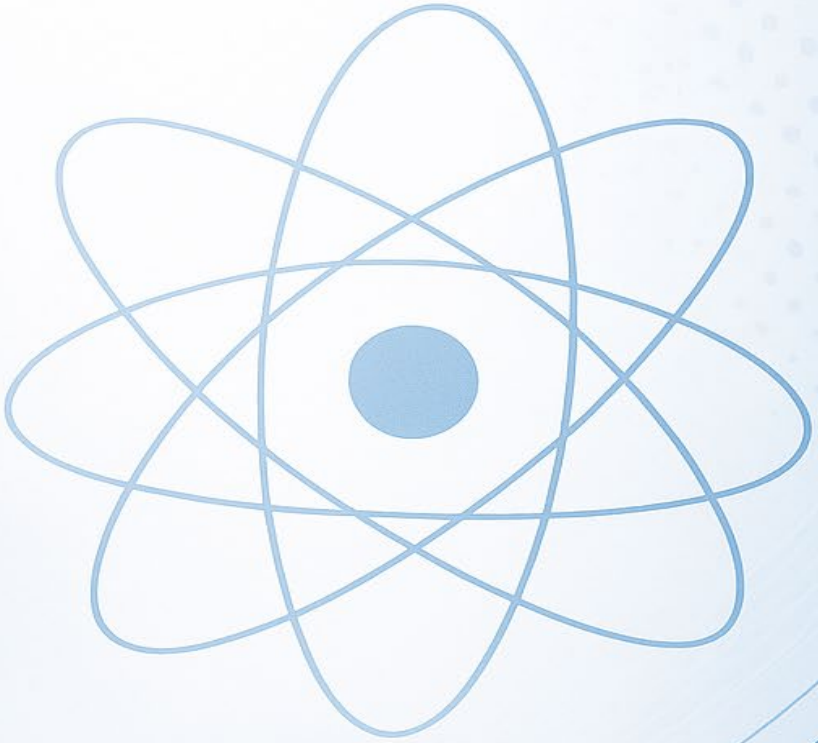
Licensing Committee
2022+ Product Catalog

PWROG

PRESSURIZED WATER REACTOR
OWNERS GROUP



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NRC APPROVED TSTF TRAVELERS

What Is a Technical Specifications Task Force (TSTF) Traveler?

A TSTF traveler is a change to the Improved Standard Technical Specifications (ISTS) (NUREGs- 1430, 1431, 1432, 1433 and 1434) as applicable. These changes are developed by the Technical Specifications Task Force (TSTF) a group consisting of EXCEL Services and an Owner's Group representative for each of the NSSS plant types.

Each traveler serves as a template that licensees can adopt to revise their plant-specific Technical Specifications (TS). It includes:

- Generic justification for the change.
- Markups of the ISTS and ISTS Bases.
- A model application.
- A model safety evaluation issued by the NRC.

Once approved by the NRC, a traveler can be adopted by licensees without re-justifying the change on a plant specific basis, significantly reducing the amount of licensee resources and NRC review and NRC review fees associated with plant specific LARs.

TSTF-602-A, Rev. 0 – Revise the Ventilation Filter Testing Program to Permit Alternate Challenge Agents

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☒ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

Background Information:
Approved by NRC on December 11, 2025. Available for adoption as a CLIIP Traveler. The Ventilation Filter Testing Program (VFTP) requires testing of ESF HEPA filters and charcoal adsorbers using challenge agents defined in Regulatory Guide 1.52, Revision 2, and ASME N510-1989. Historical challenge agents include dioctyl phthalate (DOP) and Refrigerant-11 (Freon), which pose safety and availability concerns.

Description:
TSTF-602 revises VFTP paragraphs a and b in NUREG-1430, NUREG-1431, NUREG-1432, NUREG-1433, and NUREG-1434 to allow the use of alternative challenge aerosols and gases when selected in accordance with Regulatory Guide 1.52, Revision 3, Sections 6.3 and 6.4. The change does not alter acceptance criteria, testing frequencies, or other program elements.

Benefits of Implementation:
The traveler identifies that alternative challenge agents permitted by Regulatory Guide 1.52, Revision 3, address issues related to carcinogenicity, discontinued production, increasing cost, and availability of current agents. NRC findings referenced in the material state that such changes do not impose significant additional burdens and may reduce unnecessary cost and effort.

Implementation:
Model Technical Specification markup and a model license amendment are included in the TSTF traveler.

Associated Documents:
TSTF-602, Rev. 0; NRC Final Safety Evaluation dated December 11, 2025; NUREG-1430, NUREG-1431, NUREG-1432, NUREG-1433, NUREG-1434; Regulatory Guide 1.52, Revisions 2 and 3; ASME N510-1989; ANSI N510-1975 and 1980; ASME AG-1-1997 and 2009; ASTM D3803-1989.

Additional Remarks or Comments:
None

TSTF-601-A, Revision 1 – "Extend Shield Building Completion Time After Refueling"

Applicable Reactor Type:
☒ W ☒ CE ☐ B&W ☐ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☒ Other (explain)

Applicable to Westinghouse and CE plants with shield buildings

Membership Region:
☒ U.S. Members ☐ Europe+ Members ☐ Asia+ Members ☐ Conditional Members

Background Information:
The shield building is a concrete structure surrounding the containment vessel in certain Westinghouse and Combustion Engineering pressurized water reactors (PWRs). It serves to restrict the release of radioactive material following an accident and supports periodic inspection of the containment's outer surface. During refueling outages, sections of the shield building are removed for access, and restoration is typically one of the last steps before startup.

Description:
Revises the Standard Technical Specifications (STS) to extend the allowed Completion Time for restoring an inoperable shield building from 24 hours to 72 hours in Modes 4 and 3, but only after a refueling outage and before the reactor is critical (Mode 2). This change is applicable to NUREG-1431 and NUREG-1432. The longer Completion Time is justified by the reduced decay heat and radionuclide inventory present after a refueling.

Benefits of Implementation: Shortens Outages
By extending the shield building Completion Time from 24 to 72 hours following a refueling outage and prior to reactor criticality, plants gain scheduling flexibility and can avoid delays during startup. Safety is maintained due to significantly reduced decay heat and radionuclide inventory during this period, along with the continued operability of the containment and associated systems. The change complies with NRC regulations and supports risk-informed decision-making through required assessments under LCO 3.0.4.b.

Implementation:
To adopt TSTF-601 licensees must submit a License Amendment Request (LAR) using the model application included in the traveler. [OG-25-174] The model application includes verification language and technical justification associated with NRC safety evaluation.

Associated Documents:
PA-LSC-1955

Additional Remarks or Comments:
None

TSTF-600-A, Rev. 2, "Revise the Reactor Coolant System (RCS) Pressure Isolation Valve (PIV) Leakage Testing Frequency"

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☒ BWR ☒ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

All plants that adopt or align with U.S. Standard Tech Spec frameworks.

