

Overview of Modernization Plan #4

Modernization Plan #4,
Regulatory Infrastructure,
Public Meeting
February 28, 2017
MP #4 Working Group
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Outline

- Background
- How Modernization Plan #4 fits into the Integrated Action Plan
- Modernization Plan #4's Organization
- What industry is seeking
- #4A - tactical modernization
- #4B - strategic modernization
- References to prior industry feedback

The Opportunity - SRM-SECY-15-0106

- Develop an integrated strategy to modernize the NRC's digital I&C regulatory infrastructure
- Apply high-level principles
- Not pose an unnecessary impediment to deployment of digital I&C

SRM-SECY-16-0070

- SECY-16-0070
 - Established the integrated action plan (IAP) with stakeholder input
 - Communicated the IAP to the Commission
 - Defines Modernization Plan #4 scope
- SRM-SECY-16-0070
 - Directs the staff to implement the IAP

Integrated Action Plan (IAP)

Objective: Modernize the digital I&C regulatory infrastructure to enhance the NRC's capability to be more timely, efficient and effective through a consistent and predictable regulatory process

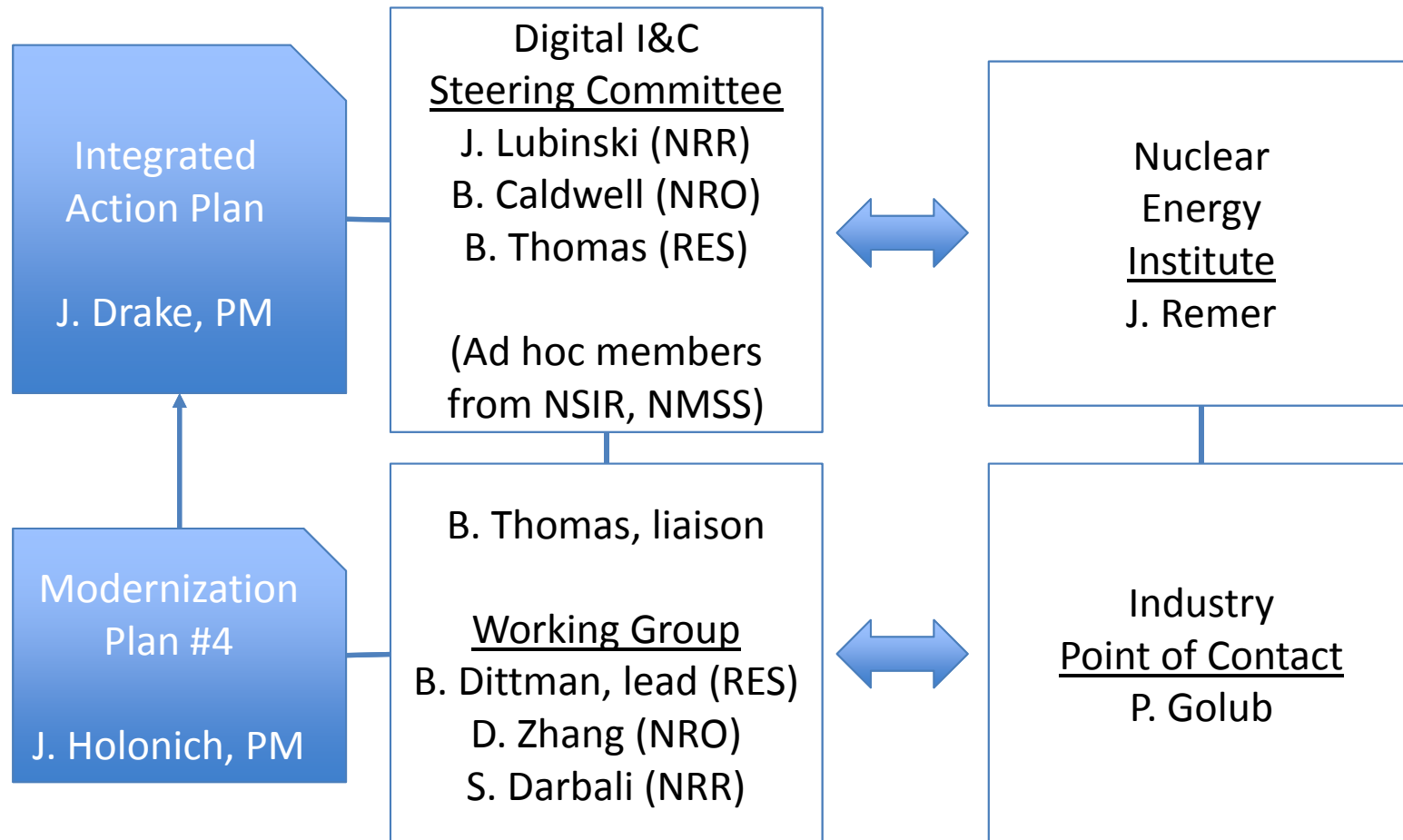
Tactical: Continue to prioritize and implement regulatory activities that enhance clarity and industry confidence needed to install digital I&C.

