

May 10, 2017

Dr. Dennis C. Bley, Chairman  
Advisory Committee on Reactor Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

SUBJECT: RESPONSE TO THE ADVISORY COMMITTEE ON REACTOR SAFEGUARDS' LETTER, "NRC NON-LIGHT WATER REACTOR VISION & STRATEGY – NEAR-TERM IMPLEMENTATION ACTION PLANS AND ADVANCED REACTOR DESIGN CRITERIA," DATED MARCH 21, 2017

Dear Dr. Bley:

I am responding to your letter dated March 21, 2017 (Agencywide Documents Access Management System (ADAMS) Accession No. ML17079A100), in which the Advisory Committee on Reactor Safeguards (ACRS) provided its findings and recommendations concerning the following U.S. Nuclear Regulatory Commission (NRC) documents on non-light water reactors and advanced reactors:

1. "NRC Non-Light Water Reactor (Non-LWR) Vision and Strategy Staff Report: Near-Term Implementation Action Plans," Volumes 1 and 2 (ADAMS Accession Nos. ML16294A181 and ML16334A495)
2. Draft Regulatory Guide-1330 (DG-1330), "Guidance for Developing Principal Design Criteria for Non-Light Water Reactors," (ADAMS Accession No. ML16301A307)

The staff appreciates the Committee's support for the NRC issuing the vision and strategy implementation action plans and for the NRC's continuing work on DG-1330. In its letter, the Committee identified areas of improvement and clarification for the vision and strategy, including providing recommendations on how to prioritize strategies. The Committee noted that Strategies 3 and 5 should receive the highest priority and that Contributing Activity 3.2, which develops approaches to licensing bases, is a particularly important task for the staff to implement early on. In its letter, the Committee also included recommendations for improvements to the design criteria in DG-1330, particularly in the following areas:

- reactor design modular high temperature gas-cooled reactors, (mHTGR-DC 10);
- reactor containment for non-light water reactors, advanced reactor design criteria (ARDC) 16;
- electric power, ARDC 17; and
- control of reactivity insertion, ARDC 26.

Finally, the Committee also included a general comment to facilitate, or at least not preclude, the use of probabilistic risk assessment in the design criteria language.

The NRC staff plans to finalize the implementation action plan report and will consider ACRS recommendations and public comments as the staff executes the implementation action plans. The staff agrees with the ACRS that Strategies 3 and 5 should receive the highest priority. Regarding DG-1330, the staff will consider ACRS recommendations while also addressing public comments received. The staff will further engage the ACRS once it has developed a draft of the final guide.

The staff appreciates the ACRS's review and feedback on the staff's non-LWR implementation action plans and DG-1330. The staff looks forward to further interaction with the Committee as the staff executes the implementation action plans and works to finalize DG-1330.

Sincerely,

*/RA/*

Victor M. McCree  
Executive Director  
for Operations

cc: Chairman Svinicki  
Commissioner Baran  
Commissioner Burns  
SECY

SUBJECT: RESPONSE TO THE ADVISORY COMMITTEE ON REACTOR SAFEGUARDS' LETTER, "NRC NON-LIGHT WATER REACTOR VISION & STRATEGY – NEAR-TERM IMPLEMENTATION ACTION PLANS AND ADVANCED REACTOR DESIGN CRITERIA," DATED MARCH 21, 2017 DATED: MAY 10, 2017.

**DISTRIBUTION**: OEDO-17-00200

PUBLIC

JMazza, NRO

ACubbage, NRO

JSegala, NRO

JMonninger

RidsAcrcs\_MailCTR Resource

RidsNroMailCenter Resource

RidsEdoMailCenter

RidsNroOd Resource

RidsOcaMailCenter

RidsOpaMailCenter

RidsSecyMailCenter

**ADAMS Accession Number ML17089A647**

**\*via email**

**NRO-002**

<b>OFFICE</b>	NRO/DSRA/ARPB	NRO/DSRA/ARPB	NRO/DSRA/ARPB	TechEditor*
<b>NAME</b>	JMazza	ARedden	ACubbage	CHsu
<b>DATE</b>	03/30/2017	04/03/2017	04/04/2017	04/05/2017
<b>OFFICE</b>	NRO/DSRA/ARPB	NRO/DSRA	NRO	EDO
<b>NAME</b>	JSegala	JMonninger	VOrdaz	VMcCree
<b>DATE</b>	04/13/2017	04/17/2017	04/28/2016	05/10/2017

**OFFICIAL RECORD COPY**