Background Information:
Addresses the surveillance requirements for Reactor Coolant System (RCS) Pressure Isolation Valve (PIV) leakage testing. The traveler revises the frequency of required leakage testing to reference only the Inservice Testing Program (IST Program), aligning Technical Specifications with current regulatory and industry standards.

Description:
This change removes unnecessary time-based and event-driven testing frequencies, ensuring that PIV leakage testing is performed in accordance with the IST Program.

Benefits of Implementation: Reduces Testing
Implementing TSTF-600 reduces unnecessary testing, lowers outage dose and outage time. It also ensures consistency with regulatory requirements and maintains safety by relying on the IST Program.

Implementation:
No additional technical justification is required to adopt the traveler. U.S. licensees adopting TSTF-600 must submit a license amendment request (LAR) in accordance with the model application provided in the traveler. Reference the Excel Services website for additional information.

Associated Documents:
PA-LSC-1975, RS-2022-019

Additional Remarks or Comments:
In October 2025, the TSTF determined that the model application verification statement needs to be revised and will be discussed with the NRC. Members should not submit a LAR until the TSTF discusses the verification statement with the NRC.

TSTF-599-A, Rev. 1, "Eliminate Periodic Surveillance Test of Simultaneous Start of Redundant Diesel Generators"

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☒ BWR ☒ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

All plants whose Technical Specifications (TS) contain an SR similar to Surveillance Requirement (SR) 3.8.1.20 in TS 3.8.1, "AC Sources – Operating" in the Improved Standard Tech Specs.

Background Information:
SR 3.8.1.20 requires a periodic simultaneous start of all redundant diesel generators (DGs) from standby conditions to verify that each DG achieves the required voltage and frequency within a specified time. This surveillance is intended to confirm starting independence, ensuring that multiple DGs can start simultaneously without common-mode failures.

Description:
TSTF-599 eliminates the requirement for a periodic simultaneous start of all redundant diesel generators to verify they reach the required frequency and voltage. The typical frequency is every 10 years, though some plants have extended it under Surveillance Frequency Control Program (SFCP). The surveillance is required for DG operability and was determined to be unnecessary based on industry data. The NRC approved TSTF-599 on May 5, 2025.

Benefits of Implementation: Reduces Testing
Implementing TSTF-599 offers several operational and safety advantages. By eliminating the requirement for a periodic simultaneous start of all redundant diesel generators (DGs), plants can significantly improve DG availability, as the test temporarily renders all DGs inoperable. This change also reduces mechanical wear and tear on the DG, which is especially beneficial given the low safety value of the test as demonstrated by historical performance data. Additionally, all US plants that have implemented the SFCP can avoid the cost and extending the surveillance frequency for this test. Overall, the elimination of this test enhances reliability, reduces unnecessary wear and tear on the DG with no safety benefit.

Implementation:
No additional technical justification is required to adopt the traveler. U.S. licensees adopting TSTF-599 must submit a license amendment request (LAR) in accordance with the model application provided in the traveler. Reference the Excel Services website for additional information.

Associated Documents, Impact & Strategy Development Document and Funding Mechanism:
TSTF-599, OG-25-93, PA-LSC-1972, RS-2022-030

Additional Remarks or Comments:
None

TSTF-596-A, Revision 2, "Expand the Applicability of the Surveillance Frequency Control Program (SFCP)"

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☒ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

All plants that have implemented a Surveillance Frequency Control Program (SFCP).

Background Information:
TSTF-596 expands TSTF-425, which added the SFCP that allows extending the periodic surveillance frequencies. However, TSTF-425 did not include all of the periodic surveillance frequencies specifically those contained in the TS Section 5.5 programs. TSTF-596 addresses this gap by expanding the SFCP's scope and clarifying its relationship with other regulations such as 10 CFR 50.55a and 10 CFR 50.69.

Description:
The traveler revises multiple Surveillance Requirements (SRs) to reference the SFCP instead of the IST Program. It also revises the TS Bases to reflect that surveillance frequencies governed by 10 CFR 50.55a(f) that are required by that regulation, and not by the ASME Code. These changes streamline the TS framework. The traveler includes a model application and marked-up TS and TS Bases pages.

Benefits of Implementation: Allows Less Stringent Testing
The primary benefit is to allow licensee control to change some additional periodic surveillance frequencies that were not included in TSTF-425. By allowing licensees to extend additional surveillance frequencies using a risk-informed process, TSTF-596 reduces frequent testing and potential plant transients associated with the testing.

There are several TS SRs which reference the IST Program and clarity is needed regarding the application of alternative treatments under 10 CFR 50.69(d)(2) to SSCs subject to those SRs. Revising SR Frequencies that reference the IST Program to reference the SFCP, which will describe control mechanisms for both IST Program testing and 10 CFR 50.69 alternative treatment, will permit licensees that have received NRC approval to use 10 CFR 50.69 to categorize SSCs as RISC-3 and apply alternative treatment requirements to SSCs without a change to the TS. Removing explicit references to the IST Program in the body of the SRs will also permit use of 10 CFR 50.69 alternative treatments, if justified.

Implementation:
U.S. licensees adopting TSTF-596 must submit a license amendment request (LAR) in accordance with the model application provided in the traveler. Reference the Excel Services website for additional information.

Associated Documents:
TSTF-596, OG-25-29, PA-LSC-1908, RS-2019-005

Additional Remarks or Comments:
None

TSTF-591-A, "Revise Risk Informed Completion Time (RICT) Program"

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☒ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

All plants that have adopted or will adopt TSTF-505.

Background Information:
The traveler revises the Risk Informed Completion Time (RICT) Program. This revision updates the reference in Technical Specification Section 5.5, RICT from Regulatory Guide (RG) 1.200, Revision 2, to Revision 3, reflecting the latest NRC-endorsed guidance for probabilistic risk assessment (PRA) methods. The change clarifies requirements for the use of newly developed PRA.

Description:
The change updates the RICT Program by requiring that RICT calculations include hazard groups and associated PRA models or alternate assessments approved by the NRC, with any changes needing prior NRC approval. PRA models must be maintained and upgraded per RG 1.200, Revision 3. Before using a newly developed method for RICT, a report describing the method, its implementation, acceptability, peer review findings, and key assumption changes must be submitted to the NRC. This change applies only to licensees who have adopted or will adopt TSTF-505. It also adds a requirement in ISTS Section 5.6, “Reporting Requirements” for the licensee to submit a report to the NRC before calculating a RICT using an NDM.

Benefits of Implementation: Prevents Unnecessary Actions
The update prevents unnecessary actions by clarifying when NRC approval is required for changes to PRA methods and hazard group assessments. It ensures that PRA models are maintained and upgraded using the most current NRC-endorsed guidance, which enhances the technical adequacy and regulatory compliance of risk-informed decision-making.

Implementation:
To implement these changes, licensees should review the safety evaluation for TSTF-591 and confirm its applicability, then update plant-specific Technical Specifications to reference RG 1.200, Revision 3. Before using any newly developed method to calculate a RICT, a report must be submitted to the NRC before calculating a RICT using an NDM. The process should follow the guidance in PWROG-19027-NP and NEI 17-07, as endorsed by RG 1.200, Revision 3.

Associated Documents:
TSTF-591, TSTF-505, OG-23-160, PA-LSC-1922, RS-2021-019

Additional Remarks or Comments:
None

TSTF-589-A, "Eliminate Automatic Diesel Generator Start During Shutdown"

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☐ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

All plants with U.S. Standard Technical Specifications.

Background Information:
TSTF-589-A, Revision 0, removes the requirement for automatic diesel generator start and loading during shutdown, because the safety analyses do not assume automatic DG operation during shutdown.

Description:
TSTF-589-A revises the technical specifications by removing the operability requirement for the instrumentation that automatically starts the DG and loads it during a loss of offsite power (LOOP) in the shutdown modes. The change revises Limiting Condition for Operation (LCO) and Surveillance Requirements (SRs) so that automatic DG start and loading signals are no longer required to be operable in Modes 5 and 6, nor during movement of irradiated fuel assemblies. Instead, the DG must be capable of manually starting, accelerating to the rated speed and voltage, manually connecting to its respective engineered safety feature (ESF) buses, and acceptance of the required loads.

Benefits of Implementation: Reduces Testing
Implementing TSTF-589-A reduces the need for testing and maintenance of automatic DG start instrumentation and logic during shutdown. By eliminating the automatic start requirement, the risk of inadvertent DG starts is also reduced. The change reduces maintenance activities and makes the technical specifications with the safety analysis assumptions, which do not require automatic DG start or load sequencing during shutdown. This results in operational flexibility and reduced testing.

Implementation:
Adoption of TSTF-589-A requires revising the plant-specific technical specifications to match the changes described in the traveler. Licensees should review the NRC's safety evaluation and the model application provided in the document to ensure applicability to their facility. The model application includes guidance for updating LCOs, SRs, and associated bases, as well as instructions for addressing plant-specific variations in numbering, nomenclature, and design. Supporting documentation, including marked-up and clean TS pages and revised bases, should be prepared and submitted as part of the license amendment request.

Associated Documents:
TSTF-589, OG-23-153, PA-LSC-1856, RS-2020-033

Additional Remarks or Comments:
None

TSTF-585-A, Revision 5: Revise LCO 3.0.3 to Require Managing Risk

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☒ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

All plants whose Technical Specifications contain an LCO 3.0.3.

Background Information:
LCO 3.0.3 required that a shutdown be initiated in 1 hour regardless of the risk significance of the condition. Operating experience identified that the majority of the LCO 3.0.3 entries did not result in a shutdown. TSTF-585 was developed to incorporate risk assessment and risk management actions (RMAs) consistent with 10 CFR 50.65(a)(4), Regulatory Guide 1.160, and NUMARC 93-01. The NRC approved Revision 5 on January 13, 2026.

Description:
TSTF-585 revises LCO 3.0.3 to require a risk assessment and implementation of appropriate RMAs within 6 hours of entry into LCO 3.0.3. If the risk assessment determines that continued operation is acceptable and entry was unplanned, up to 24 hours from entry into LCO 3.0.3 is allowed before initiating a shutdown. If risk is unacceptable, the assessment is not completed, RMAs are not implemented, or entry is planned, a shutdown must begin at the end of the 6 hour period.

Benefits of Implementation:
Avoids unnecessary plant shutdowns by allowing time to assess and manage risk. Reduces the risk associated with rapid shutdown transients. Provides additional time for repairs, regulatory relief requests, or orderly shutdown preparations. Aligns plant shutdown decisions with the actual risk significance.

Implementation:
Traveler approved under the NRC CLIIP process for US members.

Associated Documents:
OG-26-10, PA-LSC-1708

Additional Remarks or Comments:
None

TSTF T TRAVELERS

What Is a TSTF T Traveler?

A Technical Specifications Task Force (TSTF) T Traveler is a change to the Bases of the Improved Standard Technical Specifications (ISTS) (NUREGs-1430, 1431, 1432, 1433 and 1434). TSTF T Travelers focus on clarifying, correcting errors, or updating the Bases text for the Technical Specifications. TSTF T Travelers are not submitted to the for NRC review and approval and can be adopted by plants under the Bases Control Program via a 10 CFR 50.59. However, in rare instances, depending on the significance of the change to the Bases, the TSTF T Traveler may be submitted to the NRC for review and approval.

Key Points:

- Scope: TSTF T Travelers are changes to the Bases that do not revise the Technical Specifications.
- Purpose: They are used to correct errors, improve clarity, and increase standardization.
- Adoption: Bases changes do not require prior NRC approval and can be implemented under the Bases Control Program via a 10 CFR 50.59. The T Travelers associated with Travelers that revise the Technical Specification changes can be implemented prior to submitting the Traveler that revises the Technical Specifications or after the NRC approves the amendment, and prior to implementing the amendment.
- Examples: Clarifications, corrections or additions to the Background, LCO, Actions or Surveillance Requirement sections of the Bases.

Benefit:

TSTF T Travelers provide a generic means to maintain accurate and up-to-date Bases.

TSTF-612-T, Rev. 0 – Revise the Containment Isolation Valve Bases Regarding Closed Systems

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☒ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

Background Information:
The Improved Standard Technical Specifications (NUREG-1430, -1431, -1432, -1433, -1434) describe Containment Isolation Valves (CIVs) and Primary Containment Isolation Valves (PCIVs) are required to be operable, and do not address closed systems. The existing Bases language incorrectly stated that closed systems must be "intact," even though closed systems are not CIVs/PCIVs, are not verified by Surveillance Requirements, are not included in the LCO, and have no TS Actions when not intact. TSTF-502-T previously attempted to address this issue, however TSTF-612-T supersedes it.

Description:
The change revises the CIV/PCIV Bases to clarify that operability is not dependent on the condition of any associated closed systems. The Background section of the Bases was revised to discuss that one containment penetration barrier may be a closed system, that closed systems are not CIVs/PCIVs, and that deficiencies in a closed system may affect compliance with 10 CFR 50 Appendix J or 10 CFR 50.55a. The LCO section of the Bases was revised by removing the phrase "and closed systems are intact." References to Standard Review Plan 6.2.4 are replaced with references to the plant UFSAR. Additional Bases statements implying requirements on closed systems (e.g., "must meet design requirements") were deleted.

