

Summary Highlights of NRC/DOE Technical Exchange on Future Issue Resolution Meetings

February 5, 2002
Las Vegas, Nevada

Introduction and Objectives

This Technical Exchange to discuss future issue resolution meetings is one in a series of meetings related to the U.S. Nuclear Regulatory Commission (NRC) and U.S. Department of Energy (DOE) key technical issue (KTI) issue resolution process. Consistent with NRC regulations on preclicensing consultations and a 1992 agreement with the DOE, staff-level resolution can be achieved during preclicensing consultation. The purpose of issue resolution is to assure that sufficient information is available on an issue to enable the NRC to docket a proposed license application. Resolution at the staff level does not preclude an issue being raised and considered during the licensing proceedings, nor does it prejudice what the NRC staff evaluation of that issue will be after its licensing review. Issue resolution at the staff level, during preclicensing, is achieved when the staff has no further questions or comments at a point in time regarding how the DOE is addressing an issue. Pertinent additional information (e.g., changes in design parameters) could raise new questions or comments regarding a previously resolved issue.

Issues are “closed” if the DOE approach and available information acceptably address staff questions such that no information beyond what is currently available will likely be required for regulatory decision making at the time of any initial license application. Issues are “closed-pending” if the NRC staff has confidence that the DOE proposed approach, together with the DOE agreement to provide the NRC with additional information (through specified testing, analysis, etc.) acceptably addresses the NRC's questions such that no information beyond that provided, or agreed to, will likely be required at the time of initial license application. Issues are “open” if the NRC has identified questions regarding the DOE approach or information, and the DOE has not yet acceptably addressed the questions or agreed to provide the necessary additional information in a potential license application.

The objective of this meeting was to discuss the priority, type, format, and schedule for future NRC/DOE interactions. No specific agreements were reached at this meeting.

Summary of Meeting

1) Overview of KTI Issue Resolution Status

NRC opened the meeting with an overview of the issue resolution process (see “Key Technical Issue - Issue Resolution Status” presentation given by James Andersen). NRC discussed the status of the KTI subissues and agreements and stated that as the issue resolution process moves forward, the agreements should be the vehicle for future discussions. The NRC stated that future meetings should also incorporate information from NRC and DOE performance assessments, DOE's plan to address the agreements, and DOE's safety strategy to help refine what information is needed by DOE. The NRC also stated that it holds its KTI leads responsible for their specific agreements.

NRC then discussed DOE's plan to address the agreements and stated that it is interested in what DOE is doing to define the work scope, prioritize, and schedule the agreements, but the NRC would not formally review or endorse the plan. NRC added that it viewed DOE's plan as a tool which DOE could use in future discussions of the agreements.

The NRC then briefly discussed two ongoing staff activities, a risk-insights initiative (which is discussed below) and the Integrated Issue Resolution Status Report (Integrated IRSR). NRC stated that the Integrated IRSR would document the status and basis of issue resolution and would follow the Yucca Mountain Review Plan (YMRP) format. NRC stated that since the Integrated IRSR follows the YMRP format, the YMRP needs to be issued first. NRC noted that it would (1) request public comments on the YMRP when issued, (2) address the comments received in future versions of the YMRP, and (3) incorporate any YMRP format changes into future versions of the Integrated IRSR. DOE stated that at this point in their process, the YMRP was needed for future planning and that anything the NRC could do to expedite the release of the YMRP would be appreciated. NRC agreed to forward DOE's request to NRC management.

2) Use of Risk Insights in the Issue Resolution Process

NRC next discussed the use of risk insights in the issue resolution process (see "Use of Risk Insights in the Issue Resolution Process" presentation given by James Andersen). NRC provided an overview of the issue resolution process and how risk insights were used by the staff during past issue resolution meetings. NRC discussed some of its performance assessment code results and noted a number of areas the staff identified as risk significant. The NRC also discussed an effort in which it tried to identify the level of complexity for each of the specific agreements.

NRC discussed a risk insights initiative that it had recently commenced. The objective of the initiative is to document the KTI risk insights and use the insights in future discussions with DOE on the agreements.

3) DOE Approach to Agreements Using Risk Information

DOE discussed its evaluation of the status of the KTI agreements and risk-informed performance-based considerations for KTI issue resolution (see "Risk-Informed, Performance-Based Considerations for Key Technical Issue Resolution" presentation given by April Gil). DOE stated that, in general, it was in agreement with the NRC presentations on the status of KTI agreements, which were presented during the January NRC Advisory Committee on Nuclear Waste meeting. DOE noted, however, that a few items need to be discussed further during future issue resolution meetings.

