

June 11, 2012

MEMORANDUM TO: Robert J. Pascarelli, Chief
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Japan Lessons-Learned Project Directorate
Office of Nuclear Reactor Regulation

FROM: Steven D. Bloom, Senior Project Manager /RA/
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SUBJECT: SUMMARY OF APRIL 10, 2012, PUBLIC MEETING ON THE
IMPLEMENTATION OF THE ORDERS AND 10 CFR 50.54(F)
LETTER ISSUED, RELATED TO THE FUKUSHIMA DAI-ICHI
NUCLEAR POWER PLANT ACCIDENT

On April 10, 2012, the U.S. Nuclear Regulatory Commission (NRC, the Commission) held a public meeting with the Steering Committee comprised of the Nuclear Energy Institute and industry representatives, along with members of the public to discuss implementation of the Orders and the Title 10 of the *Code of Federal Regulations* (10 CFR) 50.54(f) letter issued related to the Fukushima Dai-ichi Nuclear Power Plant accident.

The meeting started with the NRC staff making their presentation (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12102A192), which described the history of the actions the NRC has taken, following the Fukushima event. The NRC staff stated that the meeting would focus on the Tier 1 Orders and 10 CFR 50.54(f) letter, which was issued on March 12, 2012, and the guidance and the path to getting guidance issued by the end of August 2012. The staff described the process that occurred prior to the issuance of the Orders and the letter, in which we held numerous public meetings and solicited public comments, and are now going to request similar comments during the development of the interim staff guidance (ISG). The NRC briefly discussed the overall schedule for the three Orders based on the type of addressee.

First, the NRC discussed the issues related to the Order for mitigating strategies for beyond-design-basis external events. At the March 28, 2012, public meeting, the NRC and industry discussed two issues which did not appear to be resolved. The first which emerged was the use of permanent piping for loss of normal access to the ultimate heat sink (UHS). The industry stated that the piping connected to the UHS would still be available if seismically qualified. The next issue was the backup power supplies for the hydrogen igniters for Mark III and ice condensers containments. The next public meeting on this Order is scheduled for April 24, 2012.

The next Order discussed was on reliable hardened vents. The next meeting is May 2, 2012, and the staff is continuing to evaluate the merits of a filter, which will be included in the July Commission paper. The NRC is working on a communication plan and a project plan for the July paper. Lastly, for the Order on spent fuel pool (SFP) level instrumentation, the NRC stated that at Fukushima, the operators were not effectively prioritizing their response because they were distracted by the SFP. The NRC discussed the fact that they are concerned about where the water level marks will be and where the data will be collected. The next public meetings are on April 18, 2012, and May 1, 2012. The ISG will be issued in draft for public comments at the end of May.

The NRC staff continued with a discussion of the 10 CFR 50.54(f) letter and the schedule for the responses from the industry for the various parts of the request. For the emergency preparedness portion of the request, the need for a common definition of impeded access, with an emphasis on “no site access” was discussed. The NRC staff stated that this was last discussed at the public meeting for the mitigation Order on March 28. For the seismic and flooding requests, the NRC stated that the walkdown deficiencies should be addressed in the licensee corrective action program. The staff also stated that we should not use the term “cliff-edge effects;” the future term should be “available physical margin.” For the flooding walkdowns they need to be effective but still need to discuss more in the guidance. The industry and NRC discussed when and how the information, with respect to margins, was to be reported to the NRC.

Next, the NRC discussed the various ongoing rulemaking activities. The advanced notice of proposed rulemaking (ANPR) for the station blackout rule was issued on March 20, 2012, and the first public meeting on April 25, 2012. The ANPR for Recommendation 8 related to the integration of the emergency operating procedures, severe accident management guidelines, and extensive damage mitigation guidelines is being finalized and should be issued this week. The public meeting for this ANPR is scheduled for April 23, 2012. The staff anticipates holding a series of public meetings in the near future.

The NRC staff stated that they were performing an assessment of the filtered vent issue and will be incorporating this into the July Commission paper which will provide the staff’s recommendations to the Commission for a notation vote. The staff will also incorporate Fukushima lessons learned, as well as information from research activities such as SOARCA and MELCOR analytical tools. The staff is engaging international counterparts to assist with providing the recommendation to the Commission in the July paper.