Benefits of Implementation:
The changes clarify that operability of the CIVs is not associated with closed systems, and avoids entry into the CIV Actions if a closed-system is not intact.

Implementation:
The traveler includes ISTS Bases markups for NUREGs-1430, 1431, 1432, 1433, and 1434 and an example 10 CFR 50.59 Screening.

Associated Documents:
OG-26-11, PA-LSC-2087

Additional Remarks or Comments:
None

TSTF-611-T, Rev. 0 – Correction of TS 3.3.1 Overpower ΔT Bases Statement

Applicable Reactor Type:
☒ W ☐ CE ☐ B&W ☐ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☐ Asia+ Members ☐ Conditional Members

Additional information as necessary here.

Background Information:
The Technical Specification (TS) Bases for Westinghouse NSSS plants incorrectly stated that the Reactor Trip System Overpower ΔT reactor trip function protects against “less than 1% cladding strain.” A review of an NRC-approved topical report (WCAP-8745-A) confirmed that the Overpower ΔT reactor trip function protects against fuel pellet melt, not cladding strain. The error originated from a legacy document (WCAP-12159).

Description:
This change deletes the incorrect phrase “and less than 1% cladding strain,” from the Bases for TS 3.3.1, Function 7, Overpower ΔT, in the Improved Standard Technical Specifications (NUREG-1431). The correction revises the Bases to accurately reflect the intended design function: protection against exceeding allowable fuel heat generation rates and preventing fuel pellet melt.

Benefits of Implementation:
Improves the accuracy of the Technical Specification Bases. Eliminates misleading information regarding the Overpower ΔT reactor trip function, when implementing the hydrogen based transient clad strain limit for higher enrichment or higher burnup fuel designs.

Implementation:
Bases markup and example 50.59 Screen is contained in the document.

Associated Documents:
OG-26-2

Additional Remarks or Comments:
None

TSTF-595-T, Rev. 0 – Correction to SR 3.8.1.9 Bases Description

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☒ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

All plants that have adopted the ITS (NUREGs-1430, 1431, 1432, 1433 and 1434).

Background Information:
The proposed change in TSTF-595-T, Rev. 0, addresses the Bases for Surveillance Requirement (SR) 3.8.1.9, which is associated with diesel generator (DG) load rejection testing. The current Bases incorrectly describe the acceptance criteria for voltage and frequency as “steady state” values. The change revises the Bases to state that these criteria are based on “nominal” values, consistent with the recommendations of Regulatory Guide 1.9.

Description:
SR 3.8.1.9 requires that each DG be tested to verify its ability to reject a load greater than or equal to its associated single largest post-accident load, and to recover voltage and frequency within specified limits and timeframes. The change revises the fifth paragraph of the SR 3.8.1.9 Bases to state that the time, voltage, and frequency tolerances are derived from Regulatory Guide 1.9 recommendations for load sequence intervals. Specifically, the voltage and frequency values to which the system must recover after load rejection are “nominal” rather than “steady state.” This correction ensures consistency with the regulatory guidance and clarifies the intent of the acceptance criteria.

Benefits of Implementation: Improves Bases
Implementing this change improves the clarity and accuracy of the Technical Specification Bases by ensuring that the acceptance criteria for voltage and frequency following DG load rejection are correctly described as “nominal.” This eliminates confusion with other surveillance requirements that use “steady state” values, and makes the Bases consistent with the regulatory guidance, to ensure consistent interpretation. The change is a correction to the Bases.

Implementation:
Plants should update their Bases for SR 3.8.1.9 to reflect the corrected description, ensuring that acceptance criteria for voltage and frequency are described as “nominal” values consistent with Regulatory Guide 1.9.

Associated Documents:
TSTF-595, OG-22-107, PA-LSC-1894

Additional Remarks or Comments:
None

TSTF-594-T Revision 0, "Revise the SR 3.8.3.3 Bases to be Consistent with the SR"

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☒ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

All plants that have SR 3.8.3.3 in the ISTS (NUREGs-1430, 1431, 1432, 1433, and 1434).

Background Information:
TSTF-594-T, Revision 0, revises the Bases for Surveillance Requirement (SR) 3.8.3.3 and the Surveillance and the Diesel Fuel Oil Testing Program in the ISTS. The original Bases included procedure-level details and specific ASTM standards not reflected in the Technical Specifications. This T traveler ensures that the Bases reflect the Surveillance's intent consistent with 10 CFR 50.36(a).

Description:
The change revises the Bases for SR 3.8.3.3 to be consistent with the Surveillance and Diesel Fuel Oil Testing Program. It clarifies that fuel oil properties of new and stored fuel are tested and maintained within the program limits, ensuring high-quality fuel for the diesel generators. The procedure-level details and specific ASTM references are deleted; instead, testing is described as being per the applicable ASTM standards in licensee procedures.

Benefits of Implementation: Improves Bases
The primary benefit is that it ensures the Bases for Surveillance Requirement 3.8.3.3 are consistent with the Surveillance itself, the Diesel Fuel Oil Testing Program. By removing procedure-level details and specific ASTM references from the Bases, the change eliminates unnecessary or conflicting requirements. The revised Bases clarify that testing is performed in accordance with applicable ASTM standards as specified in licensee procedures, and that failure to meet new fuel oil limits for fuel not yet added to storage tanks does not constitute a failure of the Surveillance Requirement or the Limiting Condition for Operation.

Implementation:
The traveler provides a template and guidance, emphasizing ASTM standards should be referenced in procedures not in the Bases.

Associated Documents:
TSTF-594-T R0, PA-LSC-1894 R0, OG-22-107

Additional Remarks or Comments:
None

TSTF GUIDELINES

What Is a TSTF Guideline?

A TSTF Guideline is an industry developed document that provides detailed instructions, best practices, and standardized approaches for implementing, formatting, or interpreting aspects of the Improved Standard Technical Specifications (ISTS) and other licensing documents. Unlike TSTF travelers which propose specific changes to the ISTS, TSTF Guidelines support consistent application and implementation of the technical specifications and other licensing documents.

Each guideline addresses a focused topic, such as converting to the ITS, evaluating one-time surveillance frequency changes, or ensuring the ITS format. The content typically includes background context, step-by-step instructions, clarifications, and practical examples. Guidelines are developed collaboratively by the Technical Specifications Task Force and Owners Groups, reflecting industry consensus and regulatory experience.

By following a TSTF Guideline, licensees can ensure their technical specifications are clear, and consistent with NRC approved Travelers and other licensing documents.

TSTF-GG-21-01, Revision 1, "Technical Requirements Manual and Operational References (TRM) Format and Content Guideline"

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☒ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

The guideline is primarily intended for U.S. members who have relocated previous Tech Spec requirements to a licensee-controlled document, e.g., a Technical Requirements Manual, such that the requirements can be changed under 10 CFR 50.59.

