

Staff, now or in the past, which serve as the basis for the answer. In lieu thereof, at Staff's option, a copy of such document and study may be attached to the answer.

- C) Identify principal documents and studies, and the particular parts thereof, specifically examined but not cited in (b). In lieu thereof, at Staff's option a copy of each such document and study may be attached to the answer.
- D) Identify by name, title and affiliation the primary Staff employee(s) or consultant(s) who provided the answer to the question.
- E) Explain whether the Staff is presently engaged in or intends to engage in any further, on-going research program which may affect the Staff's answer. This answer need be provided only in cases where the Staff intends to rely upon ongoing research not included in Section 1.5 of the PSAR at the LWA or construction permit hearing or the CRBR. Failure to provide such an answer means that the Staff does not intend to rely upon the existence of any such research at the LWA or construction permit hearing or the CRBR.
- F) Identify the expert(s), if any, which the Staff intends to have testify on the subject matter questioned, and state the qualifications of each such expert. This answer may be provided for each separate question or for a group of related questions. This answer need not be provided until the Staff has in fact identified the expert(s) in question or determined that no expert will testify, as long as such answer provides reasonable notice to Intervenor.

For all the responses to interrogatories in this set the following are the answers to the requested parts in the Protocol for Discovery.

- B) All documents and studies, and the particular parts thereof, relied upon by the Staff now or in the past which serve as the basis for the answer are mentioned in the direct answer to the question unless otherwise noted.

- C) There were no principal documents and studies specifically examined but not cited in (b) unless otherwise noted.
- D) The name, title and affiliation of the Staff employee(s) or consultant(s) who provided the answer to the question are available in the affidavits.
- E) The Staff is not presently engaged in nor intends to engage in any further, on-going research program which may affect Staff's answer unless otherwise noted.
- F) At this time, the Staff has not determined who will testify on the subject matter questioned. Reasonable notice will be given to all parties after the Staff has made this determination. At that time, a statement of professional qualifications will be provided for each witness.

Respectfully submitted,

Daniel T. Swanson

Daniel T. Swanson
Counsel for NRC Staff

Dated at Bethesda, Maryland
this 29th day of April, 1982

NRC STAFF'S ANSWERS TO NRDC'S
AND THE SIERRA CLUB'S INTERROGATORIES

The NRC Staff has determined that previous responses to interrogatories #1 through #4, a through c and f, #5 through #50, #52, #56 through #68, #70 through #83 and #89 through #100 are still applicable and need no updating.

The following Interrogatories are based upon the letter from Mr. Denise to Mr. Caffey dated May 6, 1976. References in the Interrogatories to the "letter" are to that letter.

Interrogatory 1

Do the positions and statements in the letter represent the final position of the Staff on the matters discussed?

Interrogatory 2

If not, identify those which are tentative.

Interrogatory 3

Are there any Staff evaluations of the CRBR now underway which, when completed, could affect any of the comments and guidance provided in the letter?

Interrogatory 4

If so, describe the evaluation, its possible impact on any of the comments and guidelines and its presently scheduled date of completion.

Response to Interrogatories #1 through #4 (d) and (e)

In NRC Staff Response to NRDC et al Eleventh Set of Interrogatories filed on January 27, 1977 (hereinafter referred to as Response to 11th Set) on page 3, the first paragraph after (d) should be replaced by the following:

The first paragraph under site suitability source is firm with the following exception. The Staff is currently evaluating the possibility that new information or policy might allow modification of the CP (vs. OL) conservatism factors applied to the Plutonium dose guidelines.

On page 5 of the Response to 11th Set, replace the first sentence on that page with the following:

The first sentence of the third paragraph is not firm. The staff is currently reconsidering the specific requirements that containment venting may not be initiated prior to 24 hours subsequent to a postulated CDA. This reconsideration will not extend to any of the general principles set forth in the May 6, 1976 letter. We will report on the results of our evaluation in the SER.

The staff also is currently considering the implication of the new CRBR heterogeneous core design on the core work energy which could result from a CDA. This evaluation could result in modifications to the 1200 mw-sec core work energy, 1000 pounds of sodium, and 10 percent vaporized core fuel inventory specified in the letter from Denise to Caffey of May 6, 1976. Consequently, the requirements for head hold down and missile barrier devices and sodium fuel vapor deflectors are also being reconsidered. We will report our findings in the SER.

On page 6 of the Response to 11th Set, replace the second complete paragraph on that page with the following:

The seventh paragraph constitutes firm guidance in the sense that reasonable measures should be taken to further reduce residual risk from the accidents being discussed. The non-venting approach for at least 24 hours is not firm as discussed above for the first sentence of the third paragraph. The possible approach of venting through filters is an illustrative suggestion of the type of approach the staff envisioned, and is not a specific requirement.

Interrogatory 51

Explain how the safety objective of no more than a 10^{-6} chance of an accident exceeding the 10 C.F.R. 100 dose guidelines is applied in evaluating the probability of earthquakes and establishing the safe shutdown earthquake for the CRBR.

Response

On page 18 of the Response to 11th Set, replace the second sentence with the following:

The Staff is not currently evaluating the probability of earthquakes in this determination for CRBRP.

Interrogatory 53

Has the Staff identified which structures, systems or components of the CRBR require research and development to confirm the adequacy of their design:

Interrogatory 54

If so, which ones?

Interrogatory 55

As to the structures, systems or components identified in the previous answer has the Staff completed its examination of the research and development program which will be conducted to resolve any safety questions associated with such structures, systems or components?

Response to Interrogatories #53 through #55

The Staff does not currently rely on probabilistic methods for establishing the seismic design criteria for nuclear power plants. (However, probabilistic methods have been used in a confirmatory manner and to provide insight in evaluating seismic hazard at some nuclear power plants. Because of the uncertainty associated with probabilistic estimates it is the Staff's position that such studies are more appropriate for relative comparison of seismic hazard rather than absolute determination.

Interrogatory 69

At what time in the life of the core is the source term calculation made?

Response

A) In order to be conservative, the source term inventory used in forming the Site Suitability Source Term is taken as that calculated at a time when the inventory of fission products and transuranics together in the reactor vessel is approximately at a maximum, for example, at the end of equilibrium cycle before removal and refueling of core and blanket.

B) Clinch River Breeder Reactor PSAR, Amendment 64, January 1982.

Interrogatory 84

Do the spectrum of calculations performed by the Staff in developing the accident consequences listed on page 5 of the letter represent the Staff conclusions as to the consequences of a CDA?

Interrogatory 85

If not, what do they represent?

Interrogatory 86

If yes, are these conclusions based upon completion by the Staff of the analysis of CDA consequences to the same depth and breadth as the analysis which the Staff would undertake if the CDA were the DBA?

Interrogatory 87

If not, in what specific respects does it differ?

Interrogatory 88

If not, why not?

Response to Interrogatories #84 through #88

A) On page 25 of the Response to 11th Set, add the following sentence to the prior response:

See also the response to Interrogatories #1 and #4.

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

Docket No. 50-537

My Commission expires: _____

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

Docket No. 50-537

My Commission expires: