

# WGRISK Activity Status Update

## *WGRISK(2015)3: Status of Practice for Level 3 Probabilistic Safety Assessment*

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U.S. Nuclear Regulatory Commission  
WGRISK Annual Meeting (Item 10.1)  
March 16-18, 2016

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# Background

- Level 3 PSA is an assessment of the offsite public risks attributable to a spectrum of potential accident scenarios involving a nuclear installation.
- An increasing number of countries are pursuing development and application of Level 3 PSAs.
- Experience indicates there are many challenging issues that would benefit from increased information exchange and sharing of methods and practices.

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# Objectives

- Survey member and observer countries to determine current methodological practices in offsite radiological consequence analysis element of Level 3 PSA.
- Identify common challenges and notable practices.
- Summarize and document results.

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# Core Group Composition

Country	Organization
Canada	Canadian Nuclear Safety Commission (CNSC)
Hungary	Hungarian Academy of Sciences, Centre for Energy Research (MTA EK)
Japan	Japan Atomic Energy Agency (JAEA)
Korea	Korea Atomic Energy Research Institute (KAERI)
Netherlands	Nuclear Research and Consultancy Group (NRG)
United States (activity lead)	U.S. Nuclear Regulatory Commission (USNRC)

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# Coordination: Expanded Group

- Working Group on Analysis and Management of Accidents (WGAMA)
- Committee on Nuclear Regulatory Activities (CNRA)—  
Working Group on Public Communication (WGPC)
- Committee on Radiation Protection and Public Health (CRPPH)
- NEA Nuclear Development Division—Expert Group on Costs of Nuclear Accidents, Liability Issues and their Impact on Electricity Costs (EG-COSTNA)
- International Atomic Energy Agency (IAEA)

# Schedule: Current Status and Future Plans

Activity/Milestone	Planned Completion	Estimated/Actual Completion*
Core group develops draft survey instrument.	September 2015	September 2015
Core group revises and distributes survey instrument to expanded group for review.	December 2015	January 2016
Distribute finalized survey instrument and example response to member and observer country participants.	January 2016	March 2016
Member and observer country participants return completed survey instrument.	April 2016	May 2016
Core group analyzes survey responses and develops preliminary summary of survey results.	August 2016	August 2016
Expanded group meets to conduct more detailed analysis and discussion of survey results.	October 2016	November 2016
Expanded group develops draft task report.	February 2017	February 2017
CSNI approves final task report.	June 2017	June 2017

\* Activities highlighted in green represent completed activities with actual completion dates.

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# Survey Structure (1 of 2)

- Part 1: Respondent Information
  - Helps determine whether and how responses differ across different countries or types of organizations.
- Part 2: Application of Level 3 PSA
  - Obtains information about whether and how participants use or intend to use Level 3 PSA or other offsite radiological consequence analyses.
  - Provides important contextual information for understanding and evaluating responses to Part 3.

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# Survey Structure (2 of 2)

- Part 3: Level 3 PSA Modeling Issues and Technical Challenges
  - Elicits information about whether and how participants address specific modeling issues and other technical challenges in Level 3 PSA.
  - Survey items grouped by high-level technical element.

