. It goes without saying that the sufficiency of the evidence which will be presented is necessarily limited by the scope of the evidence the Board says it will consider. We submit that the maximum presentation within the scope established by the Board cannot be sufficient to reasonably address the environmental effects of CRBR nor the suitability of the site. The scope, as currently delineated, precludes even the possibility of a showing which is sufficient to comply with NEPA and the LWA rule. NRDC's complaint is not about the prospective sufficiency of the evidence, but rather concerns the standard the Board has established for that evidence to meet. The standard for issuance of an LWA--the threshold which Applicants must meet in order to prevail--clearly affects the basic structure of the LWA proceeding in a pervasive and unusual manner. Consequently, resolution of the issue justifies immediate interlocutory action

by the Commission. Public Service Company of Indiana, Inc. (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-405, 5 NRC 1190, 1192 (1977), Public Service Electric and Gas Company (Salem Nuclear Generating Station, Unit 1), ALAB-588, 11 NRC 533, 536 (1980).

II. APPLICANTS' RESPONSE

Applicants' Response is characterized by several basic distortions of both Intervenors' positions and the law:

(1) That the instant dispute does not involve law or policy, and therefore the Commission should not intervene;

(2) That the LWA rule prescribes the "design feasibility" standard;

(3) That LWA decisions are only preliminary, implying that they will be reconsidered at a later stage absent new information or changed circumstances; and

(4) That Intervenors are asking the Commissioners to prejudge the LWA decision.

These will be discussed briefly below.

A. THE PROPER SCOPE OF THE LWA PROCEEDING IS A MAJOR ISSUE OF LAW AND COMMISSION POLICY, WHICH THE COMMISSION MAY INTERVENE TO DELINEATE.

In their Response, Applicants incorrectly characterize Intervenors' Petition as one involving a merely evidentiary matter, not one of policy or law. In fact, the instant

dispute goes directly to the crux of Commission policy regarding "reasonable assurance" of the validity of LWA findings. The major issues of law and policy involved in this matter include:

(1) Can the Licensing Board responsibly find that the site is suitable without resolving the issue of the maximum credible accident?

(2) Is the presently delineated scope of the LWA proceeding consistent with the requirements of the Atomic Energy Act and the LWA rule?

(3) Is the presently delineated scope of the LWA proceeding consistent with the requirements of the National Environmental Policy Act of 1969?

(4) Can a "design feasibility" standard appropriately be applied to CRBR?

Applicants seek, by repeated reference to the instant dispute as "merely evidentiary", to exclude Commission intervention at this time. Applicants never explain how the possibility of characterizing the issue as "evidentiary" necessarily obviates the "inherent supervisory authority" of the Commission to delineate the proper scope of adjudicatory proceedings before it, U.S. Energy Research and Development Administration (Clinch River Breeder Reactor Plant), CLI-76-18, 4 NRC 67 (1976) (hereafter "ERDA"). The fact that a Licensing Board ruling pertains to the evidence that will be considered in a proceeding does not necessarily rule out the possibility that major issues of law and policy are involved. In the instant case, the issue is not merely what evidence will be admitted, but rather what must be shown--what the standard

is--in order for an LWA to issue. A more apt analogy for the instant dispute than the admissibility of evidence is the elements of a tort or crime which must be shown by a plaintiff or prosecutor in order to establish a prima facie case; clearly those are questions of law.

Applicants' suggestion that the subsequent reversibility of an incorrect LWA decision makes the Board's conduct of the proceeding immune from the intervention of the Commissioners is without merit. In ERDA, supra, the Commissioners did not wait for LWA or CP decisions by the Licensing Board with which they did not agree; they did not even await the motion of a party. Rather, the Commissioners interevened sua sponte to modify a Licensing Board ruling affecting the scope of this very proceeding. The Commission clearly asserted its "inherent supervisory authority over the conduct of adjudicatory proceedings before this Commission." The Commission went on to state:

> No party has a vested right to the continuing effectiveness of an erroneous Licensing Board ruling which happens to favor it. In the interest of orderly resolution of disputes, there is every reason why the Commission should be empowered to step into a proceeding and provide guidance on important issues of law and policy.

Id. at 75-76. Thus, if the Licensing Board's rulings limiting the scope of Intervenors' contentions 1, 2, and 3 are incorrect, as we assert, Applicants have no vested right to the continuing effectiveness of those rulings pending the outcome of the Board's LWA decision. The LWA hearings do not have to proceed to their conclusion--as Applicants suggest--on the basis of an arguably faulty view of the requisite LWA findings.

