



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

October 4, 2018

Technical Specifications Task Force  
11921 Rockville Pike, Suite 100  
Rockville, MD 20852

SUBJECT: PLANT-SPECIFIC ADOPTION OF TRAVELERS TSTF-51, REVISION 2, "REVISE CONTAINMENT REQUIREMENTS DURING HANDLING IRRADIATED FUEL AND CORE ALTERATIONS," TSTF-471, REVISION 1, "ELIMINATE USE OF TERM CORE ALTERATIONS IN ACTIONS AND NOTES," AND TSTF-286, REVISION 2, "OPERATIONS INVOLVING POSITIVE REACTIVITY ADDITIONS"

Dear Members of the Technical Specifications Task Force:

By letter dated November 7, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13246A358), the U.S. Nuclear Regulatory Commission (NRC) staff identified potential operating issues with the continued adoption of the subject Technical Specifications Task Force (TSTF) travelers related to core monitoring instrumentation and dose consequences. It was suggested in the letter that licensees not submit license amendment requests (LARs) to adopt these three travelers until a final resolution was achieved.

TSTF-51 and TSTF-471

After considerable review and analysis, the NRC staff concludes that for certain facilities, LARs adopting TSTF-51 and TSTF-471 could result in exceeding the bounding licensing basis Fuel Handling Accident (FHA) analysis of record dose for the control room and is therefore considered an unanalyzed condition.

To minimize the potential for being requested to provide needed information under existing requirements and guidance, licensees adopting TSTF-51 and TSTF-471 are reminded that their application should include the following information to support the NRC staff's review of the requested changes:

- As described in the Reviewer's Note incorporated by TSTF-51 into the Standard Technical Specifications, information is to be provided describing the licensee's evaluation of "recently" irradiated fuel demonstrating that after sufficient radioactive decay has occurred (from the time of shutdown) the radiological doses resulting from an FHA remain below the regulatory limits specified in General Design Criterion 19, *Control room*, and well within the offsite reference values specified in Title 10 of the *Code of Federal Regulations* (10 CFR) Sections 100.11 or 50.67, without crediting the systems not required to be operable. The licensee should describe the radiological analysis assumptions, inputs, and methods in sufficient detail to support review by the NRC staff. Licensees whose licensing basis includes analysis of the dropping of a heavy load onto irradiated fuel in Chapter 15 (or equivalent) of their updated Final Safety Analysis Report (FSAR) must analyze dropping of a heavy load as part of adopting TSTF-51.

In addition to the information requested in TSTF-51, the NRC staff requests that one of the following discussions be provided for specifications revised to remove the defined term “core alterations” from their Applicability:

- Confirm that the length of time defined as “recently” is less than the time required to remove the reactor vessel head and internals and expose the irradiated fuel after a shutdown;
- Provide an analysis that demonstrates that the dropping of any unirradiated fuel assembly, source, reactivity control component, or other component affecting reactivity within the reactor vessel onto irradiated fuel assemblies prior to the period of time defined as “recently” will not result in a radioactive release from the irradiated fuel;
- Describe the limitations or controls that would prevent movement of any unirradiated fuel assembly, source, reactivity control component, or other component affecting reactivity within the reactor vessel capable of damaging a fuel assembly prior to the time period defined as “recently”; or
- Provide an analysis that demonstrates that the dose consequences of a failure of a single irradiated fuel assembly with no technical specification-required mitigation systems available remain below the regulatory limits and the regulatory guidance limits for a fuel handling accident.

#### TSTF-286

The NRC staff has reviewed traveler TSTF-571-T, “Revise Actions for Inoperable Source Range Neutron Flux Monitor,” provided by the TSTF in a letter dated August 9, 2018 (ADAMS Accession No. ML18221A561). Additionally, the TSTF stated in its August 9, 2018, letter that they will annotate their Web site to indicate that the licensees adopting TSTF-286 must also include the changes in TSTF-571-T. If a licensee includes the changes of traveler TSTF-571-T when adopting TSTF-286, the NRC staff’s technical concerns should be adequately addressed with regard to TSTF-286.

#### Conclusion

Provided that the above information is satisfactorily addressed and implemented, the NRC staff has determined that its initial concerns are resolved and no changes are needed to the travelers. Licensees may submit LARs to adopt these three travelers given the provisions stated above.

If you have any questions, please contact Michelle Honcharik at 301-415-1774 or via e-mail at [Michelle.Honcharik@nrc.gov](mailto:Michelle.Honcharik@nrc.gov).

Sincerely,

*/RA/*

Victor G. Cusumano, Chief  
Technical Specifications Branch  
Division of Safety Systems  
Office of Nuclear Reactor Regulation

Project No. 753

cc: See next page

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**\* Via E-mail**

**NRR-106**

<b>OFFICE</b>	NRR/DORL/LSPB/LA*	NRR/DRA/ARCB/BC *	NRR/DSS/SRXB/BC*
<b>NAME</b>	JBurkhardt	KHsueh	JWhitman
<b>DATE</b>	09/21/2018	09/25/2018	09/24/2018
<b>OFFICE</b>	NRR/DSS/STSB/PM *	NRR/DSS/STSB/BC	
<b>NAME</b>	MHoncharik	VCusumano	
<b>DATE</b>	10/04/2018	10 / 04 / 2018	

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PLANT-SPECIFIC INFORMATION FROM EACH LICENSEE IN ORDER TO ADOPT THE  
TRAVELERS TSTF-51, TSTF-286, AND TSTF-471

Technical Specifications Task Force Project No. 753

cc:

Technical Specifications Task Force  
c/o EXCEL Services Corporation  
11921 Rockville Pike, Suite 100  
Rockville, MD 20852  
Attention: Brian D. Mann  
E-mail: [brian.mann@excelservices.com](mailto:brian.mann@excelservices.com)

James P. Miksa  
Entergy Nuclear Operations, Inc.  
Palisades Nuclear Power Plant  
27780 Blue Star Memorial Highway  
Covert, MI 49043  
E-mail: [jmiksa@entergy.com](mailto:jmiksa@entergy.com)

Jordan L. Vaughan  
Duke Energy  
EC2ZF / P.O. Box 1006  
Charlotte, NC 28202  
E-mail: [jordan.vaughan@duke-energy.com](mailto:jordan.vaughan@duke-energy.com)

Ryan M. Joyce  
Southern Nuclear Operating Company  
3535 Colonnade Parkway / Bin N-274-EC  
Birmingham, AL 35243  
E-mail: [rmjoyce@southernco.com](mailto:rmjoyce@southernco.com)

David M. Gullott  
Exelon Generation  
4300 Winfield Road  
Warrenville, IL 60555  
E-mail: [David.Gullott@exeloncorp.com](mailto:David.Gullott@exeloncorp.com)

Wesley Sparkman  
Southern Nuclear Operating Company  
42 Inverness Center Parkway / Bin B237  
Birmingham, AL 35242  
E-mail: [wasparkm@southernco.com](mailto:wasparkm@southernco.com)