



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

September 13, 2016

MEMORANDUM TO: Michael X. Franovich, Acting Director  
Japan Lessons-Learned Division  
Office of Nuclear Reactor Regulation

FROM: J. Andrew Proffitt, Technical Assistant /RA/  
Japan Lessons-Learned Division  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF AUGUST 25, 2016, PUBLIC JOINT STEERING  
COMMITTEE MEETING TO DISCUSS ACTIVITIES RELATED  
TO LESSONS LEARNED FROM THE FUKUSHIMA DAI-ICHI  
NUCLEAR POWER PLANT EVENT

On August 25, 2016, a Category 2 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) Steering Committee and the industry's counterpart steering committee for implementing the lessons-learned from the events at Fukushima Dai-ichi. The meeting was held in the Commission Hearing Room, 11555 Rockville Pike, Rockville, Maryland. The NRC slides used in the meeting are available at Agencywide Documents Access and Management System (ADAMS) Accession No. ML16244A724. A list of participants is provided as an enclosure to this document.

The NRC staff presentation began with an implementation status update of the progress in all of the major post-Fukushima activities including mitigating strategies, hazard reevaluations, and hardened vents. This was followed by more in-depth discussions on the mitigation of beyond-design-basis events (MBDBE) rulemaking, Tier 2 and 3 recommendations, and credit for FLEX (Diverse and Flexible Coping Strategies) in other regulatory applications. The final topic of discussion was on future joint steering committee interactions.

Highlights of the discussion included:

- The current implementation progress of all of the major post-Fukushima activities: This included an update that all onsite audits supporting the mitigating strategies order are complete and nearly 75 percent of units are now in compliance with the order. Over 90 percent of units are in compliance with the spent fuel pool instrumentation order. The staff is ahead of schedule in implementing the hardened vents order and remaining phase 2 interim staff evaluations will be issued soon. Work related to the emergency preparedness staffing and communications is on schedule to be completed by the end of 2016. The key message was that the NRC remains on or ahead of schedule for all activities and there is a well-established path forward for the remaining activities that go out beyond 2016.

- The NRC staff discussed several topics in more detail including mitigating strategies, hazard reevaluations, and hardened vents:
  - Mitigating strategies: The staff completed all of the onsite audits, has issued 15 of the 61 safety evaluations (SEs) and expects to issue a total of 37 by the end of the year. The staff has implemented actions, along with industry, to increase the efficiency and ensure timely issuance of the SEs while maintaining core knowledge management aspects of the documents. The regions have completed 8 temporary instruction – 191 inspections to date with no significant issues identified. The NRC has taken several steps to ensure consistency in the conduct of these inspections including cross-regional participation, direct headquarters support for the inspection teams, and establishment of a cross-regional panel to review proposed findings.
  - Hazard reevaluations: For flooding, the NRC has issued 53 of 61 hazard acceptance letters summarizing the staff's review of the sites reevaluated flooding hazard and informing the licensee that the levels are acceptable for use in future evaluations and submittals. In accordance with the flood action plan approved by the Commission, the staff issued Phase 1 guidance on focused evaluations and integrated assessments in July of this year. With regards to seismic, 17 sites have now completed their Recommendation 2.1 seismic response. The staff assessments for the Western U.S. sites are on track to be issued by the end of 2016. The staff is developing guidance for Phase 2 decision making and a draft was made publically available ahead of an August 17, 2016, meeting with the Fukushima subcommittee of the Advisory Committee on Reactor Safeguards (ACRS). The final guidance is due to the Commission, for information, by the end of September 2016.
  - Hardened Vents: The staff plans to issue all of the phase 2 Interim Staff Evaluations (ISEs) by early September; these ISEs were originally scheduled to be completed by the end of the year. The staff has developed a streamlined process for closure of this order. The approach will use existing communications, such as the 6-month updates and compliance letters, to expedite the closure of open items. This will enable development of the staff's safety evaluation ahead of plant compliance. The staff have begun reaching out to industry to gain alignment on the process. The streamlined approach will also allow for post-compliance inspections to be scheduled earlier.
- The staff gave an update on the MBDBE rulemaking, which remains on schedule to be delivered to the Commission in mid-December 2016. There have been several interactions with the ACRS on rule language and supporting guidance with more interactions scheduled. The most challenging aspect that remains is the development of guidance related to seismic Path 5. Path 5 will be used for sites whose ground motion response spectra is greater than two times the plants current safe shutdown earthquake. The Nuclear Energy Institute (NEI) is developing guidance which will be delivered to the NRC in the near-term. The staff also mentioned that a public meeting is being scheduled in early September to discuss the guidance.