Background Information:
The Technical Requirements Manual (TRM) is a licensee-controlled document that was developed when licensees relocated Tech Specs that did not meet the 10 CFR 50.36 criteria and during conversion to Improved Technical Specifications. The TRM is controlled under 10 CFR 50.59 and may be referenced in Chapter 16 of the Updated Final Safety Analysis Report. Historically, TRMs have varied widely in format and content across the industry, and this guideline provides recommendations for standardization and best practices.

Description:
This document provides recommendations for the format and content of a TRM. It covers definitions, terms, numbering, and formatting conventions, and provides example chapters and requirements for systems such as boration, instrumentation, chemistry, fire protection, etc. The guideline explains how to incorporate the TRM by reference in the UFSAR and provides recommendations on changing surveillance frequencies, acceptance criteria, and administrative controls. Sample requirements and actions for typical plant systems are included.

Benefits of Implementation:
Implementing the guideline supports licensees that have relocated requirements from Technical Specifications to the TRM. It eliminates unnecessary shutdown actions, revising operability to functionality, NRC reporting requirements, and mode change restrictions from the TRM requirements. The guideline provides standard definitions and applicability rules, simplifying the TRM use and compliance. It also add Maintenance Rule backstop completion times to some of the current completion times.

Implementation:
Resources for implementation include a model TRM in Appendix A and example regulatory applicability determinations in Appendix B. The guideline provides guidance on using Condition Reports and the Corrective Action Program for non-compliance and incorporates NRC guidance, NEI documents, and relevant Generic Letters for relocating requirements.

Associated Documents:
OG-23-28, PA-LSC-1777, RS-2019-018

Additional Remarks or Comments:
None

TSTF-IG-06-02, Revision 1 – Implementation Guidance for TSTF-359, Revision 9, "Increase Flexibility in MODE Restraints"

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☒ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

Background Information:
The document provides implementation guidance for TSTF-359, Revision 9, which modifies Technical Specification LCO 3.0.4 and SR 3.0.4 to allow changes in Modes or other specified conditions in the Applicability when an LCO is not met. The guidance updates and supersedes NEI 03-10 and incorporates corrections, clarifications, and lessons learned since initial industry use. TSTF-359 was made available by NRC through the Consolidated Line Item Improvement Process on April 4, 2003.

Description:
The guidance describes how to implement the risk-informed changes to LCO 3.0.4 and SR 3.0.4 in TSTF-359. These changes allow plants to enter a Mode or specified condition in the Applicability with inoperable equipment under one of three allowances: LCO 3.0.4.a (operation allowed to continue for an unlimited period of time), 3.0.4.b (risk assessment performed and risk management actions established), or 3.0.4.c (explicit value/parameter allowance). The guidance discusses a qualitative risk analysis, exclusions from LCO 3.0.4.b for certain higher-risk systems, and changes to plant procedures and the Maintenance Rule (a)(4) program.

Benefits of Implementation:
The benefits include increased operational flexibility by allowing Mode changes with inoperable equipment when risk is assessed and managed, which eliminates unnecessary startup delays.

Implementation:
The implementation guidance discusses the changes to LCO 3.0.4 and SR 3.0.4, the use of flowcharts to determine whether Mode changes are acceptable, direction on adjusting Maintenance Rule (a)(4) programs, and the application of qualitative risk analyses, and FAQs. The associated documents referenced include TSTF-359 Revision 9, NEI-03-10 (superseded), NUMARC 93-01, NRC Regulatory Guide 1.182, and TSTF-485 Revision 0.

Associated Documents:
None

Additional Remarks or Comments:
The guidance was not reviewed or endorsed by NRC.

NEI GUIDELINES

What Is a NEI Guideline?

An NEI Guideline is an industry document that provides consistent guidance for licensees on regulatory or technical topics. These guidelines may be funded and developed by the Owners Groups, such as the Pressurized Water Reactor Owners Group (PWROG) and the Boiling Water Reactor Owners' Group (BWROG), in partnership with the Nuclear Energy Institute (NEI) or issued soley by NEI.

Some guidelines may incorporate feedback from the U.S. Nuclear Regulatory Commission and may be formally endorsed by the NRC.

NEI 06-02, License Amendment Request Guidelines Revision 9

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☒ BWR ☒ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

The guideline is developed for and primarily used by U.S. licensees but may be used by Europe+ and Asia+ members if they use this NEI guidance.

Background Information:

NEI 06-02, Revision 9, "License Amendment Request Guidelines," is an industry standard developed to provide a consistent approach for preparing and submitting license amendment requests (LARs). The changes in Revision 9 included a rewrite of Appendix E, "License Amendment Requests with Risk-Informed Justification," replacement of Appendix I, "Voluntary vs. Non-Voluntary License Amendment Requests," with a new Appendix I, "Time-Limited TS Changes," and replacement of Appendix N, "References" with footnotes..

Description:

This guideline discusses a standard format and content for developing LARs. It provides a standard format for LARs, detailed instructions for each section of the LAR. The appendices The appendices provide detailed information on specific subjects, such as Exigent/Emergency LARs, Plant-Specific Adoption of TSTF Travelers, License Amendment Requests with Risk-Informed Justification, License Amendment Requests to Utilize Digital Equipment, Pre-Submittal Meeting Guidance, Time-Limited TS Changes, Industry Coordinated License Amendment Requests, and License Amendment Requests Requesting Review Under Risk-Informed Process for Evaluation.

Benefits of Implementation:

Using NEI 06-02 ensures that LARs are prepared consistent with NRC expectations, reduces requests for additional information, and streamlines the NRC review and approval process. The guideline promotes consistency across the industry and supports efficient use of resources in the amendment process.

Implementation:

Licensees should use NEI 06-02 for the development of all LARs. The guideline should be followed for the format and content of submittals. Training and internal procedures should be updated to reflect the latest revision. Coordination with the NRC project manager and use of the pre-submittal meetings are recommended for complex or first-of-a-kind changes.

Associated Documents:

OG-23-105, PA-LSC-1951 R0, RS-2022-002, RS-2021-023

Additional Remarks or Comments:

Licensees should ensure they are using the most current version available on the NEI website.

NEI 99-04, Rev 1, "Guideline for Managing NRC Commitments Changes Update"

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☒ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

This guidance is applicable to licensees who change regulatory commitments.

Background Information:
NEI 99-04, "Guidelines for Managing NRC Commitment Changes," is an industry standard originally issued in 1999 and updated in Revision 1 to reflect more than two decades of experience and changes in NRC regulations and practices that impact regulatory commitments. It provides a consistent, NRC-endorsed process for managing, revising, or eliminating regulatory commitments made by licensees to the U.S. Nuclear Regulatory Commission.

