

4/27/83

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

DOCKETED  
USNRC

BEFORE THE  
ATOMIC SAFETY AND LICENSING BOARD

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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' MOTION TO DISMISS  
INTERVENORS' CONTENTIONS  
2(f), (g) and (h)

The United States Department of Energy and Project Management Corporation, for themselves and for the Tennessee Valley Authority (the Applicants), hereby file this Motion to Dismiss Intervenor's Contentions 2(f), (g) and (h). In support of this Motion, Applicants show the following:

1. Intervenor's Contentions 2(f), (g) and (h) allege the following:

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 CFR § 100.11(a), fn. 1.] 1/

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1/ Matters related to NEPA and radiological site suitability were considered and decided by the Board at the LWA-1 stage of the proceedings.

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- (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.

2. On April 8, 1983, the Staff submitted to Intervenor interrogatories and requests for admissions regarding, inter alia, Contentions 2(f), (g) and (h). The interrogatories in question are reproduced in Appendix A. In response, Intervenor's April 22, 1983 Response of Intervenor to NRC Staff First Set of Construction Permit Interrogatories and Requests for Admissions to Natural Resources Defense Council Inc. and the Sierra Club Concerning Contentions 1, 2, and 3 (HCDAs), at 11-12, stated:

CONTENTION 2(f)

Response

Contention 2(f) is hereby withdrawn and consequently no responses to contention 2(f) Interrogatories are given.

CONTENTION 2(g)

Response

Contention 2(g) is hereby withdrawn and consequently no responses to contention 2(g) Interrogatories are given.

CONTENTION 2(h)

Response

Contention 2(h) is hereby withdrawn and consequently no responses to contention 2(h) Interrogatories are given.

3. As a result of their withdrawal of Contentions 2(f), (g) and (h), Intervenors have elected not to contest the validity of the computer models (including their computer codes, input data, and assumptions) used by Applicants and Staff for CRBRP HCDA analysis, as described in the PSAR and the SER, Appendix A. Specifically, Intervenors no longer contest:

- (a) the validity of the computer models used by Applicants and Staff in representing "the physical phenomena and principles which control the response of CRBR to CDAs." Contention 2(f).
- (b) the adequacy of the documentation, verification and validation of the models and computer codes used in "the PSAR and Staff safety analysis of CDAs and their consequences." Contention 2(f).

- (c) the adequacy of the documentation and verification of "the input data and assumptions for the computer models and codes." Contention 2(g).
- (d) the establishment of "the energetics of a CDA." Contention 2(h).
- (e) the adequacy of "the containment of the source term for post accident radiological analysis." Contention 2(h).

4. In view of Intervenor's withdrawal of Contentions 2(f), (g) and (h), these contentions are no longer in issue in these proceedings as between Applicants and Intervenor's. Counsel for the NRC Staff has been contacted and agrees that these contentions are no longer in issue and should be dismissed insofar as they relate to the CP proceedings. The Board disposed of Contentions 2(a)-2(e) in its Partial Initial Decision (Limited Work Authorization) dated February 28, 1983.

5. The parties had previously agreed that the scope of issues for the CP hearings were:

Contention 1

Contentions 2(f), (g), (h) (withdrawn by Intervenor's April 22, 1983)

Contention 3

Contention 9 (9(a), (b), (d) and (e) withdrawn by Intervenor's April 14, 1983)

Contention 10 (withdrawn by Intervenor's April 22, 1983)

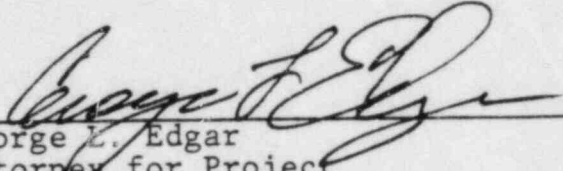
Contention 11(a) (withdrawn by Intervenor's April 14, 1983)

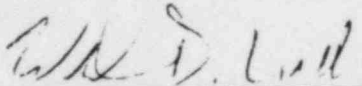


See Applicants March 7, 1983 Motion Concerning Schedule for Construction Permit Hearings at 3. The Board has issued an order establishing that scope of issues. See Board Order Opening Discovery, dated March 11, 1983. The Intervenor's have not objected to this definition of scope. See Intervenor's Response to Applicants' Supplement to March 7, 1983 Schedule Motion, dated March 24, 1983.