The dispute in ERDA, supra--the admissibility of a contention--was no less an "evidentiary" matter than the instant controversy--the proper scope of contentions at the LWA stage. Thus, Applicants' protestations that Commission intervention at this point would be impermissible interference are wholly without merit. The Commission's right to intervene in just such instances has been firmly established in this very case.

B. The LWA RULE DOES NOT PRESCRIBE THE "DESIGN FEASIBILITY" STANDARD.

Applicants state, Response at 17:

> As provided in the NRC regulations, the Board need only have reasonable assurance that the specific systems of the CRBRP can be designed to meet the site suitability requirements contained in NRC regulations [citing 10 CFR §50.10(e)]. . . .

In fact, the NRC regulations do not provide that at all. One searches Section 51.10(e)--or any of the cross-referenced regulations--in vain for the phrase "can be designed", or "feasibility of designing", or any other expression of the "design feasibility" standard. Rather, the "design feasibility" standard has developed in NRC cases dealing with light water reactors. It has become, in effect, the administrative "common law" standard for issuing LWAs in light water reactor cases. Intervenors do not here challenge that use of the standard for light water reactors but it is clearly not required by the Atomic Energy Act or NRC regulations, and it has never been applied to plants other than light water reactors. We do challenge a mechanistic application of this case law from

LWRs to an LMFBR--a first-of-a-kind project that is radically different from the LWRs on which the case law is based, and that shares none of the history of that case law.

Applicants quarrel with Intervenors' characterization of the use of the LWR "design feasibility" standard in the CRBR case as, in effect, consideration of a "hypothetical" plant. The requisite finding, according to Applicants and the Licensing Board, is that CRBR "can be designed" to comply with certain as-yet-undefined requirements. It has never been demonstrated that any LMFBR can comply with those requirements. If that finding is not hypothetical, it is difficult to imagine what is.

Applicants state that "pertinent elements" of the CRBR design will be considered at the LWA stage to the extent that they "relate to findings of site suitability." Response at 16. Unfortunately, Applicants have advanced the theory--and the Licensing Board has adopted it--that the relationship of those design elements to site suitability is limited to findings that certain systems, e.g., shutdown systems, decay heat removal systems, fuel failure detection systems, etc., "can be designed" to meet as-yet-undetermined criteria. No inquiry into the reliability of those safety systems, or any other "elements" besides the feasibility of designing them, will be permitted, as they are defined as outside the scope of the LWA hearing.

As NRDC explained in its Petition, reasonable assurance in correct site suitability findings depends on postulation of a site suitability source term which exceeds the maximum credible accident. Safety systems which bear on the probability and consequences of a CDA thus relate directly to findings of site

suitability. Reasonable assurance surely requires inquiry beyond simply whether those systems "can be designed." If this plant were identical or even substantially similar to previously licensed and operated plants, there might be some basis for confidence that the source term is within reasonable bounds without looking beyond design feasibility. That is not the case for CRBR; it is radically different in its design and safety implications from any plant which has ever been licensed by NRC.

The TMI-2 accident should have tempered the Commission's optimism that safety systems will always perform as expected. At TMI, numerous design features and system/operator interactions surprised and confounded the nuclear establishment by their unforeseen deficiencies, see 2 Rogovin Report 447-87 (1980). If there is any lesson which the Commission should have learned from that experience, it is that the reliability of safety systems cannot be presumed. Yet that is precisely the result here if the Board need only find that it is feasible to design those systems at the LWA stage.

C. LWA FINDINGS ARE NOT PRELIMINARY AND WILL NOT BE RECONSIDERED AT A LATER STAGE ABSENT NEW INFORMATION OR CHANGED CIRCUMSTANCES.

In discussing the finality of LWA findings, Applicants state:

> [T]he Commission's explanation of the LWA rule and the rule itself clearly provide that the NEPA findings are not final and can be reopened. See 39 Fed. Reg. 14506, 14507 (April 24, 1974).

