



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

June 9, 2015

The Honorable Stephen G. Burns
Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

SUBJECT: SUMMARY REPORT – 624th MEETING OF THE ADVISORY COMMITTEE ON
REACTOR SAFEGUARDS, MAY 7-8, 2015

Dear Chairman Burns:

During its 624th meeting, May 7-8, 2015, the Advisory Committee on Reactor Safeguards (ACRS) discussed several matters and completed the following memoranda:

MEMORANDA

Memoranda to Mark A. Satorius, Executive Director for Operations, NRC, from Edwin M. Hackett, Executive Director, ACRS:

- Draft Final Regulatory Guide, dated May 11, 2015
 - Regulatory Guide 1.27, Revision 3, "Ultimate Heat Sink for Nuclear Power Plants"
- Interim Staff Guidance, dated May 11, 2015
 - NSIR/DPR-ISG-02, "Emergency Planning Exemption Requests for Decommissioning Power Plants"

HIGHLIGHTS OF KEY ISSUES

1. **Grand Gulf MELLLA+ License Amendment**

The Committee met with representatives of the NRC staff and Entergy Operations, Inc. to discuss a license amendment request for operation of the Grand Gulf Nuclear Station (GGNS) Unit 1 in the expanded Maximum Extended Load Line Limit Analysis Plus (MELLLA+) domain and the associated NRC staff draft safety evaluation.

GGNS currently operates in the Maximum Extended Load Line Limit Analysis domain. The MELLLA+ operating domain increases operating flexibility by allowing control of reactivity at maximum power by changing flow rather than control rod insertion and withdrawal. The discussion included the GGNS MELLLA+ safety analysis and proposed solutions to maintain the safety margin under the MELLLA+ operation domain. The licensee evaluated stability during Anticipated Transient Without Scram events, including those initiated by turbine trip and recirculation pump trip. Analysis results showed that mitigating actions in emergency operating procedures (e.g., flow runback to uncover the feedwater spargers and early boron injection) are effective in the MELLLA+ operating domain if operator actions are accomplished within a specified time. The Committee requested additional information about analytical uncertainties in the timing of operator responses, the onset of core power oscillations, and the magnitude of consequential peak cladding temperatures.

Committee Action

The Committee is expecting additional technical information from the applicant and plans to further discuss this issue during the June ACRS Full Committee meeting.

2. Draft Final Regulatory Guide 1.27, Revision 3

The Committee met with the NRC staff to discuss draft final Regulatory Guide (RG) 1.27, Revision 3, "Ultimate Heat Sink for Nuclear Power Plants." The staff provided an overview of RG 1.27 and discussed reasons for the revision. The staff indicated that stakeholder comments on the draft RG 1.27, including comments from the ACRS Subcommittee were addressed. The staff concluded that the draft final Regulatory Guide 1.27, Revision 3, is ready for final publication.

Committee Action

The Committee reviewed draft Final Regulatory Guide 1.27, Revision 3, and concluded that the staff had satisfactorily addressed comments raised during the March 4, 2015 ACRS Regulatory Policies & Practices Subcommittee meeting. The Committee has no objection to the staff's proposal to issue this Guide.

3. Interim Staff Guidance

The Committee considered the following Interim Staff Guidance, and decided not to review it. However, the Committee requested an opportunity to review future guidance documents associated with the decommissioning rulemaking. The Committee has no objection to the staff's proposal to issue the guidance.

- NSIR/DPR-ISG-02, "Emergency Planning Exemption Requests for Decommissioning Power Plants"

4. RECONCILIATION OF ACRS COMMENTS AND RECOMMENDATIONS

- The Committee considered the Executive Director for Operations' response of March 27, 2015, to comments and recommendations included in the February 20, 2015 ACRS letter on draft final Generic Letter 2015-XX, "Treatment of Natural Phenomena Hazards at Fuel Cycle Facilities." The Committee was satisfied with the Executive Director for Operations' response.
- The Committee considered the Executive Director for Operations' response of April 2, 2015, to comments and recommendations included in the February 19, 2015 ACRS letter report on the safety aspects of the Nuclear Innovation North America, LLC Combined License Application for South Texas Project Nuclear Station, Units 3 and 4. The Committee was satisfied with the Executive Director for Operations' response.

SCHEDULED TOPICS FOR THE 625th ACRS MEETING

The following topics are scheduled for the 625th ACRS meeting, to be held on June 10-12, 2015:

- Grand Gulf MELLLA+ License Amendment
- PSEG Early Site Permit
- Documents that Support the Mitigation of Beyond-Design-Basis Events Rulemaking
- Update on Reactor Oversight Process
- Meeting with the Commission
- Meeting with the Executive Director for Operations

Sincerely,

/RA/

John W. Stetkar
Chairman

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John W. Stetkar
Chairman

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