Description:
The guideline defines regulatory commitments and distinguishes them from legally binding obligations. It discusses a structured process for evaluating, documenting, and implementing changes to regulatory commitments. This process includes definitions, historical context, and a flowchart-driven method for screening, evaluating, and documenting commitment changes. Guidance is provided on when NRC notification or approval is required, and templates are included for documenting the justification and evaluation of changes. The process is can be used for both individual commitment changes and comprehensive re-baselining efforts, and it applies to commitments for operating reactors as well as those pursuing license termination (decommissioning).

Benefits of Implementation:
Implementing this guideline ensures a clear, consistent approach to managing regulatory commitments. It reduces unnecessary regulatory burden and ambiguity for licensees, provides flexibility to revise or eliminate commitments based on experience and changing plant conditions, improves traceability and documentation, and supports efficient and effective compliance with regulatory expectations.

Implementation:
The guideline includes a detailed process flowchart and a commitment evaluation summary template to guide users through each step. Licensees should use the stepwise process to determine if a change is governed by another codified process, whether NRC notification or approval is required,. The guidance should be integrated into plant-specific commitment management programs and referenced in internal procedures.

Associated Documents:
OG-22-193, PA-LSC-1918, RS-2021-014

Additional Remarks or Comments:
Licensees should ensure they are using the most current version available on the NEI website.

POSITION AND WHITE PAPERS

What Are Position and White Papers?

Position Papers and White Papers are documents developed to address specific technical, regulatory, or operational issues.

Position Papers:

- Discuss the position or approach that addresses a specific issue.
- May address regulatory interpretations, technical challenges, or best practices.
- Serve as guidance for member utilities to respond to NRC questions, implementing new requirements, or resolving industry-wide issues.

White Papers:

- Provide background information, and the technical justification for a topic.
- May include evaluations of regulatory issues, or recommendations for plant-specific implementation.

Purpose:

Both types of papers are intended to clarify issues, support consistent industry practices, and facilitate regulatory compliance. They can be used by member utilities when preparing license amendment requests, responding to NRC requests, or implementing new programs and processes.

Benefit:

Position and White Papers ensure that all members have access to vetted, consensus-based guidance, reducing regulatory uncertainty.

EXCEL Services Corporation "Evaluation of the Proposed Plant-Specific Online Monitoring Program TS Requirements and Recommended Changes"

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☐ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

Background Information:
This evaluation was prompted by Southern Nuclear Company's (SNC) May 2024 license amendment request to incorporate an Online Monitoring (OLM) Program into the Technical Specifications (TS). The request builds on the NRC-approved topical report AMS-TR0720R2-A, which supports extending calibration intervals for pressure transmitters. While the NRC approved the topical report, it did not approve the proposed TS changes, resulting in the need for plant-specific reviews and changes to the TS changes.

Description:
The document provides a detailed assessment of the proposed TS changes associated with implementing an Online Monitoring Program for pressure, level, and flow transmitters. It reviewed the SNC's submittal and identifies areas needing clarification or improvement, such as the definition of "calibration check," the need for a maintaining a list of transmitters included in the program, and the proper application of response time verification language. It also evaluates the structure and clarity of the proposed TS program elements and offers revised language to improve consistency and clarity.

Benefits of Implementation:
The document provides recommended Tech Spec changes to SNC's Tech Spec changes to ensure that they are consistent with the content of the Tech Specs.

Implementation:
The document includes a recommended OLM TS program based on AMS-TR0720R2-A for plant-specific adoption. It outlines key implementation elements such as maintaining a list of qualified transmitters, performing noise-based response assessments, documenting monitoring results, and scheduling calibration checks during refueling outages or at defined backstop frequencies.

Associated Documents, Impact & Strategy Development Document and Funding Mechanism:
OG-25-173, PA-LSC-2087

Additional Remarks or Comments:
None

OG-22-187 - Mode 4 LOCA Analysis for W-NSSS Plants

Applicable Reactor Type:
☒ W ☐ CE ☐ B&W ☐ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☐ Asia+ Members ☐ Conditional Members

Background Information:
Callaway plant received a Non-Cited Violation associated with the testing of certain Residual Heat Removal Heat Exchanger valves that were classified as "passive." This classification was based on the fact that no Mode 4 Loss-of-Coolant Accident (LOCA) analysis exists for Callaway. Historically, WCAP-12476 evaluated Mode 3 and 4 LOCAs for Westinghouse NSSS plants, the NRC did not complete its review because it was withdrawn from review. Correspondence between PWROG and NRC from 1991 through 2000 established that Mode 3 and 4 LOCA issues are to be addressed through voluntary programs rather than regulatory requirements.

Description:
The document provides a summary of the applicable regulatory requirements, NRC correspondence, and technical basis demonstrating that LOCA analyses are required only for Mode 1 at full power. It discusses why Mode 4 LOCA analyses are not part of the licensing basis for Westinghouse NSSS plants. The document also reviews the applicable regulations, including Appendix K to 10 CFR 50, NUREG-0800 SRP Section 15.6.5, General Design Criterion 35, and Technical Specification Bases sections for TS 3.5.2 and TS 3.5.3. The Technical Specifications Task Force Traveler TSTF-575-T is referenced regarding corrections to the TS 3.5.3 Bases that incorrectly implied Mode 4 LOCA analyses exist.

Benefits of Implementation:
The document clarifies that there is no licensing basis Mode 4 LOCA analysis..

Implementation:
The document discusses that changes to TS 3.5.3 Bases, as identified in TSTF-575-T, can be performed under the Technical Specifications Bases Control Program. No additional implementation guidance is provided.

Associated Documents:
None

Additional Remarks or Comments:
The document concludes that no regulatory requirement exists for performing a Mode 4 LOCA analysis. It clarifies that WCAP-12476 should not be part of any plant's licensing basis and reiterates that ECCS requirements in Mode 4 differ from Mode 1 and that the applicable regulations only require a Mode 1 full-power analysis.

Position Paper: "Credit for RHR Operation in Post-Accident Recovery in Hot Shutdown NSSS Designs" (PA LSC-1894, Rev 0)

Applicable Reactor Type:
☒ W ☐ CE ☐ B&W ☐ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

This paper is applicable to Westinghouse NSSS licensed to a hot shutdown end state after an accident.

Background Information:
The paper addresses plants designed to achieve hot shutdown conditions after an accident ("Hot Shutdown NSSS") and the current design or licensing basis includes operation of the RHR system in the shutdown cooling mode where the RHR system, or other required systems needed to reach RHR shutdown cooling entry conditions, may not be fully qualified. References and regulatory history spanning GDC-34 (1971), NUREG-0800, draft Regulatory Guide 1.139, IE Bulletin 79-01B, Generic Letter 1981-05, USI A-45, and 10 CFR 50.67 are discussed.

