

August 3, 1994

Docket No. 52-001

Mr. Joseph Quirk
GE Nuclear Energy
175 Curtner Avenue, MC-782
San Jose, California 95125

Dear Mr. Quirk:

The purpose of this letter is to update the guidance on preparation of a design control document (DCD) contained in my letter of August 26, 1993. The DCD will be referenced in the proposed rule for the certification of the Advanced Boiling Water Reactor (ABWR) design. Enclosed is detailed guidance on the submittal of the DCD. The notice of proposed rulemaking (NPR) for the ABWR certification could be published in the Federal Register in October 1994. The DCD is required to be finalized prior to publication of the NPR. To preclude iterations and amendments to the DCD, please provide a submittal in early August of the following: (1) a proposed introduction to the DCD, (2) proposed markups to the standard safety analysis report (SSAR) for Tier 2* items, and (3) the proposed DCD Chapter 19, and a cross-reference showing where probabilistic risk assessment information that was removed from SSAR Chapter 19 has been relocated, or is already addressed, in other parts of the DCD.

For planning purposes, a meeting to resolve any staff comments on these submittals is tentatively scheduled for the week of August 21. Resolutions to staff comments would then be incorporated into a complete DCD submittal to be provided to the staff in early September 1994. The staff would then review the complete DCD, and resolve any comments with you by the end of September. This schedule supports the NPR publication date of October.

Sincerely,

original signed by: William Travers

Dennis M. Crutchfield, Associate Director
for Advanced Reactors and License Renewal
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:
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NAME	PShea <i>PS</i>	Tom Boyce:sp <i>TB</i>	JNWilson	RBorchardt	DCrutchfield <i>for</i>
DATE	08/1/94	08/1/94	08/1/94	08/1/94	08/3/94

GUIDANCE ON THE SUBMITTAL OF A DESIGN CONTROL DOCUMENT (DCD)

This guidance is based on the goal of minimizing any differences between the standard safety analysis report (SSAR) and the DCD for a design.

1. References

References to external documents (outside the SSAR), as well as internal cross-references to other parts of the SSAR, should be retained in the DCD without changes. This includes references to information deleted for purposes of DCD preparation. The NRC's views on the treatment of references in a DCD was provided in a letter from Dennis M. Crutchfield, NRC, to Joe Colvin, Nuclear Energy Institute, of May 3, 1994.

2. Tier 2*

The DCD should designate clearly (shaded, italicized, etc.) in the approved design material (Tier 2 portion of the DCD) what information is Tier 2*. A statement may be added to each Tier 2* area or in the introductory section indicating that prior NRC review and approval is required to change the information.

3. Combined License (COL) Action Items

COL Action Items should be retained in the DCD without changes. An appropriate discussion on the status of these items may be included in the introduction to the DCD. The discussion should state that COL Action Items are not requirements in and of themselves, but must be addressed in a COL application. The discussion should note that some Action Items include only high level discussion of what issues must be addressed, and do not include all details of what must be addressed. Also, the discussion should note that some COL Action Items do include a detailed discussion of what must be addressed.

4. Proprietary information

Because of the requirements of the Federal Register, there should be no proprietary information in the DCD. The introduction to the DCD should state that the proprietary information that is removed must be submitted as part of a COL application. To ensure that it is clear what is required for a COL application, the DCD should indicate that any deletions of proprietary information were for purposes of DCD preparation.

5. Chapter 19/Probabilistic Risk Assessment (PRA)

- a. PRA was used in the review of the design to determine the risk significance of key structures, systems, and components. However, the details of the PRA data analysis are not required for the DCD. Instead, an updated PRA or supplemental PRA analyses should be submitted as part of a COL application. Therefore, detailed discussions of PRA data analysis may be removed, but PRA insights and assumptions should be retained. Any information that was deleted should indicate that it was deleted from the DCD, and is contained in the SSAR. Severe accident and shutdown risk discussions should remain in the DCD, although these may be edited to remove detailed PRA data analysis. This is consistent with the industry proposal

contained in a letter from Raymond Ng, NUMARC, to Dennis M. Crutchfield, NRC, of February 1, 1994.

- b. The PRA analyses in SSAR Chapter 19 discussing why various design features are important should be retained in the DCD. These analyses should be retained either in Chapter 19 or the appropriate sections of the DCD discussing the systems of the design. Also, SSAR internal references to other parts of the SSAR and SSAR external references to other documents should be retained in the DCD if they support the information retained in the DCD.
- c. Cross-references in SSAR Chapter 19 showing where design features from key integrated plant safety analyses were incorporated into the design should be retained in the DCD in the same form as in the SSAR. Cross-references to the appropriate sections of the SSAR and certified design material (CDM) should be retained.
- d. Information that is currently in SSAR Chapter 19 that does not involve PRA should be retained in the DCD. This includes addressal of items such as 10 CFR 50.34(f) items, including design alternatives for severe accidents required by 50.34(f)(1)(i), and Unresolved and Generic Safety Issues (USIs/GSIs).

6. Conceptual Design for Site-Specific Portions of the Design

Conceptual design information for site-specific portions of the design should be retained in the DCD, with appropriate discussion in the introduction section that a COL applicant is not required to conform with the conceptual design information.

7. Technical specifications

Technical specifications should be retained in the DCD as Tier 2 material.

8. Miscellaneous

- a. Section numbering should be the same in the DCD as in the CDM and the SSAR.
- b. Guidelines for preparation of emergency procedures should be retained in the DCD.
- c. Information designated as safeguards-protected should not be contained in the DCD. Where safeguards information has been removed, the DCD should reference the appropriate sections of the SSAR. This information must also be submitted as part of a COL application.
- d. Large size drawings may be reduced to facilitate DCD preparation.

Enclosure