DOE then discussed its use of risk-informed performance-based considerations for KTI resolution and stated that this approach would focus attention on activities most important to protecting safety. DOE discussed NRC guidance documents and relevant information from 10 CFR Part 63. DOE stated that 10 CFR Part 63 eliminates arbitrary or prescriptive criteria and detailed requirements, and establishes a coherent body of risk-informed criteria compatible with the overall philosophy of risk-informed performance-based regulation. DOE also stated that a meeting on 10 CFR Part 63 is needed and that they have several questions regarding the

regulation. NRC noted that a meeting on 10 CFR Part 63 could be combined with a future meeting on the YMRP.

DOE stated that it is currently evaluating and prioritizing its future work and the work scope and schedule will be defined in the license application planning effort currently underway. DOE stated that the goal is to prioritize identified information needs based on relevance to the total system performance approach and safety case. DOE stated that it is in the final stages of developing its license application safety strategy and that DOE would be ready to discuss it sometime in the spring. NRC noted that the DOE plan to address the agreements and the license application safety strategy are key inputs in the future discussion of the KTI agreements. DOE also noted that its current goal is a license application in 2004 (if the site is approved).

DOE then provided an overview of its performance assessment prioritization process (see "Performance Assessment Prioritization Overview" presentation given by Peter Swift). DOE discussed the process it is using to evaluate and prioritize proposed work. DOE summarized the process by stating that (1) it is a decision aiding tool rather than a decision making tool; (2) it is based on both technical and management input; (3) consideration is given to quantitative and qualitative regulatory requirements, confidence in technical defensibility, and fiscal constraints; (4) decisions will be integrated with other project activities; (5) the basis will be documented; and (6) decisions will be re-evaluated as new information becomes available.

4) Future Communications

NRC and DOE then discussed several issues relating to communications (see "Talking Points: DOE/NRC Future Meeting and Communications" slides). NRC and DOE discussed the need for NRC and DOE KTI leads to discuss their specific agreements to ensure that DOE understands what information the NRC is looking for and how DOE is addressing the agreement. NRC and DOE both stated that their individual KTI leads are responsible for their specific agreements.

NRC and DOE discussed DOE responses to the KTI agreements and how the response could be more focused. NRC and DOE discussed how the information needed could be highlighted so that NRC would know where to look for the information. NRC and DOE also discussed how the NRC would document that an agreement is complete. NRC stated that it would specifically note the status of an agreement at the conclusion of the NRC review in a letter to DOE.

5) Schedule and Format for Future Meetings

NRC and DOE discussed the different types of interactions. It was agreed that Appendix 7 meetings would be focused on specific aspects of a KTI and that they would be open to public observation. DOE asked whether agreements could be closed at an Appendix 7 meeting. NRC stated that they could not. NRC stated that documentation is needed to close an agreement so if DOE wanted to document the agreed upon information discussed at the Appendix 7, the NRC could then review it and formally close it in a letter back to DOE. NRC requested that DOE periodically provide a list of documents DOE plans to issue in the near future. NRC stated that this would assist it in identifying documents not specifically associated with the KTI agreements. DOE agreed to this request.

NRC and DOE then discussed several topics for future discussions and a possible schedule (see Interactions Calendar). NRC stated that this is DOE's proposed schedule and that when a meeting topic and schedule was agreed to, the meeting time and date would be posted on the NRC website. In addition to the proposed meetings noted on DOE's interaction calendar, NRC stated that a meeting on (1) the status of drilling and testing in the unsaturated and saturated zones, and (2) igneous activity plans and schedules should also be included in future discussions. DOE stated that this meeting on meetings was very useful and that it would like to have similar meetings every six months. NRC agreed to this proposal.

NRC asked whether DOE was working on the agreements due in fiscal year 2002. DOE stated that work on these agreements is continuing and that a number of agreements will be addressed in the next several months. NRC stated that it was interested in discussing the schedule and DOE's approach for these agreements. NRC also stated that pre-meeting telephone calls to discuss the scope and objectives of future meetings should continue and that NRC and DOE should try to provide needed documents well in advance of the meeting time.

6) Summary of Meeting

In closing, NRC restated that (1) the issue resolution process needs to proceed and that to move forward, it needed to understand DOE's plans on addressing the agreements; (2) communication is needed on the agreements DOE plans to address in the near term; (3) the NRC and DOE KTI leads are the main points of contact and are responsible for their agreements; and (4) it was interested in understanding the DOE plan to address the agreements, but that it would not formally review or endorse it. NRC and DOE both noted that information pertaining to future meeting schedules would be discussed to set firm meeting dates.

7) Public Comments

None

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