Response at 23, fn. 23. Applicants misrepresent the rule and its explanation. Neither the LWA rule nor its Statement of Consideration "clearly provide that the NEPA findings are not final." In fact, the rule requires "all the findings required by §51.52(b) and (c)", 10 CFR §50.10(e)(2)(i), and completion of a "final" EIS on the construction permit, 10 CFR §50.10(e)(1). The rule does not provide that these findings are to be only preliminary at the LWA stage, or that they will be considered in greater detail at the CP stage. The Statement of Consideration for the LWA rule does not support the proposition for which Applicants cite it--that the NEPA findings can be reopened without condition. Rather, the Statement of Consideration states:

> The rules adopted herein would not preclude the presiding officer from reopening the NEPA and limited safety hearing after grant of authorization under §50.10(e) to consider new information upon motion by an interested party or on its own initiative. In the event the presiding officer determined that the record should be reopened, the resolution of any issues that may be raised regarding whether the outstanding authorization should continue in effect would be governed by principles similar to those that apply in the case of reopened proceedings on licenses and permits.

39 Fed. Reg. 14507 (April 24, 1974) (emphasis added).

Thus, LWA findings are no more or less "final" than decisions granting full-power operating licenses. Following issuance of an LWA for CRBR, Intervenors would have no right to raise NEPA or site suitability issues--no matter how peremptorily they were considered in the LWA proceeding--unless Intervenors could meet the substantial burden of demonstrating that new information bearing on those issues has become available since issuance of the LWA or that circumstances have changed substantially. Absent

that newly discovered information, the NEPA and site suitability issues will never receive any more thorough consideration than they will in the LWA hearings. Applicants' repeated, groundless protestations that the regulations provide otherwise are incorrect.

Contrary to Applicants' allegations, Intervenors have not taken inconsistent positions on the finality of site suitability findings at the LWA stage. We have always acknowledged that all Commission findings and decisions are subject to revision on the basis of significant new information or fundamentally changed circumstances. The Commission has recently given a graphic demonstration of this principle in its decisions granting and then shortly thereafter revoking the operating license for Diablo Canyon 1.

Intervenors see no point in an extended semantic squabble over "finality" or the supposed "full" vs. "final" distinction. The important point is that LWA findings regarding site suitability and NEPA are supposed to dispense with those issues once and for all--barring new information on changed circumstances.

Intervenors should not have to meet the heavy burden of proving significant new information or substantially changed circumstances in order to raise these issues fully for the first time at the CP stage. As Applicants point out, Response at 29, reopening issues which are supposed to be decided is "a difficult burden to bear." Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-359, 4 NRC 619, 620 (1976). Meaningful LWA findings and licensing efficiency both require that NEPA and site suitability issues be decided finally and dispensed with at the LWA stage.

But if they are to be dispensed with responsibly, it must be on the basis of all the available information which bears on them, including design-specific information when it is available and pertinent to those findings.

In another distortion, Applicants state:

> In arguing that a detailed design review should be undertaken at the LWA stage, Intervenors rely upon the Commission's recent Statement of Policy on Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452 (1981). Far from supporting Intervenors, the Statement of Policy clearly states that the detailed design review sought by Intervenors should be undertaken at the Construction Permit proceeding not at the LWA proceeding.

Response at 20-21, fn. 19. In fact, the Statement of Policy does not refer to construction permits vis-a-vis LWAs. Indeed it does not mention LWAs at all. The passage we cited from the Statement was expressing the need to dispense with more issues at the CP stage rather than leaving them for final consideration at the OL stage. We cited it for the proposition--which it clearly supports--that more issues should be finally dispensed with at an earlier rather than later stage so resources are not wasted reconsidering them more fully later. That is precisely Intervenors' argument with respect to NEPA and site suitability findings at the LWA stage vis-a-vis the CPA stage.

D. INTERVENORS ARE NOT ASKING THE COMMISSION TO PREJUDGE THE LWA DECISION.

Contrary to the assertions of Applicants, the thrust of Intervenors' Petition was not that an LWA should be denied on the merits. Applicants express concern that the Commission

should not prejudge the Board's actions prior to the creation of a record. Intervenors' argument is that under the Board's ruling, a responsible record cannot be created. That is precisely the "pervasive effect" on the proceeding which justifies interlocutory action by the Commission.

Applicants state:

> In order for the Commission to accept Intervenors' argument, the Commission would have to (1) accept at face value and without any factual record, all of the factual premises implicit in Intervenors' argument (i.e., that a CDA should be a DBA); (2) assume that despite these factual premises the Board recommended the issuance of an LWA and (3) assume that the Board decision would be incorrect and in violation of NEPA.

