

APR 7 1993

NOTE TO: Division of High-Level Waste Management Staff

FROM: B. J. Youngblood, Director
Division of High-Level Waste Management

SUBJECT: ISSUANCE OF THE TOPICAL REPORT REVIEW PLAN

Attached is the Topical Report Review Plan. This document is patterned after the Office of Nuclear Reactor Regulation Topical Report Review Plan but has been modified to meet the special needs of the High Level Waste Site Characterization Program.

Please note that this review plan is aimed at both the NRC staff, to facilitate staff review of Topical Reports, and the DOE, to indicate minimum content requirements.

If you have questions or comments, please contact Paul Prestholt at 504-3810.

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B. J. Youngblood, Director
Division of High-Level Waste Management

Enclosure: As stated

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

APR 7 1993

MEMORANDUM FOR: Division of High-Level Waste Management Staff

FROM: B. J. Youngblood, Director
Division of High-Level Waste Management

SUBJECT: ISSUANCE OF THE TOPICAL REPORT REVIEW PLAN

Enclosed is the Topical Report Review Plan. This document is patterned after the Office of Nuclear Reactor Regulation's Topical Report Review Plan but has been modified to meet the special needs of the High-Level Waste Site Characterization Program.

Please note that this review plan is aimed at both the NRC staff, to facilitate staff review of Topical Reports, and the DOE, to indicate minimum content requirements.

If you have questions or comments, please contact Paul Prestholt at 504-3810.

A handwritten signature in black ink, appearing to read "B. J. Youngblood".

B. J. Youngblood, Director
Division of High-Level Waste Management

Enclosure: As stated

**DIVISION OF HIGH-LEVEL WASTE MANAGEMENT
TOPICAL REPORT REVIEW POSITION PAPER**

1.0 INTRODUCTION

Historically, the purpose of the Nuclear Regulatory Commission topical report program has been to provide a procedure whereby industrial organizations may submit reports on specific important-to-safety subjects to the NRC, and have them reviewed independently of any construction permit or operating license review. The benefits resulting from this program are a minimization of time and effort that industry and the NRC spend on subjects repeated in numerous licensing actions. In the past, a report qualified as a topical report if it met all of the following criteria: (1) dealt with a subject requiring a safety assessment which could be reviewed independently of any specific license application (LA), such as, design, analytical models or techniques or performance testing of components or systems, (2) was expected to be referenced in several license applications, (3) contained complete and detailed information on the specific subject presented, and (4) completion of the report review would increase efficiency of the application review.

Although the focus of this program has been to minimize time and effort on subjects repeated in numerous licensing actions, clear benefits can also be achieved from the use of topical reports in the high-level waste (HLW) program using a similar approach to that outlined above. HLW topical reports will focus on design methodologies, tests, techniques or analytical models under evaluation during the pre-licensing consultation phase as well as the application of a particular technical issue at a specific site. Topical reports may be referenced in the LA for a HLW disposal facility. In addition, it is expected that topical reports will be referenced in the U.S. Department of Energy's (DOE's) LA Annotated Outline (AO), and will serve as the basis for preparation of portions of the AO.

The NRC staff will review the reports, and determine if the DOE has acceptably addressed the subject of the topical such that the staff has no questions or comments at a particular time. If it has, the staff will prepare a safety evaluation (SE) documenting the results of the review. DOE will then be able to reference this topical in its LA. However, the NRC staff will still need to evaluate the use of the topical report in the LA to determine if DOE has acceptably demonstrated compliance with 10 CFR Part 60. In addition, if during this pre-licensing consultation phase new information becomes available, the staff may choose to conduct an additional review at any time.

This position paper documents (1) the purpose of a topical report review, (2) the process for submittal of topical reports, (3) a general format that the NRC staff would expect the reports to take, and (4) the process the NRC staff will use to evaluate topical reports. It is intended for use by both DOE in the preparation of topical reports, and the NRC staff as guidance in its reviews.