The NRC staff plans to submit a plan for completing the work related to the Tier 3 recommendations. The plan will include the schedule and resource needs for the various recommendations. The staff is planning to hold public meetings on May 3, 7, and 14, 2012. In addition, the staff is making presentations before the Advisory Committee on Reactor Safeguards (ACRS) subcommittee on May 22-23, 2012, and the ACRS full committee on June 6, 2012. Some of these project plans will be resolved by the appropriate line organizations and will eventually fold into a temporary instruction. The NRC needs to make sure that inspections are an integrated part of the licensing process to ensure compliance with Japan lessons learned actions.

The NRC staff stated that they would address questions from the industry related to what was presented on the Tier 1 items. The first issue was related to the use of existing UHS piping. The industry stated that they did not want to rule out options such as that the piping might be available. The NRC stated that this is a very important clarification since permanent piping is an option, however, the plans should include options in case the piping is not available. Next, industry representatives stated that, relative to the backup power to hydrogen igniters, Diverse and Flexible Coping Capability (FLEX) is to prevent core damage; the industry representatives suggested that this item be moved to the Tier 3 recommendation related to hydrogen control. The NRC staff stated that the Tier 3 recommendation was a broader issue and the ignition was for prevention not for mitigation.

The industry wants to make the decision of the use of filtered vents to be performance based and they stated that there may be other modifications that are more beneficial than filters. Concerning the SFP instrumentation Order, level range monitoring was discussed. Industry stated that they would not wait until level dropped to near the top of the spent fuel to take action as they did not want this to create a diversion of resources. Industry stated that if water level was ten feet and above the top of the fuel racks, they still would have days to respond.

Industry next discussed the fact that they believed the work being done on seismic and flooding is a step in the right direction; however, they think the plants are seismically hardy. Industry suggested that for simplification they did not want to re-create a seismic analysis; they suggested use of existing individual plant examination of externally initiated events (IPEEE) or have a licensee perform a higher quality IPEEE. The industry also discussed the issue of high frequency exceedance, stating that this should be treated differently since it is an important issue. The NRC stated that they would continue to focus on the long-term and ways to, for example, compare ground motion response spectra (GMRS) with the IPEEE and then analyze the high frequency exceedance.

The NRC asked the industry, what fixes need to be made as a result of the walkdowns? The industry stated that going forward they would apply the new GMRS numbers and compare to the current approach and look for the deltas.

The industry stated that they like that we are moving away from the "cliff edge" effects, but would like us to move even more forward and start talking in terms of physical function and available physical margin. The NRC staff felt that it is important that the flooding walkdowns focus on easily identified items and remodeled things. The NRC also stated that it is important that we have the results of the walkdown of available physical margin at the time of the 2.3 recommendation submittal. Industry was concerned since they did not know the meaning or downstream effects and that it will there be enough information to make a decision at this point. The NRC stated that we do not want to distract the licensees from the issues of greater safety significance. Industry was concerned that this is in the wrong context and should remain in the reevaluation portion of this issue. The NRC agreed that the grading system for complexity is the preferred approach for prioritization. The NRC stated that as an overall schedule, we do not want all plants to finish at the same time, and would propose an NFPA805-like schedule.

With respect to emergency preparedness, industry proposes a site-specific value for no site access at 0-6 hours but this must be justified. Licensees would have to demonstrate that they have memorandums of understanding with local officials and will have augmented resources to assist with restoring access to the site. Industry stated that the following week they would submit for NRC approval a draft of the guidance document if an agreement could be reached on impeded access. The NRC stated if an agreement could not be reached then we would endorse with an exception.

The NRC stated that it is evaluating the economic consequences of land contamination and that this issue will be discussed in the July Commission paper. The NRC further stated that there will be public meetings on this issue. The meeting concluded with questions from the public and stakeholders.

Enclosure:
List of Attendees

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LIST OF ATTENDEES

U.S. NUCLEAR REGULATORY COMMISSION

APRIL 10, 2012, PUBLIC MEETING ON

DISCUSSION OF IMPLEMENTATION OF THE ORDERS AND 10 CFR 50.54(F) LETTER

ISSUED RELATED TO THE FUKUSHIMA DAI-ICHI NUCLEAR POWER PLANT ACCIDENT

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