

Enclosure 2  
Meeting Summary Handouts  
of the September 14, 2011  
ROP Public Meeting  
Dated August 25, 2011

# Preparations for ROP Tabletops for New Reactor Risk Applications

August 25, 2011

Public Meeting

POC: Ron Frahm, NRR/DIRS

# Meeting Purpose

- To conduct a planning meeting with the industry and staff to discuss the approach and develop a group of examples to further evaluate in preparation for the upcoming ROP-related tabletop exercises in the Fall
- This is a Category 2 meeting; public is invited to participate at designated points identified on the agenda
- Prepare for and perhaps schedule a Category 3 public meeting/workshop to perform and discuss the selected ROP tabletop exercises

# Commission SRM, March 2, 2011

- Commission approved a hybrid of Options 1 and 2 from SECY-10-0121, to continue existing risk-informed framework pending a series of tabletop exercises that test existing guidance
- Commission “reaffirms” existing safety goals, safety performance expectations, subsidiary risk goals and associated risk guidance, key principles (e.g., RG 1.174), and quantitative metrics
- Commission expects advanced technologies in new reactors will result in enhanced margins of safety; as a minimum, new reactors will have the same degree of protection of the public and environment as current generation reactors
- New reactors with these enhanced margins and safety features should have greater operational flexibility than current reactors

# Tabletop Deliverables

- Perform tabletop exercises to test adequacy of existing risk-informed guidance for new reactor designs
- Document preliminary discussions/outcomes in meeting summaries
- Report progress to Commissioner TAs every 6 months
- Brief ACRS in fall 2011 and spring 2012
- Produce Commission paper with specific recommendations by June 2012

# Tabletop Status

- Risk-informed ISI, May 4
- Risk-informed tech specs RITS 4b (completion times) and Maintenance Rule 50.65 (a)(4), May 26 & June 1
- Risk-informed tech specs RITS 5b (surveillance frequency control program), June 29
- 50.69 and 50.59-like process (ex-vessel severe accident features) for new reactors, August 9
- ROP applications, Fall 2011

# ROP Tabletops

- Test various realistic performance deficiencies, events, etc that are or will be relevant to the licensing basis for new reactors
- ROP-related tabletops would include the primary risk-informed aspects of the ROP:
  - the SDP used for potentially risk-significant issues within the reactor safety cornerstones
  - the Mitigating Systems Performance Index
  - Management Directive 8.3 used to determine our level of response to events
- Confirm the adequacy of these tools for regulatory decision-making or identify areas for improvement

# Proposed Approach

- Identify a broad cross-section of well-vetted cases, developed from actual greater-than-green SDP findings, MSPI data and MD 8.3 applications from the current fleet of reactors
- Apply similar situations to the new reactor designs, filling in any gaps with realistic hypothetical situations and reasonable assumptions
- Compare the risk values/results from the new reactor scenarios to those derived from the current fleet to assess the adequacy of the current regulatory tools



# Goals for 8/25 Planning Meeting

- Agree on approach for ROP tabletops
- Select sample cases for upcoming tabletop exercises
- Establish timeline for analytical work to develop comparable examples for new reactor designs
- Discuss timing/duration and attendance for upcoming ROP tabletops
- Tentatively schedule tabletop exercises for the Fall

# Next Steps

- Finalize list of case studies/test samples, as necessary
- Further evaluate selected cases using applicable SPAR models and/or other scenarios/tools to evaluate applicability to new reactor designs
- Schedule and complete ROP tabletop(s) in Fall 2011