Modernization Plans (MPs) #1-3 and **MP #4A**

Strategic: Assess and implement broad modernization of the digital I&C regulatory infrastructure

MP #4B

Modernization Plan #4's Organization



What Industry Seeks

- An updated regulatory infrastructure that
 - Improves efficiency
 - Focuses on basic tenets of sound I&C design principles
 - Performance-based
 - Technology-neutral
 - Consistent across both legacy and new build plants
 - Addresses industry's issues
 - Aligns with current best practices
 - Is an enabler for advancing digital technology in domestic nuclear power plants

#4A – Tactical Modernization

- Address impediments to digital modifications of greatest near-term benefit:
 - Build upon MP #1-3 activities
 - (e.g., for digital I&C without prior NRC approval)
 - Extend to licensing amendment requests that use digital I&C
 - (scope and timing of information)
 - Produce corresponding inspection guidance

#4A – Industry Perspectives

- Too much and unnecessary submittal information (e.g., plans)
- Licensing should be scalable and tailorable rather than one-size-fits-all
- Review of Factory Acceptance Test results should be an inspection activity (not licensing)
- Inspection guidance should eliminate inconsistencies and build industry confidence

#4A – Path Forward

- Work with stakeholders to prioritize and create a detailed plan for the complete set of MP #4 activities
- Identify licensing actions to pilot tactical guidance from MP #1-3 and #4A
- Refine the set of tactical guidance
- Pilot tactical guidance to digital modifications without prior NRC approval, or through license amendment requests

#4A – Staff’s Approach

- Inform #4A with progress from MPs #1-3
- Meet with industry to identify and plan tactical modernization activities
- Develop additional tactical guidance
- Meet with industry to identify digital modifications for pilots
- Pilot digital modifications with industry
- Inform #4B based on #4A results

#4B – Strategic Modernization

- Address broad modernization issues:
 - Complexity of infrastructure
 - Overly prescriptive nature of infrastructure
 - Treatment of digital I&C differently from other review areas

#4B – Industry Perspectives

- The digital I&C regulatory infrastructure should be simplified, streamlined, and safety-focused
 - Too cumbersome
 - Contains inconsistencies
 - Difficult to navigate
- An efficient means should exist to use alternative standards and pre-existing components that comply with those standards.
- Digital I&C is unnecessarily treated as unique when it could be treated similar to other licensing areas (e.g., evaluation of development processes)

#4B – Path Forward

- Perform a broad assessment of the digital I&C regulatory infrastructure
 - Develop clear improvement goals & criteria
 - Comprehensively document the current infrastructure
 - Evaluate the infrastructure against goals & criteria
 - Develop options
 - Prioritize improvements
- Document the consensus vision of the fully modernized digital I&C regulatory infrastructure
- Execute and refine #4B modernization plans

#4B – Staff’s Approach

- Broad Assessment (parallel activities)
 - Research & workshops to characterize the existing digital I&C regulatory infrastructure
 - Literature research & workshops to characterize alternative digital I&C regulatory infrastructures
 - Workshops to finalize criteria for fully modernized digital I&C regulatory infrastructure
- Workshops to finalize modernization target
- Develop detailed integrated plans to achieve

References to prior IAP feedback

- Public Meeting Presentation
 - NEI : 03/30/16, ML16091A127
- Formal Comment Submissions
 - NewClear Day : ML16117A090
 - NEI : ML16118A279, ML16145A278
 - Oklo : ML16118A280, ML16118A281
 - Florida Power and Light : ML16120A519

ML#s - Agencywide Documents Access and Management System Accession Numbers
