

# UNITED STATES NUCLEAR REGULATORY COMMISSION ADVISORY COMMITTEE ON REACTOR SAFEGUARDS WASHINGTON, DC 20555 - 0001

May 30, 2017

The Honorable Kristine L. Svinicki Chairman U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

SUBJECT: SUMMARY REPORT – 641st MEETING OF THE ADVISORY COMMITTEE ON

REACTOR SAFEGUARDS, MARCH 9-11, 2017

## Dear Chairman:

During its 641<sup>st</sup> meeting, March 9-11, 2017, the Advisory Committee on Reactor Safeguards (ACRS) discussed several matters and completed the following report, letters, and memoranda:

# **REPORT**

Report to Kristine L. Svinicki, Chairman, NRC, from Dennis C. Bley, Chairman, ACRS:

 "Proposed Revision To NUREG-1530, 'Reassessment of NRC's Dollar Per Person-Rem Conversion Factor Policy'," dated March 20, 2017

# **LETTERS**

Letter to Victor M. McCree, Executive Director for Operations, NRC, from Dennis C. Bley, Chairman, ACRS:

 "Interim Comments on Draft NUREG/BR-0058, Revision 5, 'U.S. Nuclear Regulatory Commission Guidance on Performing Cost-Benefit Analyses'," dated March 20, 2017

Letter to Victor M. McCree, Executive Director for Operations, NRC, from Dennis C. Bley, Chairman, ACRS:

• "NRC Non-Light Water Reactor Vision & Strategy – Near-Term Implementation Action Plans and Advanced Reactor Design Criteria," dated March 21, 2017

### **MEMORANDA**

Memoranda to Victor M. McCree, Executive Director for Operations, NRC, from Andrea D. Veil, Executive Director, ACRS:

• "Regulatory Guides," dated March 16, 2017

- Draft Regulatory Guide, DG-1338, "Qualification of Safety-Related Vented Lead-Acid Storage Batteries for Nuclear Power Plants"
- Regulatory Guide 4.25, "Assessment of Abnormal Radioactive Discharges in Ground Water to the Unrestricted Area at Nuclear Power Plant Sites"
- "Documentation of Receipt of Applicable Official NRC Notices to the Advisory Committee on Reactor Safeguards for March 2017," dated March 16, 2017

## **HIGHLIGHTS OF KEY ISSUES**

# 1. Proposed Updates to NRC Guidance for Cost-Benefit Analysis

The Committee met with representatives of the NRC staff to discuss proposed updates to NRC guidance for performing cost-benefit analysis, namely, draft Revision 5 to NUREG/BR-0058, "U.S. Nuclear Regulatory Commission Guidance on Performing Cost-Benefit Analyses," and draft Revision 1 to NUREG-1530, "Reassessment of NRC's Dollar per Person-Rem Conversion Factor Policy."

#### Committee Action

The Committee issued a letter to the NRC Executive Director for Operations on draft NUREG/BR-0058, dated March 20, 2017, finding it reasonable to seek public comments on the draft NUREG and plans to provide further comments on the draft NUREG in parallel. The Committee should have another opportunity to review Revision 5 to NUREG/BR-0058 after all appendices are completed and prior to its issuance.

The Committee issued a report to the NRC Chairman on draft NUREG-1530, dated March 20, 2017, with the following conclusion and recommendations: 1) The staff's systematic process to derive a contemporary basis for the dollar per person-rem value is an important improvement to support NRC cost-benefit analyses; NUREG-1530, Revision 1, should be issued, and 2) a further revision to NUREG-1530 should be developed; that revision should characterize and quantify the uncertainty in the dollar per person-rem value.

# 2. Advanced Reactor Design Implementation Action Plan

The Committee met with representatives of the NRC staff to discuss Volumes 1 and 2 of the "NRC Non-Light Water Reactor (Non-LWR) Vision and Strategy Staff Report: Near-Term Implementation Action Plans," and the advanced non-LWR design criteria published in draft Regulatory Guide DG-1330, "Guidance for Developing Principal Design Criteria for Non-Light-Water Reactors." Representatives from the Department of Energy, the nuclear industry, and non-LWR nuclear developers also briefed the Committee regarding their efforts in this area.

#### Committee Action

The Committee issued a letter to the NRC Executive Director for Operations on these matters, dated March 21, 2017, with the following findings and recommendations: 1) The draft NRC nonlight water reactor vision and strategy – near-term implementation action plan reports represent a reasonable beginning and should be issued, 2) The highest priority should be given to implementing action plan Strategy 3, a flexible regulatory review process, and Strategy 5, technology-inclusive policy issues, 3) Development of the advanced reactor design criteria as

described in draft Regulatory Guide DG-1330 is progressing and should continue, 4) Strategy 3, Contributing Activity 3.2, which develops approaches to licensing bases and will determine licensing bases for non-LWR technologies, is particularly important to implement early on; identification of technology-specific licensing basis events needs to be developed to ensure that the associated design criteria are complete, and 5) The staff should consider making a number of the design criteria more explicit, as described in this report.

# 3. Generic Issues Program

The Committee received a presentation on the status and update of the Generic Issues Program from the Office of Nuclear Regulatory Research. The presentation focused on the three stages of the review and evaluation of a proposed generic safety issue, how an issue moves through the three stages of evaluation towards becoming a generic safety issue, and how a generic safety issue is resolved.

## Committee Action

There was no Committee action as a result of this briefing.

# RECONCILIATION OF ACRS COMMENTS AND RECOMMENDATIONS

- The Committee considered the Executive Director for Operations' response of December 13, 2016, to the October 17, 2016 ACRS letter, "Review of RG 1.26, Revision 5, 'Quality Group Classifications and Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants'." The Committee was satisfied with the Executive Director for Operations' response.
- The Committee considered the Executive Director for Operations' response of December 7, 2016, to the November 15, 2016 ACRS letter, "Monticello Nuclear Generating Plant Licensing Amendment Request for Operation in the Extend Flow Window Domain." The Committee was satisfied with the Executive Director for Operations' response.

# SCHEDULED TOPICS FOR THE 642<sup>nd</sup> ACRS MEETING

The following topics are scheduled for the 642<sup>nd</sup> ACRS meeting, to be held on April 6-8, 2017:

- Meeting with the Commission
- NuScale Topical Report 1015-18653, "Highly Integrated Protection System Platform"
- Subsequent License Renewal Part II
- Proposed Updates to NRC Guidance for Cost-Benefit Analysis (NUREG/BR-0058)

Sincerely,

/RA/

Dennis C. Bley Chairman described in draft regulatory guide DG-1330 is progressing and should continue, 4) Strategy 3, Contributing Activity 3.2, which develops approaches to licensing bases and will determine licensing bases for non-LWR technologies, is particularly important to implement early on; identification of technology-specific licensing basis events needs to be developed to ensure that the associated design criteria are complete, and 5) The staff should consider making a number of the design criteria more explicit, as described in this report.

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Sincerely,

/RA/ Dennis C. Bley Chairman

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