Description:
The paper provides a technical and regulatory review of issues associated with crediting RHR system shutdown cooling operation in post-accident recovery for Hot Shutdown NSSS plants. It outlines system design limitations, environmental qualification concerns, single-failure vulnerabilities, supporting system dependencies, and operational challenges. It also identifies inconsistencies in the licensing and design basis for hot versus cold shutdown capability, and the implications for dose analyses requiring RCS temperature < 212°F to terminate steam generator-related releases. The paper establishes a generic framework for plants to clarify their licensing basis related to the RHR system usage in shutdown cooling mode.

Benefits of Implementation:
The paper does not explicitly list benefits.

Implementation:
The paper recommends that each licensee perform a plant-specific review and update the UFSAR to clarify the licensing basis for hot shutdown versus cold shutdown.

Associated Documents:
The paper cites numerous regulatory documents, including NUREG-0800 (Sections 5.4.7 and BTP 5-4), 10 CFR 50.67, Regulatory Guide 1.183, IE Bulletin 79-01B and Supplements, Generic Letter 1981-05, NUREG-0705, NUREG/CR studies, WASH-1400, and the Palisades UFSAR Section 1.8.10.

Additional Remarks or Comments:
The paper concludes that no generic licensing position can be applied to all Hot Shutdown NSSS plants due to differences in design, licensing basis documentation, and plant-specific amendments. It recommends that each affected plant perform a plant-specific evaluation to establish and document its licensing basis for achieving hot shutdown versus cold shutdown when crediting RHR shutdown cooling operation.

TOPICAL REPORTS

What Is a Topical Report?

A Topical Report is a document that addresses a specific technical subject, methodology, and Tech Spec changes.

Purpose:

Topical Reports provide detailed technical justification, analysis, or evaluation of a particular topic.

They are submitted to the U.S. Nuclear Regulatory Commission (NRC) for review and approval if it is required, to allow methodologies to be implemented on a plant specific basis or Tech Spec changes to be included in a TSTF Traveler rather than individual licensees performing the work on a plant specific basis.

Scope:

The Topical Report justification may be a safety analysis, risk-informed or technical. After approved by the NRC, a Topical Report can be implemented and referenced via 10 CFR 50.59 without NRC approval or referenced by licensees in TSTF Travelers.

Benefits:

- Provides a common approach to address issues that are common to multiple members.
- Eliminates performing the work on a plant specific basis.
- Ensures consistent implementation and efficiency to address an issue by allowing all members to utilize the same technical justification.

PWROG-20016-P-A/NP-A, Revision 0, "PWROG – Regulatory Relaxation for PWR Loose-Part-Detection Systems"

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☐ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

Applicable to all licensees that reference Regulatory Guide (RG) 1.133 in their licensing basis.

Background Information:

The NRC issued RG 1.133 in 1981 for Loose-Part Detection Systems (LPDS) in light-water reactors. Many PWRs reference RG 1.133 in their licensing basis. PWROG-20016-P-A contains the technical justification, operating experience, and alternative means of detecting a loose part to justify removing the LPDS requirements from the licensing bases. The NRC approved the topical report in December 2021 for referencing in licensing actions.

Description:

PWROG-20016-P-A provides a generic technical basis for eliminating the LPDS from the licensing basis for PWRs. The topical report evaluates operating experience, LPDS effectiveness, maintenance burden, radiation exposure impacts, and industry improvements in the prevention and detection of loose parts. It also outlines alternative means for detection and mitigation, including Foreign Material Exclusion (FME) programs, plant water chemistry monitoring, radiation monitoring, equipment walkdowns, fuel debris filters, and visual inspections.

Benefits of Implementation:

The LPDS has not provided the safety benefit originally envisioned when RG 1.133 was issued. Maintenance of the LPDS introduces unnecessary radiation exposure and costs. False alarms divert operator attention and impose additional workload. Alternative prevention, detection, and mitigation activities provide adequate means to prevent and detect loose parts that were not available when RG 1.133 was issued.

Implementation:

Implementation requires a plant-specific 10 CFR 50.59 screen to be performed. A generic 10 CFR 50.59 screen template was developed to use to support the plant specific implementation.

Associated Documents:

PWROG-20016, Rev. 0 and the generic 10 CFR 50.59 screen template.

Additional Remarks or Comments:

Licensees must perform a plant-specific 10 CFR 50.59 screen and confirm the availability of the alternative prevention, detection means, and FME programs when implementing the topical report.

OTHER PRODUCTS

This category includes Licensing Committee products that do not fall into any of the other product classifications in this catalog. Products in this section may address emerging issues, specialized topics, implementation guides, reference materials, or informational resources that support member needs.

Products listed under Other Products may be technical, regulatory, or informational in nature and are typically included to ensure that documents are available that do not fall into the category of a traveler, topical report, position paper, or white paper.

Nukapedia

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☒ BWR ☒ Advanced Plants (e.g., AP1000) ☒ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☒ Europe+ Members ☒ Asia+ Members ☐ Conditional Members

Background Information:
Nukapedia was created as a resource for Regulatory Affairs professionals working in the commercial nuclear industry. It is intended to support both experienced and new Regulatory Affairs personnel by providing a centralized location for information relevant to their roles.

Description:
Nukapedia is a wiki-based platform containing information related to the work of Regulatory Affairs engineers as well as other disciplines. The content is not limited to licensing or Technical Specifications and may include any job-related topic. Users can create new pages, edit existing pages, and attach files. The platform uses keywords to categorize the content. The categories may include Administrative, Backfit, Definitions, Emergency Preparedness, Fire Protection, Fukushima, Guidance, Inspections, Legal Precedents, License Renewal, Operability, Probabilistic Risk Assessment, Radiological and Environmental Issues, Reactor Oversight Program (ROP), Reportability, Security, Seismic Issues, Technical Specifications, Testing, Training, Travelers and the License Amendment Process.

Benefits of Implementation:
The material states that Nukapedia's goal is to provide a resource for Regulatory Affairs engineers as well as other disciplines, including new personnel. Users can easily create and modify the content.

Implementation:
Not Applicable

Associated Documents:
Not Applicable

Additional Remarks or Comments:
Nukapedia's structure is flexible, with no predefined organizational hierarchy. The content organization is driven by keyword tagging and user-created pages.