Response at 24.

We do not ask the Commission to accept any factual premises whatsoever. All we ask is that the Commission acknowledge the fundamental importance of reliably resolving the CDA issue in order for the Board to make LWA findings which possess a modicum of validity. All of the consequences--intemperately referred to by Applicants as "absurd speculation"--which flow from the CDA determination do so naturally and necessarily. Applicants have not even attempted to logically refute NRDC's premise that if the CDA determination is incorrect, the whole LWA analysis will be worthless. Instead they attempt to demonstrate its "absurdity" by extending it illogically in a way which Intervenors have in no way suggested. Intervenors can only reiterate that we have never asserted that issues may not be revisited if there is significant new information or changed circumstances. Every final decision the NRC makes

may be reconsidered under those circumstances. That does not make those decisions any less final. LWA decisions on NEPA issues must be final in the sense that they will never receive a more thorough airing at any later stage, as well as in the sense that they must be worthy of confidence. The thrust of our argument is that LWA findings for CRBR, if based on the LWR "design feasibility" standard, cannot be worthy of confidence. The argument does not reach to LWAs for light water reactors; we do not here challenge the practice of using the "design feasibility" standard for reactors with which there is some significant experience and history affording confidence that feasibility-based LWA findings will not prove incorrect. A fortiori our argument does not extend to CPs.

We do not ask the Commission to prejudge the ultimate outcome of the LWA proceeding; we merely ask the Commission to properly delimit the scope of the LWA proceeding. More concretely, we do not ask the Commission to revise the Board's assumption and decide that CDAs should be in the design basis for CRBR; we ask rather that the Commission direct the Licensing Board to the effect that the CDA issue is a serious and important one which must be fully litigated at the LWA stage if the LWA findings are to be reliable.

III. STAFF'S RESPONSE

Substantively*, Staff argues that Intervenors' Contentions 1, 2 and 3 should not be dealt with fully at the LWA stage because:

(1) Applicants proceed at their own risk between issuance of an LWA and a CP;

(2) Those issues may be fully considered at the CP stage: and

(3) Applicants have the burden of demonstrating that their design assumptions are reasonable for purposes of an LWA.

A. THAT APPLICANTS PROCEED AT THEIR OWN RISK DOES NOT LOWER THE LWA STANDARDS.

With respect to the first point, the fact that an LWA decision is not supposed to prejudice a subsequent CP decision does not in any way relax the established LWA standards. Both Applicants and Staff seem to make the remarkable argument that the validity of LWA findings is not important because Applicants proceed at their own risk. There is no basis for that position, indeed it is prohibited by NEPA, which requires reasonable environmental analysis and cost-benefit balancing to the fullest possible extent before a spade of dirt is turned. SIPI v. AEC, 481 F.2d 1079, 1092 (D.C. Cir. 1973), NRDC v. Morton, 458 F.2d 827, 834 (D.C. Cir. 1972).

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*Staff's Response, after quoting the proper alternative standards for interlocutory review (i.e., either serious irreparable harm or pervasive effect on the structure of the proceeding), Staff's Response at 4-5, seems to suggest that both standards must be met. It is unclear why Staff devotes more than two pages to refuting an argument that NRDC never offered (that it was irreparably harmed). It is clear that NRDC need only show, and only attempted to show, that the Board's ruling affects the basic structure of the proceeding in a pervasive manner, in order to meet the standard for interlocutory review. Intervenors do not concede the irreparable harm argument, but it is unnecesary for us to make it.

B. LWA ISSUES WILL NOT BE MORE THOROUGHLY CONSIDERED AT THE CP STAGE ABSENT NEW INFORMATION OR CHANGED CIRCUMSTANCES

The Staff's second argument, that Intervenors will be able to fully pursue their concerns about CDAs at the CP stage, is neither demonstrably correct nor responsive to Intervenors' arguments about the validity of the LWA findings. As was true for the argument that Applicants proceed at their own risk, supra, the gist of this argument is that the validity of LWA findings is not important. This was surely not the intent of the Commission in promulgating the LWA rule. As noted above, even if the Commission had wished to accomplish such an objective, NEPA would prohibit it.