6. In the interest of accuracy of the record and to facilitate orderly planning by the Board and all parties, Applicants respectfully request that the Board enter an Order dismissing Intervenor's Contentions 2(f), (g) and (h).

Respectfully submitted,

  
George L. Edgar  
Attorney for Project  
Management Corporation

  
William D. Luck  
Attorney for the  
U. S. Department of Energy

Dated: April 27, 1983

04/08/83

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSIONBEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

U.S. DEPARTMENT OF ENERGY  
PROJECT MANAGEMENT CORPORATION  
TENNESSEE VALLEY AUTHORITY

(Clinch River Breeder Reactor Plant)

Docket No. 50-537

NRC STAFF FIRST SET OF CONSTRUCTION PERMIT  
INTERROGATORIES AND REQUESTS FOR ADMISSIONS  
TO NATURAL RESOURCES DEFENSE COUNCIL, INC. AND THE  
SIERRA CLUB CONCERNING CONTENTIONS 1, 2 AND 3 (HCDAs)

In accordance with the Board's March 10, 1983 Order Opening Discovery, the NRC Staff ("Staff") hereby submits to Intervenor Natural Resources Defense Council, Inc. and the Sierra Club (hereafter jointly referred to as "NRDC") the following interrogatories and requests for admissions.

INTERROGATORIES

Pursuant to 10 C.F.R. § 2.740(b), the NRC Staff requests NRDC, et al. to respond to the following interrogatories in writing and under oath. For each interrogatory, provide the following answer, in accordance with the terms of the parties' March 4, 1982 "Protocol For Discovery":

- a) Provide the direct answer to the question.
- b) Identify all documents and studies, and the particular parts thereof, relied upon by NRDC, now or in the past, which serve as the basis for the answer. In lieu thereof, at NRDC's option, a copy of such document and study may be attached to the answer.

subpart of Contention 1 each reference relates, and indicate how you contend that the reference supports that subcontention.

- 1(b)-16 Define "established", as that term is used in Contention 1(b)-(4). Set forth with particularity what Applicants and/or Staff must show to "establish" that the Applicants' test program will be completed prior to the CRBR projected construction completion date.

#### CONTENTION 2 GENERAL INTERROGATORY

Does NRDC contend that Staff must analyze all CDA scenarios and their consequences for purposes of licensing the CRBR and demonstrating that the radiological source term for the CRBR would result in potential hazards not exceeded by those from any accident considered credible? If the answer is yes, specify the bases, including supporting data upon which NRDC relies, for so concluding. If the answer is no, indicate what NRDC contends the criteria should be for determining what CDAs and their consequences should be analyzed; specify the bases for selecting the criteria.

#### CONTENTION 2(f)

- 2(f)-1 Define, "computer models," as that term is used in Contention 2(f). Provide the bases for NRDC's definition.

2(f)-2 Define, "computer codes," as that term is used in Contention 2(f).  
Explain how computer codes differ from computer models. Set forth the bases for NRDC's definition.

2(f)-3(a) List by title all computer models and computer codes referenced in the SER's CDA analyses which NRDC contends have not been adequately documented.

(b) List by title all computer models and computer codes referenced in the SER's CDA analyses which NRDC contends have not been adequately verified.

(b) List by title all computer models and computer codes referenced in the SER's CDA analyses which NRDC contends have not been, or are insufficiently validated by comparison with experimental data.

2(f)-4 Does NRDC contend that computer codes and computer models must be validated by comparison with experimental data, in order to be acceptable for use? Set forth the bases for NRDC's answer.

2(f)-5 List the specific relevant SER sections and subsection which discuss CDAs, which NRDC contends rely upon or refer to computer codes and computer models which have not been adequately documented, verified, or validated by comparison with applicable experimental data.

2(f)-6 For each SER section and subsection listed by NRDC in its answer to Interrogatory 2(f)-5, set forth with specificity



why NRDC contends that these sections and subsections are inadequate.

2(f)-7 List all physical phenomena and principles which NRDC contends should be accurately represented in the computer codes and computer models used in the Staff's analyses of CDAs.

2(f)-8 Would the Staff's analyses of CDAs be more conservative, or more realistic, if physical phenomena and principles are accurately represented in the computer codes and models utilized by the Staff in its CDA analyses? Provide the bases for NRDC's answer.

