



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

August 22, 2018

Mr. W. Anthony Nowinowski, Program Manager
PWR Owners Group, Program Management Office
Westinghouse Electric Company
1000 Westinghouse Drive, Suite 380
Cranberry Township, PA 16066

SUBJECT: DRAFT SAFETY EVALUATION FOR PRESSURIZED WATER REACTOR
OWNERS GROUP TOPICAL REPORT PWROG-16043-P, REVISION 2,
"PWROG PROGRAM TO ADDRESS NRC INFORMATION NOTICE 2012-09:
'IRRADIATION EFFECTS ON FUEL ASSEMBLY SPACER GRID CRUSH
STRENGTH' FOR WESTINGHOUSE AND CE PWR FUEL DESIGNS"

Dear Mr. Nowinowski:

By letter dated February 1, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17039B050), the Pressurized Water Reactor (PWR) Owners Group (PWROG, or "the applicant"), submitted to the U.S. Nuclear Regulatory Commission (NRC) staff for review licensing topical report (TR) PWROG-16043-P, Revision 2, "PWROG Program to Address NRC Information Notice 2012-09: 'Irradiation Effects on Fuel Assembly Spacer Grid Crush Strength' for Westinghouse and CE [Combustion Engineering] PWR Fuel Designs," ((ADAMS Package Accession No. ML17039B061), henceforth referred to as the "TR"). Subsequent letters dated March 27, 2018, May 15, 2018, and May 15, 2018 (ADAMS Accession Nos. ML18100A053, ML18143B462, and ML18144A760, respectively), provided additional information.

The NRC staff review determined that the information provided in the TR and responses to NRC staff requests for additional information adequately demonstrates that the proposed methodologies to address end-of-life (EOL) effects on spacer grids and to recover margin through credit for flowing water damping are acceptable for use, subject to the limitations and conditions contained in the enclosed draft safety evaluation (SE), with existing methodologies that the NRC has previously found to be acceptable for analysis of fuel assembly structural behavior during seismic and loss-of-coolant-accident events.

Pursuant to Section 2.390 of Title 10 of the *Code of Federal Regulations* (10 CFR), we believe that the enclosed draft SE may contain proprietary information. If you believe that any information in the enclosure is proprietary, please identify such information line-by-line and define the basis pursuant to the criteria of 10 CFR 2.390. Twenty working days are provided for you to comment on the proprietary aspects and provide any factual errors or clarity concerns contained in the SE. The final SE will be issued after making any necessary changes and a non-proprietary version will be made publicly available. The NRC staff's disposition of your comments on the draft SE will be discussed in the final SE.

NOTICE: The Enclosure transmitted herewith contains Proprietary Information. When separated from the Enclosure, this transmittal document is decontrolled.
--

W. Nowinowski

- 2 -

To facilitate the NRC staff's review of your comments, please provide a marked-up copy of the revised draft SE showing proposed changes and provide a summary table of the proposed changes.

If you have any questions, please contact Jason Drake at 301-415-8378.

Sincerely,

/RA/

Dennis C. Morey, Chief
Licensing Processes Branch
Division of Licensing Project
Office of Nuclear Reactor Regulation

Docket No. 99902037

Enclosure:
Draft SE

W. Nowinowski

- 3 -

SUBJECT: DRAFT SAFETY EVALUATION FOR PRESSURIZED WATER REACTOR
OWNERS GROUP TOPICAL REPORT PWROG-16043-P, REVISION 2,
“PWROG PROGRAM TO ADDRESS NRC INFORMATION NOTICE 2012-09:
‘IRRADIATION EFFECTS ON FUEL ASSEMBLY SPACER GRID CRUSH
STRENGTH’ FOR WESTINGHOUSE AND CE PWR FUEL DESIGNS”
DATED AUGUST 22, 2018

DISTRIBUTION:

PUBLIC (Cover Letter ONLY)

NON-PUBLIC (Enclosure)

RidsResOd	RidsNrrDpr	RidsACRS_MailCTR	SKrepel, NRR
RidsNrrLADHarrison	RidsOgcMailCenter	RidsNrrDprPlpb	JDrake, NRR
RidsNrrDe	DMorey, NRR	RidsNrrDssSnpb	
RidsNroOd	RLukes, NRR		

ADAMS Accession Nos.:

PKG ML18186A619

Letter ML18186A634 (Letter);

Draft Enclosure ML18186A625

***concurrence via email**

NRR-106

OFFICE	NRR/DPR/PLPB*	NRR/DPR/PLPB*	NRR/DSS/SNPB*	NRR/DPR/PLPB
NAME	JDrake	DHarrison	RLukes	DMorey
DATE	8/21/2018	08/09/2018	08/22/2018	08/22/2018

OFFICIAL RECORD COPY