

Enclosure 2

Handouts and Presentations Discussed during the
March 23, 2017 ROP WG Public Meeting

Dated April 6, 2017

Emerging Potential Small “g” Generic Issue: EDG Load Reject Surveillance requirements

There has been recent experience with the handling of the identification that the surveillance testing associated with testing the largest single load had never been adequately performed. The load requirement specified in the Tech Spec was determined to be non-conservative and the associated surveillance procedure used the Tech Spec value for the acceptance criteria. At the time, the NRC resident’s position was that the affected EDGs should be declared inoperable and that SR 3.0.3 was not applicable since the surveillance had never been performed.

A historical review of industry data identified similar instances documented in findings from multiple NRC Regions. The NRC responses to the issues were somewhat varied in that there was not a consensus on whether or not SR 3.0.3 was applicable or under what conditions it could be applicable. Both NRR and Region have documented positions that said SR 3.0.3 was not applicable. One station had a NOED approved for this situation while others entered the item in CAP and performed the surveillance under SR 3.0.3 provisions. This issue was identified twice during CDBI inspections and during other inspection activities. To ensure consistency in applying NRC guidance for this situation, the surveillance section of MC 326 may need to be clarified or better use of internal NRC OE applied.

In this instance better application of NRC and industry OE may also help to avoid adverse regulatory or plant responses to similar occurrences. The findings discussed above are included in the table below.

Plant	Inspection Number	Finding Number	Report Date	Severity	Color	Functional Area
Watts Bar	2016-11	1	10/6/2016	NCV	Green	Surveillance - CDBI
Grand Gulf	2015-04	2	2/11/2016	NCV	Green	Surveillance: NRC said SR 3.0.3 should have been applied based on other testing performed
Grand Gulf	2015-07	6	11/13/2015	NCV	Green	Surveillance – Follow-up to 2015-04
Palisades	2014-08	13	12/2/2014	NCV	Green	Surveillance - CDBI
Diablo Canyon	2014-07	2	10/22/2014	NCV	Green	Surveillance – Station entered SR 3.0.3 and entered in CAP
Monticello	2011-04	1	11/1/2011	NCV	Green	Surveillance – NOED granted to perform surveillance after discovery
Diablo Canyon	2010-05	6	2/7/2011	NCV	Green	Surveillance – SR 3.0.3 was applied for this finding
FitzPatrick	2010-06	1	8/13/2010	NCV	Green	Surveillance – NRR determined that it was not appropriate to enter SR 3.0.3, entered SR 3.0.1

Envisioned Significance Determination Process for New Reactors

ROP Public Meeting
March 23, 2017



SDP for New Reactors (1)

Commission direction to modify the existing SDP, as needed to accommodate new reactors (SRM-SECY-13-0137)

- Commission disapproved staff recommendation to develop an integrated risk-informed approach using qualitative measures.
- Staff to enhance the SDP by developing a structured qualitative assessment for events or conditions that are not evaluated in the supporting plant risk models.

SDP for New Reactors (2)

- SDP should continue to place emphasis on use of existing quantitative measures for both operating and new reactors.
- Staff should develop guidance to address circumstances that are unique to new reactors, for example due to uncertainty of the reliability of passive systems, structures and components (SSCs) or other SSCs with limited operational experience.
- No change in significance thresholds.

Activities/Schedule (1)

- NRR has lead with multiple organizations involved (NRO, NSIR, Region II).
- All SDP procedures, including technical basis documents, evaluated to determine where gaps might exist.
- No new SDP procedures are expected as current framework is robust and inclusive.
- App's A (At Power), G (Shutdown) and H (Containment) are only procedures expected to change.
- No gaps identified for App's B, C, D, E, F, I, J, K, L, O

Activities/Schedule (2)

- Enhanced App M envisioned to address certain unique aspects of new reactor design and conditions not evaluated in supporting risk models.
- Complete gap review and initial draft input for Commission paper by June 2017.
- Complete procedure revisions with full stakeholder involvement by December 2018.

Significance Determination Process (SDP) Revisions Appendix G and H for AP1000

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March 23, 2017

Background

- Commission Staff Requirements Memorandum SRM-SECY 2013-0137, dated June 30, 2014
- Directs staff to develop integrated risk-informed approach for evaluating safety significance of inspection findings for new reactor designs

Appendix G – Shutdown Operations

- Appendix G and Appendix G Attachment 1 were last revised in April 2014 for clarity and simplification
- Attachment 2 (Phase 2 SDP PWRs during Shutdown) and Attachment 3 (Phase 2 SDP BWRs during Shutdown) still at Rev. 0 dated February 2005
- Attachment 2 needs to be updated to revise fault trees and corresponding worksheets to credit AP1000 passive features and possibly lower base CDF

Appendix G – cont.

- Will also incorporate lessons learned, feedback form input, correct errors and attempt to simplify language and structure as time permits
- Attachment 3 for BWRs also needs to incorporate these improvements
- Will also update corresponding IMC 0308 basis correspondingly

Appendix H – Containment Integrity

- Appendix H still at Rev. 0 dated April 2004
- Separate sections cover at-power and shutdown operations
- AP1000 has large dry containment similar to current PWR fleets large dry containment

Appendix H – cont.

- However, need to consider and credit as appropriate:
 - Possible difference between LERF and LRF
 - Passive containment cooling
 - Lower AP1000 CDF
- Additional Phase 1 screen criteria
- Will also incorporate lessons learned, feedback form input
- Will also update corresponding IMC 0308 basis correspondingly

Path Forward

- Plans for:
 - Public meetings
 - Tabletop exercise and workshops as necessary
- Planned completion date: June 2018

SDP TOOLS for NEW REACTORS

- ~ IMC 0609 Appendix A**
- ~ IMC 0609 Appendix M**

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Purpose

- Discuss the plans for the development of SDP tools for new reactors (e.g., AP 1000 plants)
- Provide an overview of revisions to IMC 609 Appendix A and Appendix M used for operating reactors that can be adapted to reflect the unique design and operational practices of advanced reactor plants

Background

- Commission Staff Requirements Memorandum (SRM) on SECY 2013-0137, dated June 30, 2014
 - Develop guidance to address circumstances that are unique to new reactors, e.g., uncertainty of reliability of passive SSCs or other SSCs with limited operational experience
 - Enhance the SDP by developing a structured qualitative assessment for events or conditions that are not evaluated in the supporting plant risk models, e.g., performance deficiencies associated with passive safety systems, digital I & C, and human performance issues
 - Submit a paper to the Commission with proposed approach for any revisions to the SDP for new reactors

IMC 0609 Appendix A

- General structure similar to IMC 609 Appendix A for operating reactors, except for revisions in screening questions to reflect the unique design and operational practices of advanced reactor plants
 - Initiating Events, Mitigating Systems, Barrier Integrity
 - External Events
- Guidance for detailed risk evaluation, or go to IMC 0609 Appendix M

IMC 0609 Appendix M

- General structure similar to IMC 609 Appendix M for operating reactors
 - Clear Definitions of Entry Conditions
 - Defined Set of Decision Attributes
 - Assess Importance of Each Affected Decision Attribute
 - Integrated Assessment of Applicable Decision Attributes

PATH FORWARD

- Plans for public meetings and “tabletop exercise” workshops (if necessary)
- Planned completion date of SDP tools for new reactors – June 2018