



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

December 17, 2019

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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RE: TRAVELER TSTF-582,
REVISION 0, "RPV WIC ENHANCEMENTS" (EPID L-2019-PMP-0199)

Dear Members of the Technical Specifications Task Force:

By letter dated August 28, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19240A260), you submitted to the U.S. Nuclear Regulatory Commission (NRC) for review Traveler TSTF-582, Revision 0, "RPV [Reactor Pressure Vessel] WIC [Water Inventory Control] Enhancements."

Upon review of the information provided, the NRC staff has determined that additional information is needed to complete the review. On December 17, 2019, Mr. Brian Mann, Vice President of Industry Programs, EXCEL Services Corporation, agreed that the NRC staff will receive your response to the enclosed request for additional information (RAI) questions within 60 calendar days of the date of this letter.

The review schedule that was provided in the acceptance letter dated December 5, 2019 (ADAMS Accession No. ML19276G660), has not changed.

MILESTONE	SCHEDULE DATE
Issue Draft Safety Evaluation	May 15, 2020
Issue Final Safety Evaluation	August 28, 2020

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

Sincerely,

/RA/

Michelle C. Honcharik, Senior Project Manager
Technical Specifications Branch
Division of Safety Systems
Office of Nuclear Reactor Regulation

Project No. 753

Enclosure:
Request for Additional Information

cc: See next page

cc:

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REVISION 0, "RPV WIC ENHANCEMENTS" (EPIDL-2019-PMP-0199)
Dated: December 17, 2019

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ADAMS Accession No.: ML19351D783 *concurred via e-mail NRR-106

OFFICE	NRR/DEX/EICB*	NRR/DSS/STSB/BC*	NRR/DSS/STSB/PM
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DATE	12/5/2019	12/17/2019	12/17/2019

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REQUEST FOR ADDITIONAL INFORMATION
TECHNICAL SPECIFICATIONS TASK FORCE
TRAVELER TSTF-582, REVISION 0, "RPV WIC ENHANCEMENTS"
(EPID L-2019-PMP-0199)

By letter dated August 28, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19240A260), the Technical Specifications Task Force (TSTF) submitted traveler TSTF-582, Revision 0, "RPV [Reactor Pressure Vessel] WIC [Water Inventory Control] Enhancements," to the U.S. Nuclear Regulatory Commission (NRC). Traveler TSTF-582, Revision 0, proposes changes to the Standard Technical Specifications (STS) for boiling water reactor (BWR) General Electric (GE) plant designs. These changes would be incorporated into future revisions of NUREG-1433 and NUREG-1434^[1]. This traveler would be made available to licensees for adoption through the consolidated line item improvement process (CLIP).

The proposed change would revise technical specifications (TSs) related to RPV WIC to incorporate operating experience in the STS and to correct errors and omissions in TSTF-542, Revision 2, "Reactor Pressure Vessel Water Inventory Control" (ADAMS Accession No. ML16074A448).

During the review of the submitted TSTF traveler, the NRC staff found the following additional information is needed to complete the instrumentation and controls branch (EICB) review. The responses are required to ensure that the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.3(c)(2) and 10 CFR 50.36(c)(3) are met.

EICB-RAI 1:

Section 3.0 of the submitted TSTF-582 provides the technical evaluation of the proposed change. TSTF-582 proposes to eliminate the requirement for a manual emergency core cooling systems (ECCS) initiation signal to start the required ECCS injection/spray subsystem. Further, part of Improvement 1 states, "TS 3.5.2 Surveillance Requirements (SRs) related to manual initiation using the ECCS signal (such as verifying automatic alignment of valves on an initiation signal) are eliminated. Related to this change, the TS 3.3.5.2 functions, Surveillance Requirements, and Actions that only support manual initiation using an ECCS signal (including interlocks and minimum flow instruments) are eliminated."

- a. The traveler states that it is not necessary to have requirements for BWR/4 and BWR/6 functions 1.a and 2.a, injection valve permissives for low pressure core spray and low pressure coolant injection because in Modes 4 and 5 the reactor pressure is well below

[1] U.S. Nuclear Regulatory Commission, "Standard Technical Specifications, General Electric, BWR/4 Plants," NUREG-1433, Volume 1, "Specifications," and Volume 2, "Bases," Revision 4.0, April 2012 (ADAMS Accession Nos. ML12104A192 and ML12104A193, respectively).

U.S. Nuclear Regulatory Commission, "Standard Technical Specifications, General Electric BWR/6 Plants," NUREG-1434, Volume 1, "Specifications," and Volume 2, "Bases," Revision 4.0, April 2012 (ADAMS Accession Nos. ML12104A195 and ML12104A196, respectively).

the ECCS maximum design pressure. Please describe how an ECCS subsystem will achieve manual start without its valve permissive (e.g., if the permissive input circuits are not available, can manual subsystem start be achieved?)

- b. The traveler states that it is not necessary to have Mode 4/5 pump minimum flow requirements for pump low discharge pressure bypass for BWR/4 Functions 1.b and 2.b, and BWR/6 Functions 1.b, 1.c, 2.b, 3.c, and 3.d because the ECCS pump will be started manually by the operator after aligning the valves needed to inject into the RPV. The Bypass function serves to protect a pump from overheating when the pump is operating, and the associated injection valve is not fully open. Please explain how the pump will be protected from damage during startup before the flow rate is adequate (e.g., operator actions taken, availability of other instruments or indications for low flow, etc.)

EICB-RAI 2:

TSTF-582 proposes to delete the BWR/6 Function 3.b High Pressure Core Spray (HPCS) suction switchover at low level from the condensate storage tank to the suppression pool from automatic mode to manual action (Reference page 9 of TSTF-582 submittal).

- a. Without this automatic function, please describe the manual actions would the control room operator take to ensure that the HPCS has a sufficient water source.
- b. Please describe the indications and instruments that are available to the operator to support these actions.
- c. Clarify how manual water source switchover can be achieved if the permissive input is not available.