The Staff argues:

> In spite of Intervenors' argument to the contrary, the fact that the safety review could reveal an inadequacy in the design, which might change the environmental effects of the project, does not justify delaying completion of the NEPA process until safety review issues are resolved.
>
> * * * *
>
> The Licensing Board noted the possibility that resolution of design issues could result in significant information justifying reopening of the NEPA review.

Staff Response at 12, fn. 13. The mere "possibility" that a design review, which does not focus on NEPA issues, might turn up new information bearing on those issues, does not give cause for confidence that NEPA issues will ever be thoroughly considered. Rather than gamble on that fortuitous development, Intervenors urge that confidence in the LWA NEPA findings requires a close look at the one aspect of CRBR safety which bears so heavily on the NEPA findings: the likelihood and consequences of CDAs. All other aspects of the safety review, we agree, can be deferred until the CP stage.

C. THAT THE BURDEN IS ON APPLICANTS DOES NOT PROVIDE "REASONABLE ASSURANCE" WHERE THE STANDARD APPLICANTS MUST MEET IS INADEQUATE.

The fact that Applicants have the burden of showing the validity of their design assumptions is not nearly as reassuring as the Staff portrays it. The placement of the burden of persuasion would be more meaningful if the standard Applicants had to meet properly reflected the requirements of NEPA and the LWA rule. As it is, the only thing Applicants have the burden of showing at the LWA stage, under the Board's ruling, is that it is "feasible to design" CRBR to make CDAs sufficiently unlikely that they can be excluded from the design basis. Because of the lack of experience with prior similar designs, such a showing will not be a reliable indicator of whether CRBR itself will make CDAs sufficiently unlikely.

Staff stresses the significance of the placement of the burden, while joining Applicants in attempting to minimize the weight of the burden to such an extent that meeting it is a foregone conclusion. As explained in detail in Intervenors' Petition and part II.B., supra, even if Applicants meet their burden as currently defined, that cannot afford "reasonable assurance" that the LWA standards are satisfied.

IV. CONCLUSION

Both Applicants and Staff have responded to Intervenors' Petition by falsely portraying it as seeking a complete safety review at the LWA stage. In fact, NRDC seeks only to consider

concretely at the LWA stage the one aspect of safety which is crucial to valid NEPA and site suitability findings: the likelihood and consequences of core disruptive accidents at CRBR.

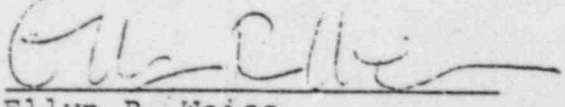
Applicants and Staff also both mischaracterize Intervenors' Petition as asking the Commission to prejudge the sufficiency of evidence in the LWA proceeding. Actually, NRDC asks the Commission only to properly delineate the scope of the proceeding and the standard which must be met for issuance of an LWA.

Intervenors have shown that the "design feasibility" standard derives not from the LWA rule or any statutory or regulatory requirement, but rather from Commission cases applying the LWA rule to light water reactors, and that it is inappropriate to apply that standard in the CRBR case. Applicants' and Staff's characterization to the contrary notwithstanding, this is not just another licensing proceeding.

NRDC has refuted Applicants' and Staff's assertions that LWA findings are only preliminary, and has shown that they will not be more fully considered at the CP stage absent new information or changed circumstances. Finally, Intervenors have demonstrated that the instant dispute is an important issue of law and Commission policy which merits the intervention of the Commission at this time.

For all the reasons stated in Intervenors' Petition and above, Intervenors pray the Commission to grant the relief requested.

Respectfully submitted,



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CERTIFICATE OF SERVICE

I hereby certify that copies of INTERVENORS' REPLY TO APPLICANTS' AND STAFF'S RESPONSE TO INTERVENORS' PETITION TO THE COMMISSIONERS TO DELINEATE THE SCOPE OF THE LWA PROCEEDING were delivered by hand this 22nd day of July 1982 to:

The Honorable Nunzio J. Palladino
Chairman
U.S. Nuclear Regulatory Commission
Washington,1 D.C. 20555

The Honorable James K. Asselstine
Commissioner
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

The Honorable Victor Gilinsky
Commissioner
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

The Honorable John F. Ahearne
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The Honorable Thomas F. Roberts
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ATTACHMENT 6

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Marshall E. Miller, Chairman
Gustave A. Linenberger, Jr.
Cadet H. Hand, Jr.