2.0 PURPOSE OF REVIEW

In conducting its review, the staff will evaluate whether the information provided in the topical report acceptably addresses all of the following four criteria:

1. The report deals with a specific important-to-safety or important-to-waste-isolation subject that requires a safety assessment by the NRC staff, such as a design methodology, test, technique or analytical model, as well as the application to a particular technical issue at a specific site which can be evaluated independent of a LA.
2. The subject of the report is under evaluation during the pre-licensing phase of the program and could be referenced in DOE's LA for the HLW repository.
3. The report contains complete and detailed information on the specific subject presented.
4. NRC's acceptance of the report will result in increased efficiency of the review process for the HLW repository application.

The focus of the review will be on whether the design methodologies, tests, techniques, or analytical models, which are the subject of the report, are acceptable for referencing in a LA and can be used to demonstrate compliance with 10 CFR Part 60. DOE will still need to demonstrate in the LA that these methods have been acceptably applied to a specific design or site, and that the requirements of 10 CFR Part 60 have been met. In addition, the staff will identify concerns, so that they can be addressed in a timely manner, such that its ability to review the LA within the three-year time frame will not be impacted.

Through its reviews, the staff will provide guidance to DOE on what concerns it has with the information provided and what is needed to resolve concerns. The function of the NRC staff is to review, comment, and determine if the report is acceptable for referencing in the LA. Because the repository is a first-of-a-kind facility, there are several limitations on the staff's review. System interfaces are not yet fully defined and the understanding of the site, methodologies, and technologies is still evolving; therefore, most important-to-safety or important-to-waste-isolation issues need to be evaluated in the context of the overall system. This circumstance will constrain the number of issues which will be accepted in the topical report program until integrated evaluations are complete.

3.0 PROCESS FOR SUBMITTAL OF TOPICAL REPORTS

3.1 Procedure for Submittal

When DOE is planning a report which it believes can qualify as a topical, it shall contact the NRC Project Manager well in advance of the planned submittal. After the scope and description of content of the report are reviewed, the NRC staff will determine if it may be submitted as a topical report, and will inform DOE as well as all program participants of the results of this evaluation. If the report meets the above criteria, it should be submitted to the NRC staff under a letter of transmittal from DOE. The letter should be addressed to the Project Director, Repository Licensing and Quality Assurance Project Directorate (HLPD) from the DOE Associate Director for Systems and Compliance.

The NRC staff may also identify the desirability for addressing a matter in a topical report. In such cases, the Project Director, HLPD, will contact DOE, (includes the standard notification of the State of Nevada and affected units of local government) to discuss the desirability of submitting the report. If DOE agrees, it will formally submit the report for review.

3.2 Report Identification

Each topical report should have a unique alphanumeric identification symbol for filing and reference purposes. These symbols can be specified at the discretion of DOE. Any report submitted by DOE containing proprietary information shall include a "-P" after the identification symbol. Each non-proprietary version of proprietary reports shall have the same identification symbol as the corresponding proprietary report except that it shall include an "-NP" following the identification symbol. NRC accepted versions of topical reports shall include an "-A" following the identification symbol ("-P-A" for proprietary versions).

All reports containing responses to NRC comments or NRC requests for additional information regarding a specific topical report shall be identified by the symbol for that report followed by Amendment XX where XX is a sequential amendment number beginning with 1 for the first amendment.

3.3 Correspondence

All correspondence regarding topical reports shall be addressed to the Project Director, HLPD, and must identify the appropriate report identification symbol.

3.4 Revisions to Reports

If DOE determines that a revision is needed to a topical report after it has been found acceptable for review by the NRC, the proposed revision will be submitted to the staff for review in accordance with the same requirements and procedures as apply to new reports. The revision will have the same

identification as the base report with the addition of the suffix "Revision 1," etc. The revised report must contain a note on the cover page stating that it supersedes and replaces all earlier versions of the numbered report.

4.0 CONTENTS OF REPORT

4.1 Abstract

The report shall include an abstract, not to exceed one page in length, which summarizes the contents of the report and the conclusions reached.

4.2 Introduction

The report shall have an introductory section which states the purpose of the report and clearly defines its scope, including restrictions or limitations on the use of the report or its results or conclusions, and applicability.

4.3 Body of the Report

The body of the report will be organized according to the discretion of DOE to suit its needs and the subject matter of the report. It is recommended that long tabulations of data such as site characterization results, computer program descriptions, detailed technical analyses or derivations and the like be included as appendices when they are not information supporting statements or conclusions and are not, in themselves, the subject of the report.

