

**Status and Completion Schedules for
Digital Instrumentation and Controls
Integrated Action Plan Modernization Plans**

| Modernization Plan (MP) Number and Title | | Status and Schedule¹ |
|---|---|---|
| MP1: Protection Against Common Cause Failure | MP1A: Development of near-term clarifying guidance for modifying lower risk significant safety system auxiliary and support digital instrumentation & control (I&C) systems under Title 10 of the <i>Code of Federal Regulations</i> (10 CFR) 50.59, "Changes, Tests and Experiments" | COMPLETE: Regulatory Issue Summary (RIS) 2002-22, Supplement 1, "Clarification on Endorsement of Nuclear Energy Institute Guidance in Designing Digital Upgrades in Instrumentation and Control Systems" issued May 31, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession Number ML18143B633). |
| | MP1B: Evaluation of the Nuclear Energy Institute's (NEI's) proposed guidance in NEI 16-16, Draft 2, "Guidance for Addressing Digital Common Cause Failure" | COMPLETE: NEI no longer pursuing. MP1D providing framework for use of "Defensive Measures" as described in NEI 16-16. NEI may submit new industry guidance in the future. (ADAMS Accession No.ML19218A371). |
| | MP1C: Evaluation of the NRC's current position on the protection of digital I&C systems and components against common cause failure | COMPLETE: SECY-18-0090, "Plan for Addressing Potential Common Cause Failure in Digital Instrumentation and Controls," issued September 12, 2018 (ADAMS Accession No.ML18179A066). |
| | MP1D: Update Branch Technical Position (BTP) 7-19, "Guidance for Evaluation of Diversity and Defense-In-Depth in Digital Computer Based Instrumentation and Control Systems" | IN PROCESS: Stakeholder Engagement Meetings: 01/31/2019 04/04/2019 06/26/2019 08/01/2019 08/29/2019 ACRS Informational Meeting: Nov. 2019 Publish for Public Comment: Dec. 2019 ACRS Full Committee Meeting: April 2020 Final Publication: June 2020 |

| | | |
|--|--|---|
| MP2: Considering Digital I&C in Accordance with 10 CFR 50.59 | MP2A: Endorsement, with exceptions, of NEI 96-07, Appendix D, "Supplemental Guidance for Application of 10 CFR 50.59 to Digital Modifications through an Update to Regulatory Guide (RG) 1.187, "Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments" | IN PROCESS: Public Comment Period: 05/30/2019 to 07/15/2019 ACRS Informational Meeting: 06/05/2019 Public Meeting: 06/25/2019 Public Meeting: 09/18/2019 ACRS Review: Nov. 2019 Final Publication: Dec. 2019 Staff will assess need to perform supplemental training upon completion of MP2A. |
| | MP 2B: Implement inspector training and conduct stakeholder workshops on new digital I&C 10 CFR 50.59 guidance | COMPLETE: Planned workshops conducted in late 2018 and early 2019 and inspector training completed July 2019. |
| MP3: Commercial Grade Dedication of Digital Equipment | MP3: Endorsement of NEI 17-06, "Supplemental Guidance for Acceptance of Digital Equipment using 3rd Party Certification" through issuance of an NRC RG | IN PROCESS: Draft NEI 17-06 submitted to NRC: 09/27/2019 Public Meeting: 10/30/2019 Final NEI 17-06 submitted to NRC: Dec. 2019 NRC technical review of NEI 17-06: March 2020 Enter RG Development Process: April 2020 RG Development Milestones: TBD |
| MP4: Assessment for Modernization of the I&C Regulatory Infrastructure | MP4A: Revise Interim Staff Guidance (ISG) DI&C-ISG-06, "Licensing Process" | COMPLETE: ISG-06 issued December 27, 2018 (ADAMS Accession No.ML18269A259). |
| | MP4B: Capstone Assessment to Identify Potential Longer-Term Regulatory Improvements | IN PROCESS: Stakeholder Engagement Meetings: 01/31/2019 to 04/04/2019 Issue Draft Recommendations: Oct. 2019 Public Meeting: Nov. 2019 Issue Final Report: Dec. 2019 |

Note 1: For items in process, only milestones for 2019 and beyond are listed. Previous milestones are available in Revision 3, to the Digital I&C Integrated Action Plan (ADAMS Accession No.ML19025A312)