Schaperow, Jason

From: Schaperow, Jason
Sent: Wednesday, January 05, 2011 2:40 PM
To: Chang, Richard
Cc: Tinkler, Charles
Subject: Three changes
Attachments: Comm Plan Rev 6b Mod1.docx

Hi Richard,

Charlie suggested a few changes to the first page of the Comm plan revision that I developed this morning. (Please see attached document.) The first two changes are meant to address feedback he has received from Brian Sheron in the past. I am O.K. with these changes. I request that you incorporate them.

Thanks,
Jason

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~~Pre-Decisional – Internal Draft Document~~

Communication Plan for the State-of-the-Art Reactor Consequence Analyses January 2011

Key Messages

- In carrying out its mission to protect public health and safety, NRC performs research to determine the risk to the public from commercial nuclear power plant operation. The SOARCA project develops the best estimates of the health consequences to the public using state-of-the-art understanding of accident phenomena, ~~and~~ plant performance, and radiation health effects ~~for~~ for select and important severe accident scenarios. ~~under accident conditions and understanding of radiation effects on humans~~.

- Scenarios could reasonably be mitigated resulting in either averted core damage or delay or reduction of the radiation release.

- For cases assumed to proceed unmitigated:
  - Accidents progress more slowly and result in smaller and more delayed radiological releases than previously assumed/predicted
  - Individual early fatality risk is essentially zero; no large early releases were predicted

- Individual latent cancer fatality risk within the Emergency Planning zone for the selected and important scenarios is very low
  - Thousands of times lower than the NRC safety goal and millions of times lower than other cancer risks (assuming the linear no-threshold hypothesis
  - Generally dominated by long-term exposure to small annual doses
  - Non-LNT models predict risk is even lower (a factor of 3 to 100 lower)

- Events in which the radiation release bypasses the containment do not pose higher risk than events involving containment failure

- Explicit consideration of seismic impacts on evacuation had no significant impact on predicted risk

- Dominance of external events suggests need for PRA focus and seismic research

Background

The objective of the SOARCA study is to develop a body of knowledge on the realistic outcomes of severe reactor accidents for two pilot plants ~~.~~, (Peach Bottom and Surry). Supporting and corresponding objectives are as follows:

- Incorporate plant improvements not reflected in earlier assessments (hardware, procedures, security related enhancements, emergency planning)
- Incorporate state-of-the-art modeling
- Evaluate the benefits of recent improvements, including security related improvements

- Enable the NRC to communicate severe accident aspects of nuclear safety to diverse stakeholders
- Update the quantification of offsite consequences found in earlier publications such as NUREG/CR-2239 (1982 Siting Study)

The study has adopted new approaches in many areas

- Focus on important severe accident scenarios
- Realistic assessments and detailed analyses
- Integrated, self consistent analyses
- Incorporated recent phenomenological research
- Treatment of seismic impacts on evacuation
- Range of health effects modeling

This communication plan is needed, because the topic studied in SOARCA, namely risk to the public from severe reactor accidents, is controversial as are some of the new approaches adopted by the study.

Audience

External Stakeholders include:

- General public
- Public interest groups
- Media
- Congress
- Licensees
- Nuclear industry organizations (e.g., Nuclear Energy Institute, Institute of Nuclear Power Operations, Electric Power Research Institute)
- Department of Homeland Security, Federal Emergency Management Agency, and other Federal and State agencies
- State regulators and Agreement States
- International groups

Internal Stakeholders include:

- The Commission
- Advisory Committee on Reactor Safeguards (ACRS)
- NRC staff

Communication Team

The communication team includes the following members and will be responsible for facilitating communication activities for the SOARCA project:

Team Manager:

- Patricia Santiago, Office of Nuclear Regulatory Research

Team Members:

- Richard Chang, SOARCA Project Manager, Office of Nuclear Regulatory Research
- Charles Tinkler, Office of Nuclear Regulatory Research
- Jason Schaperow, Office of Nuclear Regulatory Research
- Tina Ghosh, Office of Nuclear Regulatory Research
- Richard Guzman, Office of Nuclear Reactor Regulation
- Scott Burnell, Office of Public Affairs
- Susan Bagley, Office of the Executive Director for Operations
- David Decker, Office of Congressional Affairs

Communication Tools

The following tools will be used to communicate with external stakeholders:

Public Website	SOARCA information is available on the external Web site at: http://www.nrc.gov/about-nrc/regulatory/research/soar.html
Questions and Answers	Possible questions that may be asked about the project and the answers that are deemed acceptable are provided at the end of this Communication Plan. They include information that highlights aspects of the project that audience members may inquire about.
Fact Sheet	A fact sheet will be prepared to provide the public with an overview of the project.
Brochure	A summary of the SOARCA project will be presented in a NUREG/BR brochure using plain language and applying risk communication techniques. This brochure is a tool to enable a good level understanding about risk, for those not interested in technical details. It will be issued in conjunction with the public release of the draft NUREG.
Public Meetings	Meetings will be held to publicly share information at key phases of the project. Meetings will be held when the draft NUREG is released for public review and comment to facilitate public awareness and review of the draft NUREG.
Press Releases	A press release will be issued after the peer review is completed and in conjunction with the NUREG public release, and at other times as appropriate. Press releases will be coordinated with the Office of Public Affairs.
Technical Reports	Technical information about the SOARCA process and results will be documented in a NUREG. The draft NUREG will be made available for public review and comment. An uncertainty analysis, to confirm the robustness of the SOARCA predictions of the most likely outcomes and determine the variability of the SOARCA results to modeling parameters and assumptions, will be

documented in a NUREG/CR. In addition, the lessons learned and experiences gained from utilizing the MELCOR and MACCS2 codes for SOARCA will be documented in NUREG/CR reports.

External Briefings — Briefings will be provided to congressional and State stakeholders as requested. Briefings will also be provided to other federal agencies, such as FEMA, as required prior to release of the draft NUREG for public review and comment.

Internal Briefings — Briefings will be provided to headquarters and regional staffs, ACRS, and Commission staffs as required, to help prepare internal stakeholders to communicate the SOARCA results prior to releasing the results to the public.

Timeline

The following table identifies the planned communications activities.

Action	Finish Date
Brief Commission TAs (semi-annual briefing)	March 2011
Public briefing at Regulatory Information Conference	March 10, 2011
Complete revising NUREG to reflect peer review and licensee fact check comments	April 2011
Brief peer review committee on revised NUREG	May 2011
Receive final reports from peer review committee on NUREG	June 2011
Provide Commission with peer reviewed version of NUREG	June 2011
Brief ACRS on peer reviewed version of NUREG	June 2011
Webinar for regional and HQ staff before public release of draft NUREG	June 2011
Inform Surry and Peach Bottom of the pending release of draft NUREG	June 2011
Brief state and Federal agencies, and congressional staffs (coordinating through OCA) as needed on draft NUREG prior to public release	June 2011
Publish brochure	June 2011
Brief peer review committee on revised parameter list and distributions for uncertainty analysis	June 2010
Release draft NUREG for public review and comment along with press release and federal register notice	July 2011
Conduct public meetings at Surry, Peach Bottom and Headquarters areas	July – August 2011
Brief Commission TAs (semi-annual briefing)	September 2011
Brief peer review committee on results of uncertainty analysis	September 2010
ACRS and OGC review of NUREG	September-October 2011
NRC interoffice review of NUREG	September-October 2011
Brief ACRS	October 2011
Incorporate ACRS comments on NUREG	October 2011
Provide final NUREG to Commission with recommendations on next steps for SOARCA	November 2011

Q's and A's

Please take the Q's and A's from the Communication Plan attached to SECY-09-0054.