

## 13.0 Conduct of Operations

### 13.5 Plant Procedures

#### 13.5.1 Regulatory Criteria

In a letter dated July 20, 2012 (ADAMS Accession No. ML12125A385), the NRC identified 28 suggested changes for GEH's consideration that the staff considered to be regulatory improvements or changes that could meet 10 CFR 52.59(b) criteria. In Item No. 17 of this letter, the NRC staff suggested that GEH update the emergency procedure guidelines and severe accident management guidelines (SAMGs) for the ABWR consistent with NEI 91-04, "Severe Accident Issue Closure Guidelines." GEH responded in letters dated June 19, 2015 (ADAMS Accession No. ML15170A034) and January 30, 2017 (ADAMS Accession No. ML17031A056). GEH proposed to amend ABWR DCD, Tier 2, Section 13.5, "Plant Procedures," to include additional information for COL applicants referencing the ABWR design to address regarding the development of plant specific technical guidelines (PSTGs), emergency operating procedures (EOPs), SAMGs, and extensive damage mitigation guidelines (EDMGs). The proposed changes relate to an issue that is outside the scope of the design certification, and a COL applicant addressing the issue would be subject to the requirements as they exist at the time the COL application is filed. Therefore, the proposed changes are "amendments," as this term is defined in Chapter 1 of this supplement, and are evaluated using the regulations applicable and in effect at the time of renewal.

10 CFR 52.79(a)(29)(ii) requires the COL applicant to submit plans for coping with emergencies, other than the plans required by § 52.79(a)(21). As discussed in the 2007 amendments to the Part 52 rule (72 FR 49386), this requirement is meant to capture, for example, EOP. The staff acceptance criteria associated with EOPs are in Section 13.5.2.1, Revision 2, of NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants (LWR Edition)."

The SAMGs are a voluntary industry initiative and no specific regulatory requirements govern the acceptability of SAMGs. While SAMGs are not a regulatory requirement, the U.S. nuclear industry has committed to developing and maintaining the SAMGs in accordance with NEI 91-04, Revision 1, "Severe Accident Issue Closure Guidelines," December 1994. Therefore, the staff reviewed GEH's proposed changes for consistency with the current industry approach.

In accordance with 10 CFR 52.80(d), COL applicants must provide a description and plans for implementation of the guidance and strategies intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities under the circumstances associated with the loss of large areas of the plant due to explosions or fires, as required by 10 CFR 50.54(hh)(2).

#### 13.5.2 Summary of Technical Information

By letters dated June 19, 2015 and January 30, 2017, the applicant proposed to expand the COL License Information item "Emergency Procedure Development" provided in DCD Section 13.5.3.2 to clarify that:

- Procedure development will integrate the EOPs, SAMGs, and EDMGs using industry (BWROG) guidance as endorsed by applicable NRC RGs consistent with the Near-Term Task Force recommendation as described in SECY-11-0124, "Recommended Actions To Be Taken Without Delay From the Near-Term Task Force Report."
- Development of the PSTGs, EOPs, and SAMGs will use as inputs the standard ABWR emergency procedure guidelines described in the DCD and generic industry guidance per NEI 91-04, Revision 1, which includes the industry commitment to incorporate severe accident strategies into the overall accident management program.
- EDMG development will be as described in NEI 06-12, "B.5.b Phase 2 & 3 Submittal Guideline."
- The EOPs, EDMGs, and SAMGs will be integrated in a cohesive, effective and useable manner as described in NEI 14-01, "Emergency Response Procedures and Guidelines for Beyond Design Basis Events and Severe Accidents."

### **13.5.3 Technical Evaluation**

The NRC staff evaluated the changes to the COL License Information item as follows:

- The SAMGs are a voluntary industry initiative. Therefore, no regulatory requirements govern the acceptability of SAMGs. However, the staff finds that the updated COL License Information item which applies NEI 91-04 "Severe Accident Issue Closure Guidelines," and NEI 14-01, provides that the SAMGs will be developed and maintained consistent with the current industry approach. Therefore, the staff finds the applicant's approach acceptable.
- GEH proposed a change to this COL License Information item to state that the PSTGs and EOPs will be developed using the standard ABWR emergency procedure guidelines. The staff finds this acceptable because the standard ABWR emergency procedure guidelines were reviewed and found acceptable as part of the initial ABWR certification.
- GEH proposed a change to this COL License Information item to state that EDMGs will be developed as described in NEI 06-12. Since NEI 06-02 is endorsed by DC/COL-ISG-016, "Compliance With 10 CFR 50.54(hh)(2) and 10 CFR 52.80(d)," the staff finds this update acceptable.
- GEH proposed a change to this COL License Information item to state that procedure development will integrate the EOPs, SAMGs, and EDMGs using industry (BWROG) guidance as endorsed by applicable NRC RGs. The staff finds this acceptable since the COL applicant is directed to use NRC-endorsed approaches.
- GEH proposed a change to this COL License Information item to state that these procedures and guidelines will be integrated in a cohesive, effective and useable manner as described in NEI 14-01. While not currently endorsed by the staff, the staff issued Draft Regulatory Guide DG-1319, "Integrated Response Capabilities for Beyond-Design-Basis Events," proposing to endorse NEI 14-01 with clarifications. Therefore, the staff finds that referencing NEI 14-01 in this COL License Information item is acceptable.

The use of COL License Information items is appropriate because the overall responsibility for severe accident management lies with the COL applicant/holder. The proposed DCD markups included in the June 19, 2015, and January 30, 2017 letters, are being treated as **Confirmatory Item 13.5-1**, pending their incorporation into a revision of the DCD.

#### **13.5.4 Conclusion**

Based on the evaluation provided in this SER section supplement, the staff concludes that the proposed amendment to the ABWR DCD associated with the revision of the COL information item is acceptable, because it provides that the SAMGs will be developed and maintained consistent with the current industry approach and that the EOPs and EDMGs will be developed in a manner acceptable for meeting 10 CFR 50.54(hh)(2), 52.79(a)(29)(ii), and 52.80(d). Inclusion of the proposed changes in the DCD is being tracked by **Confirmatory Item 13.5-1** discussed above.