In the Matter of UNITED STATES DEPARTMENT OF ENERGY PROJECT MANAGEMENT CORPORATION TENNESSEE VALLEY AUTHORITY (Clinch River Breeder Reactor Plant)	Docket No. 50-537 September 27, 1982

ORDER

The Intervenors filed a motion on September 9, 1982 to strike or amend certain portions of Applicants' Exhibit 1, which consists of prefiled direct testimony. The basis for this motion is that such testimony presents conclusions about the adequacy of CRBR safety systems that are based on detailed, design-specific data and analyses of CRBR. The motion was opposed by both Applicants and Staff.

The Board issued an Order April 22, 1982 which outlined the scope of the issues to be considered in the LWA-1 hearing. We concluded that 10 CFR §50.10(e)(2)(ii) does not require a complete safety review based on the completed detailed design of the specific reactor proposed at the LWA-1 stage, but rather a preliminary safety finding based on available information and review to date of a reactor of the general size and type proposed.

Safety information may be presented to demonstrate the feasibility of general systems in the proposed general size and type facility at the site suitability hearings.

During the August 23, 1982 session of the hearing, Intervenors moved to strike certain portions of the Applicants' testimony on the basis that they included a discussion of CRBR design details which violated the Board's April 22, 1982 Order (Tr. 1299), claiming that this detailed information was being used by Applicants to demonstrate adequacy of design and performance reliability. However, the Board ruled that the testimony, documents and exhibits offered by the Applicants, including the testimony in question, would be admitted, although they contained detailed design information, for the limited purpose of being illustrative of the reactor of the general size and type proposed (Tr. 1349). The Applicants were instructed to modify those portions of the testimony which were more than illustrative.

Applicants made certain specific changes to their Exhibit 1 (see Tr. 1986, 1979-2071), and indicated a general limitation on the use of Exhibit 1, which was only to provide general design characteristics of the CRBR, relevant criteria, and the state of technology (Tr. 1987). The testimony, as so limited, was received into evidence.

The Board's previous Order of April 22, coupled with its ruling during the hearing on August 23, 1982, sufficiently protect the Intervenors from being required to address the issue of the adequacy of proposed CRBR safety systems at this time. As explained in our April 22 Order, "full design detail and supportive analyses of the facility will be critiqued" at the CP stage (Order, p. 4). It has been clearly stated that Exhibit 1 may be used

to show feasibility of the implementation of certain design features for the limited purpose of being illustrative of a reactor of the general size and type proposed. However, no party may rely on a detailed design analysis for the purpose of demonstrating adequacy of systems at this stage of the hearing. Accordingly, the motion is denied.[1/]

It is so ORDERED.

FOR THE ATOMIC SAFETY AND
LICENSING BOARD

Marshall E. Miller

Marshall E. Miller, Chairman
ADMINISTRATIVE JUDGE

September 27, 1982

1/ Judges Cadet H. Hand, Jr. and Gustave A. Linenberger participated and concurred in the foregoing Order, but were not available to sign it.

ATTACHMENT 7

Document: ORDER
Diskette: 01

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Nunzio J. Palladino, Chairman
Victor Gilinsky
John F. Ahearne
Thomas M. Roberts
James K. Asselstine

In the Matter of

UNITED STATES DEPARTMENT OF ENERGY
PROJECT MANAGEMENT CORPORATION
TENNESSEE VALLEY AUTHORITY

(Clinch River Breeder Reactor Plant)

Docket No. 50-537

ORDER

On June 11, 1982, the Natural Resources Defense Council, Inc. and Sierra Club ("Intervenors") petitioned the Commission to exercise its inherent supervisory authority to delineate the scope of the LWA proceeding for the Clinch River Breeder Reactor. Intervenors' request is essentially an interlocutory appeal for direct Commission review of the Atomic Safety and Licensing Board's order of April 22, 1982 ruling on which issues could be litigated in the ongoing proceeding on an application for a Limited Authorization-1 for this facility, limits on the litigation of those issues, and associated limits on discovery. An order addressing such issues is wholly interlocutory.

The Rules of Practice specifically preclude the appeal of interlocutory decisions to the Commission, 10 CFR 2.730(f), or any other request for Commission review of such a decision, 10 CFR 2.786(b)(9).

Thus, intervenors' petition must be denied because it is not permitted by the rules.

It is so ORDERED.

For the Commission

SAMUEL J. CHILK
Secretary of the Commission

Dated at Washington, D.C.

this day of , 1982.