Licensing Implementation Guide for PWROG-19014-P, "Verification Versus Measurement of the Beginning of Cycle Life and End of Cycle Life Moderator Temperature Coefficient"

Applicable Reactor Type:
☒ W ☒ CE ☒ B&W ☐ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☐ Europe+ Members ☐ Asia+ Members ☐ Conditional Members

Background Information:
PWROG-19014-P and its Supplements provide an approach for verifying the Moderator Temperature Coefficient (MTC) Technical Specification (TS) Surveillance Requirements without performing isothermal temperature coefficient (ITC) measurements. The approach quantifies measurement-prediction experience and establishes verification limits based on predicted MTC values. Implementation falls into three categories: ISTS plants adopting TS Bases changes; ISTS plants with references to WCAP-13749-P-A; and non-ISTS plants requiring TS changes before adopting the verification approach.

Description:
This Licensing Implementation Guide provides guidance for implementing PWROG-19014-P (and Supplement 1 for plants with Framatome fuel and Addendums 1 and 2 for AP1000 plants). It includes MTC TS Bases markups, a generic 10 CFR 50.59 screening template, and licensing guidance for revising the plant-specific TS if required. The guidance clarifies how plants can eliminate references to "measurement" in the TS Bases for ISTS plants and revisions to the TS for non ISTS plants. It discusses the various implementation options and required TS Bases or TS changes depending on the plant category and includes templates and examples to support plant-specific implementation.

Benefits of Implementation:
Benefits explicitly stated include enabling TS compliance using verification methods that do not require ITC measurement, allowing consistent implementation of PWROG-19014-P across the PWR plants, and allowing continued use of acceptable verification procedures without prior NRC approval via TS Bases changes for ISTS plants. The approach also allows plants to avoid unnecessary measurements when predictive criteria are met.

Implementation:
The guidance includes: ISTS TS 3.1.3 Bases markups (Attachments A–D); generic 10 CFR 50.59 screen template (Attachment E); ISTS MTC TS in non-ITS format for W and CE plants (Attachments F–H); and a License Amendment Request template for non-ISTS plants (Attachment I). Plant-specific evaluations and TS Bases changes are required for ISTS plants. Implementation guidance for revising the TS Bases and for preparing the 10 CFR 50.59 screen and revising surveillance procedures. It also provides guidance for revising the TS for non ISTS plants.

Associated Documents:
PWROG-19014-P, Rev. 0, PWROG-19014-P Supplement 1 (for Framatome fuel), and Addendums 1 and 2 for AP1000 plants).

Additional Remarks or Comments:
None

ITS Improvements for Non-ITS Plants Report

Applicable Reactor Type:
☒ W ☒ CE ☐ B&W ☐ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☒ U.S. Members ☐ Europe+ Members ☐ Asia+ Members ☐ Conditional Members

This project has the following participants: Dominion Energy (Millstone 3, Surry 1 and 2, V.C. Summer), Duke Energy (Shearon Harris), Entergy (Arkansas Nuclear One Unit 2, Waterford), PSEG Nuclear (Salem 1 and 2), STP Nuclear Operating Company (South Texas Project 1 and 2)

Background Information:
The development of the Improved Standard Technical Specifications (ISTS) began in the late 1980s and have been continuously revised and improved. The project identifies beneficial ITS changes that may be adopted by plants with non-ITS Technical Specifications without performing a full ITS conversion. The work was performed under PWROG Licensing Committee Project PA-LSC-1887.

Description:
This document identifies ISTS-based Technical Specification changes that can be implemented by non-ITS plants. Approximately 150 License Amendment Requests from 2002–2022 that referenced ITS NUREGs were reviewed that did not include TSTF Travelers. The document catalogs categories of changes, provides descriptions, benefits, submittal considerations, and examples for each change type.

Benefits of Implementation:
The document lists benefits for each change type, for example: improved flexibility from relocating requirements from the TS to licensee control; elimination of cascading TS Actions via LCO 3.0.6, clarifying using the ITS definition of operability; reduced regulatory burden through elimination of special reporting requirements; and flexibility for plant modifications through relocating design features, response time limits, and diesel fuel oil tank surveillance requirements.

Implementation:
The document contains the submittal content and evaluations for each type of change, for example, 10 CFR 50.36(c)(2)(ii), the Safety Function Determination Program evaluations for LCO 3.0.6 and references to NRC precedent letters and LAR examples.

Associated Documents:
The source cites ITS NUREG-1430, NUREG-1431, NUREG-1432, previous standard TS NUREG-0452 and NUREG-0212, NRC Final Policy Statement on TS improvements, Generic Letters 91-08 and 93-08, and NRC correspondence such as ADAMS Accession Nos. ML11264A057, ML112940645.

Additional Remarks or Comments:
This document discusses categories of ITS improvements that are available for non-ITS plants and provides numerous example LARs. It identifies beneficial changes and past NRC approvals.

IAEA Conference: OG-25-191, Common Approach to Address Climate Change Issues in the Framework of European Periodic Safety Reviews (Presentation & Abstract Summary)

Applicable Reactor Type:
☒ W ☐ CE ☐ B&W ☐ BWR ☐ Advanced Plants (e.g., AP1000) ☐ VVER ☐ CANDU ☐ Other (explain)

Membership Region:
☐ U.S. Members ☒ Europe+ Members ☐ Asia+ Members ☐ Conditional Members

Background Information:
The documents discusses increasing external hazards driven by climate change and their potential impacts on European nuclear power plants. National regulators require these hazards to be addressed during 10-year Periodic Safety Reviews. Because no common approach previously existed, utilities have treated climate considerations on a plant-specific basis. The PWROG initiated a project to develop a consistent, standardized method for evaluating climate-related hazards and their impacts on nuclear safety and plant reliability.

Description:
The presentation and abstract outline a PWROG standardized approach consisting of four major tasks: identification and screening of climate hazards; development of a classification scheme to rank hazard evolutions; development of a method to identify potential climate hazard strategies; and further standardization of such strategies. Information sources used in assessments include plant-specific documentation, hazard lists, design-basis limits, and plant operating experience. The presentation highlights principal climate hazards such as high temperatures, heat waves, cold weather, droughts, heavy rain, flash floods, fires, sea-level effects, and flooding. It also discusses how climate hazard screening affects plant documentation such as technical specifications, external events PSA, and environmental permits.

Benefits of Implementation:
The documents state that the approach aims to maintain nuclear safety by assisting plants with identifying vulnerabilities from climate hazards and implementing actions to manage them effectively. The unified approach across European borders provides consistency in licensing and allow plants to prioritize improvements based on risk insights and climate projections. Identified and implemented plant modifications (such as improved flooding protection, enhanced cooling capabilities, lightning and hail protection) would improve plant safety, safety margins, and equipment survivability.

Implementation:
None

Associated Documents:
PWROG-25012-NP, Rev. 0-C “Common Approach to Address Climate Change Issues in the Framework of European Periodic Safety Reviews”

Additional Remarks or Comments:
The files summarize the concept, purpose, and framework of the PWROG climate change approach. The project is developed based on European climate projections but may support future implementation by non-European plants.