4.4 References

The report shall include a listing of all pertinent references. DOE will furnish the following references upon request:

1. Contractor and participant reports such as Open-File Reports, Sandia reports, Los Alamos reports, etc.
2. Reports published in foreign national journals and books.
3. State publications.
4. Symposium, meeting, and workshop abstracts and papers.
5. Commercial and trade contract report (e.g., EPRI).
6. Academic M.S. theses and dissertations.
7. Participant management plans, QA plans, etc.
8. Computer code manuals.
9. Draft, unpublished, or "letter" reports and documents (personal and oral communications are not acceptable references unless documented in letter reports).

10. Manuscripts of "in press" works (manuscripts "in review" or "in preparation" are not acceptable references).
11. Monograph reports and handbooks from Federal agencies (e.g., local USDA soil reports).

4.5 Subject Matter

Diverse or unrelated subjects shall be addressed in separate topical reports to the extent practical rather than combined in one report.

5.0 STAFF REVIEW

5.1 Acceptance Review

Before the staff will begin its review of any topical report, it will first conduct an evaluation to determine if the report satisfies the qualification criteria for a topical report and is complete. All of the following four criteria will be used to make this determination:

1. The report deals with a subject requiring a safety assessment which can be reviewed independently of any specific LA, such as a design methodology, test, technique, or analytical model, as well as the application to a particular technical issue at a specific site.
2. The report is expected to be referenced in the DOE LA for the HLW repository.
3. The report contains complete and detailed information on the specific subject presented.
4. NRC acceptance of the topical report will increase the efficiency of the staff's evaluation of DOE's LA.

5.2 Request for Additional Information

During the course of its review, the staff may find that the information contained in the topical report is incomplete or that additional information is needed to draw a conclusion. In this case, the staff will prepare a request for additional information. Any request will originate from the appropriate technical Branch Chief, and be transmitted to the Project Director, HLPD.

Once HLPD has reviewed the questions to ensure consistency with the requirements of the scope of the review discussed above, it will transmit them to DOE by letter with copies to those individuals on the cc list. Request for additional information can also be provided at a meeting, but must be included as attachments to the minutes and identified in the transmittal letter. In

order to support the established milestones and corresponding review time contained in the appendix, the staff will request that the responses be provided within 60 days of the date of the transmittal letter.

Responses to requests for additional information should be submitted as amendments to the original report. Interactions with DOE to discuss the contents of a topical report or its answers to requests for additional information will be scheduled by HLPD in consultation with the technical review branches. Information provided by DOE, at an interaction, should be included in the accompanying minutes, but also must be formally transmitted as described above.

5.3 Staff Evaluation

When a topical report is found acceptable for referencing in the LA the extent of and conditions for acceptance, if any, should be identified in the staff's SE, and in the letter transmitting the results of the evaluation. For proprietary reports, the transmittal letter will state that both proprietary and non-proprietary versions must be referenced in the LA. DOE may choose to reissue the topical report in an accepted version containing the staff evaluation and letter of transmittal, both of which should be incorporated into the report.

The SE will include the following major headings, as a minimum: Introduction, Summary, Staff Evaluation, Basis, and Conclusion. The SEs will be transmitted to DOE from the Project Director, HLPD, with copies provided to the Affected State, Local Units of Government and Indian tribes, and made available to the public through the Public Document Room.

APPENDIX

Milestones and Times for Review of Topical Reports

| <u>Milestone</u> | <u>Time (Wks)</u> | <u>Total Time (Wks)</u> |
|---------------------------|-------------------|-----------------------------|
| DOE Submits Report | 0 | 0 |
| Staff Prepares Questions | 6 | 6 |
| Questions Provided to DOE | 2 | 8 |
| DOE Submits Responses | 8 | 16 |
| Staff Completes Review | 6 | 22 |
| Issue Letter to DOE | 4 | 26 |

The staff's ability to meet this schedule is dependent upon DOE identifying the schedule for providing topical reports at least six months prior to their submittal through the Site Characterization Plan Progress Reports.

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