



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

October 5, 2023

Mrs. Joy L. Rempe, Chairman  
Advisory Committee on Reactor Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

SUBJECT: RESPONSE TO ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
LETTER ON ITS REVIEW OF REGULATORY GUIDE 1.183, REVISION 1,  
"ALTERNATIVE RADIOLOGICAL SOURCE TERMS FOR EVALUATING  
DESIGN BASIS ACCIDENTS AT NUCLEAR POWER REACTORS"

Dear Chairman Rempe:

The purpose of this letter is to provide the U.S. Nuclear Regulatory Commission (NRC) staff's response to the Advisory Committee on Reactor Safeguards (ACRS) letter dated September 20, 2023, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML23256A179), whereby the ACRS reported on its review of the NRC staff's Regulatory Guide (RG) 1.183, Revision 1, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors."

In its letter, the ACRS recommended that RG 1.183, Revision 1, should be issued. Based on the information provided to the ACRS and discussions during the September 6, 2023, ACRS Full Committee meeting with external stakeholders and the NRC staff, the ACRS noted that the following two topics should also be addressed:

- (1) Because of the need for regulatory stability relative to the use of alternative source terms (including high burnup and high enriched fuels), a single version (Revision 2) of the RG should be developed. The schedule for this development should be aligned with the upcoming rulemaking on increased enrichment.
- (2) The staff should consider detailed comments in the September 20 letter related to alignment with emergency preparedness guidance, rationale associated with the RG, and the need for capturing lessons learned during implementation.

The NRC staff recognizes the ACRS conclusions and recommendations and will ensure there is appropriate consideration of these topics in future updates to this regulatory guidance or related documentation. The NRC staff appreciates the ACRS's timely and thorough review of RG 1.183, Revision 1, which is available in ADAMS (ML23082A305) and is expected to be issued in October 2023.

J. Rempe

- 2 -

Sincerely,

A handwritten signature in black ink, appearing to be 'a' followed by a long horizontal stroke.

Kock, Andrea signing on behalf  
of Veil, Andrea  
on 10/06/23

Andrea D. Veil, Director  
Office of Nuclear Reactor Regulation

cc: Chairman Hanson  
Commissioner Caputo  
Commissioner Crowell  
Commissioner Wright

SUBJECT: RESPONSE TO ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
 LETTER ON ITS REVIEW OF REGULATORY GUIDE 1.183, REVISION 1,  
 "ALTERNATIVE RADIOLOGICAL SOURCE TERMS FOR EVALUATING DESIGN  
 BASIS ACCIDENTS AT NUCLEAR POWER REACTORS" DATED: 10/05/2023

DISTRIBUTION:

PUBLIC

- RidsEdoMailCenter Resource
- RidsSecyMailCenter Resource
- RidsAcrs\_MailCTR Resource
- RidsNrrDra Resource
- RidsOpaMail Resource
- RidsNrrMailCenter Resource

ADAMS Accession No.: ML23276B392

OFFICE	NRR/DRA/ARCB	NRR/DRA/ARCB	NRR/DRA/ARCB: BC	QTE
NAME	SMeighan	MBlumberg	KHsueh	Kazariah-Kribbs
DATE	10/03/2023	10/04/2023	10/03/2023	10/05/2023
OFFICE	NRR/DRA	NRR/D		
NAME	MFranovich	AVeil		
DATE	10/04/2023	10/05/2023		

**OFFICIAL RECORD COPY**