- The staff discussed the remaining Tier 2 and 3 recommendations including Recommendation 11.3 real-time radiation monitoring, evaluation of other natural hazards, and Recommendation 2.2, periodic reconfirmation. The NRC staff has had several public interactions on real-time radiation monitoring and other natural hazards and is nearing completion of final assessments. The staff has developed a proposed process to address Recommendation 2.2 in a systematic approach. The process leverages and enhances existing NRC processes and programs to more efficiently accomplish the objective of Recommendation 2.2. The staff is planning a public meeting in September to discuss the process in more detail. Resolution plans for these remaining Tier 2 and 3 recommendations are due to the Commission by the end of the year 2016.
- Staff from the Division of Risk Assessment discussed credit for FLEX in other regulatory applications. The NRC's risk-informed steering committee directed the staff to evaluate how FLEX equipment could be credited in various risk-informed regulatory decisions and the staff is now developing application-specific guidance. There are six high-priority application areas including incident response, significance determination, maintenance rule, notices of enforcement discretion, and risk-informed license amendment requests. The staff is developing plans for these high priority areas and will provide a status update at a public risk-informed steering committee meeting in December of this year.
- The last discussion topic was the future interactions between the NRC and industry steering committees. Given the significant progress in implementing the Fukushima lessons learned, there are fewer issues requiring the attention of the joint steering committee. The steering committees will need to continue focus on the MBDBE rule completion and the resolution of the remaining Tier 2 and 3 recommendations, but the staff and industry agree that both items are on a well-defined success path. Therefore, the staff is anticipating sun setting the NRC's internal Japan lessons-learned steering committee in early 2017.

There were several questions from one member of the public that focused on the remaining Tier 2 and 3 recommendations, including which items remained and why the staff felt that real-time radiation monitoring should not be a requirement. The NRC staff addressed the questions by explaining which Tier 2 and 3 items remained, as well as pointing the individual to previous agency documents on real-time radiation monitoring and that a white paper will be released publically documenting the staff's conclusions on all of the remaining Tier 2 and 3 activities prior to final issuance of a paper to the Commission at the end of the year 2016. There was also a question unrelated to the topics discussed on reactor event reports.

M. Franovich

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Members of the public were in attendance in the room and through the teleconference. Public meeting feedback forms were not received.

Please direct any inquiries to me at 301-415-1418 or [Andrew.Proffitt@nrc.gov](mailto:Andrew.Proffitt@nrc.gov).

Enclosure:  
List of Participants

M. Franovich

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Enclosure:  
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| NAME   | AProffitt  | SLent      | MShams        | AProffitt  |
| DATE   | 09/09/2016 | 09/08/2016 | 09/09/2016    | 09/13/2016 |

**OFFICIAL AGENCY RECORD**

LIST OF ATTENDEES

AUGUST 25, 2016

JOINT STEERING COMMITTEE MEETING TO DISCUSS ACTIVITIES RELATED TO LESSONS  
LEARNED FROM THE FUKUSHIMA DAI-ICHI NUCLEAR POWER PLANT EVENT

The participants from the NRC included:

- Michael Johnson, Deputy Executive Director for Operations
- William Dean, Director, Office of Nuclear Reactor Regulation (NRR)
- Michael Franovich, Acting Director, JLD, NRR
- Andy Campbell, Deputy Director, DSEA, NRO
- Sunil Weerakkody, Branch Chief, DRA, NRR
- Andrew Proffitt, Technical Assistant, JLD, NRR

The participants from the industry included:

- Anthony Pietrangelo, Senior Vice President and Chief Nuclear Officer, Nuclear Energy Institute (NEI)
- Joseph Pollock, Vice President, Nuclear Operations, NEI

Additional NRC staff members, industry representatives, and members of the public were in attendance in person or through the teleconference

Enclosure