2(f)-9 In NRDC's May 6, 1982 response to Interrogatory 2-13(a) of the Staff's First Round of Discovery, filed on April 15, 1982, NRDC stated that it has not yet analyzed Applicants updated responses to earlier discovery concerning computer codes. Has NRDC now analyzed these responses? If so please provide an answer to interrogatory 2-13a, b and c of NRC Staff's First Round of Discovery. If not, please provide a date as to when these questions will be answered.

CONTENTION 2(g)

2(g)-1 Define, "input data", and "assumptions", as those terms are used in Contention 2(g). Set forth the bases for NRDC's definition.

- 2(g)-2 Define, "adequate documentation" and "verification", as those terms are used in Contention 2(g). Set forth the bases for NRDC's definition.
- 2(g)-3 List all computer codes and computer models which NRDC contends utilize inadequately documented or verified input data and assumptions.
- 2(g)-4 For each computer code and model identified in NRDC's answer to Interrogatory 2(g)-3, list every input data and assumption which NRDC contends is inadequately documented or verified, together with NRDC's basis for such contention.
- 2(g)-5 Describe the criteria, methodology, or process which NRDC contends should be utilized to adequately document and verify input data and assumptions for computer codes.
- 2(g)-6 List all relevant sections of the SER which NRDC contends are inadequate or invalid due to the Staff's utilization of, or reference to computer codes or models with undocumented or unverified input data and assumptions.
- 2(g)-7 For each SER section and subsection listed by NRDC in its answer to Interrogatory 2(g)-6, set forth with specificity why NRDC contends that these sections and subsections are inadequate.

- 2(g)-8 In NRDC's May 5, 1982 response to Interrogatory 2-14 of the Staff's First Round of Discovery, filed on April 15, 1982, NRDC refers to "arbitrary, unfounded and superstitious assumptions" by the staff as well as assumptions based on nuclear "theology, dogma and folk wisdom". Provide all specific examples you have that support these statements.
- 2(g)-9 In NRDC's May 5, 1982 response to Interrogatories 2-14.c and d of the Staff's First Round of Discovery, filed on April 15, 1982, NRDC states that it needs to analyze the Staff's updated responses to earlier discovery before the question can be answered. Has NRDC now analyzed the updated responses? If so, please provide an answer to interrogatories 1.14.c and d of NRC Staff's First Round of Discovery. If not, please provide a date as to when these questions will be answered.

CONTENTION 2(h)

- 2(h)-1 Does NRDC believe that the energetics of a CDA can be realistically or conservatively predicted using adequately documented, verified and validated computer codes, computer models, input data and assumptions? If not, describe with particularity the rationale for NRDC's position in this regard.
- 2(h)-2 List all relevant sections of the SER which discuss CDA energetics and/or source terms for post accident analysis which NRDC believes to be inadequate due to the utilization of

inadequately documented, verified and validated computer codes, computer models, input data and assumptions.

- 2(h)-3 For each section of the SER listed in NRDC's response to Interrogatory 2(h)-2, set forth with specificity the reasons why these sections are inadequate.

CONTENTION 3(a)

- 3(a)-1 Identify the analytic methodology which NRDC believes was utilized in the Rasmussen Report, WASH-1400.
- 3(a)-2 Describe the analytic methodology which NRDC believes was utilized in WASH-1400, in NRDC's own words. Do not answer this question by reference or citation to another document.
- 3(a)-3 Define "CRBR accident possibilities," as that term is used in Contention 3(a). Set forth the bases for NRDC's definition.
- 3(a)-4 List all CRBR accident possibilities which NRDC contends have greater frequency and/or consequence than the accident scenarios analyzed by Applicants and the Staff. Provide the specific frequencies (or range of frequencies), and the specific consequences (or range of consequences) for each accident possibility listed. Provide the basis for each accident possibility, by listing all documents which support the answer to this interrogatory.



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TENNESSEE VALLEY AUTHORITY  
(Clinch River Breeder Reactor Plant)

Docket No. 50-537

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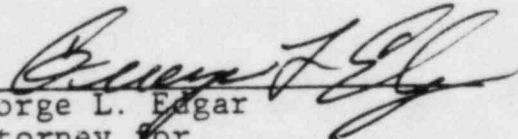
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DATED: April 27, 1983

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