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10 CFR 50.90

May 22, 2017
Serial: HNP-17-041

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Shearon Harris Nuclear Power Plant, Unit 1
Docket No. 50-400 / Renewed License No. NPF-63

Subject: Response to Request for Additional Information Regarding License Amendment Request to Relocate Technical Specification Cycle-Specific Parameters to the Core Operating Limits Report, Delete Reference to Plant Procedure PLP-106, and Delete Duplicate Reporting Requirements in Administrative Section of Technical Specifications

Ladies and Gentlemen:

By letter dated December 2, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16337A249), Duke Energy Progress, LLC (Duke Energy), submitted a license amendment request (LAR) for Shearon Harris Nuclear Power Plant, Unit 1 (HNP). The proposed license amendment requested to relocate specific Technical Specification (TS) parameters to the Core Operating Limits Report (COLR) in accordance with TSTF-339, Revision 2, to remove reference to plant procedure PLP-106, "Technical Specification Equipment List Program and Core Operating Limits Report," as it pertains to the COLR, and to delete duplicate reporting requirements from the Administrative Controls section in TS.

The U.S. Nuclear Regulatory Commission (NRC) staff reviewed the LAR and determined that additional information was needed to complete their review. Duke Energy provided a response to the NRC request for additional information (RAI) in a letter dated April 25, 2017. The NRC staff determined additional information is needed and a second RAI was received on May 9, 2017 (ADAMS Accession No. ML17123A133). Response to this request is required by May 22, 2017.

Attachment 1 provides Duke Energy's responses to the RAI questions. The proposed TS changes provided in the Duke Energy letter dated December 2, 2016, were updated in Attachment 2 as described in Attachment 1.

This additional information does not change the No Significant Hazards Determination provided in the original submittal. No regulatory commitments are contained in this letter.

In accordance with 10 CFR 50.91(b), HNP is providing the state of North Carolina with a copy of this response.

Should you have any questions regarding this submittal, please contact Jeffery Robertson, Manager – Regulatory Affairs, at (919) 362-3137.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 22, 2017.

Sincerely,

A handwritten signature in cursive script that reads "Tanya M. Hamilton".

Tanya M. Hamilton

Attachments:

1. Response to Request for Additional Information
2. Proposed Technical Specification Changes

cc: J. Zeiler, NRC Sr. Resident Inspector, HNP
W. L. Cox, III, Section Chief, N.C. DHSR
M. Barillas, NRC Project Manager, HNP
C. Haney, NRC Regional Administrator, Region II

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U.S. Nuclear Regulatory Commission
Serial HNP-17-041
Attachment 1

SERIAL HNP-17-041

ATTACHMENT 1

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1

DOCKET NO. 50-400

RENEWED LICENSE NUMBER NPF-63

By letter dated December 2, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16337A249), Duke Energy Progress, LLC (Duke Energy), submitted a license amendment request (LAR) for Shearon Harris Nuclear Power Plant, Unit 1 (HNP). The proposed license amendment requested to relocate specific Technical Specification (TS) parameters to the Core Operating Limits Report (COLR) in accordance with TSTF-339, Revision 2, to remove reference to plant procedure PLP-106, "Technical Specification Equipment List Program and Core Operating Limits Report," as it pertains to the COLR, and to delete duplicate reporting requirements from the Administrative Controls section in TS.

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STSB RAI #1

Technical Specification 2.1, "Safety Limits," still contains a cross reference to TS 6.7.1. Specifically, the action of TS 2.1.2 states the licensee will comply with the requirements of TS 6.7.1. In its application, the licensee did not address the effects of deleting TS 6.7.1 on TS 2.1, "Safety Limits." Provide justification for deleting TS 6.7.1 and maintaining its reference in other sections of TS. Clarify if the licensee's intent is to remove TS 6.7.1 referenced in other TSs and whether this expands the licensee's amendment request. Provide justification for removal in those applicable TS sections.

HNP Response:

Duke Energy's intent was to remove TS 6.7.1 in its entirety and all reference to it from the TS. The original submittal, dated December 2, 2016, indicated the removal of reference to TS 6.7.1 from TS 2.1.1, but did not indicate the removal from TS 2.1.2. An extent of condition revealed that there are no other references to TS 6.7.1 in the HNP TS. A revised markup of the impacted TS page is included in Attachment 2 that removes reference to TS 6.7.1 from TS 2.1.2.

The removal of the additional reference to TS 6.7.1 does not change the scope of the original submittal. The scope focused on the removal of TS 6.7.1 based on the intent of TSTF-5, which deletes administrative actions from TS that duplicate the requirements to report safety limit violations and requirements that preclude restart after a safety limit violation without NRC approval. Both safety limits under TS 2.1 referenced TS 6.7.1 for the required actions in the event of a safety limit violation. The removal of the reference from TS 2.1.2 is an administrative adjustment within the scope of the original submittal to accurately reflect the removal of TS 6.7.1 in its entirety due to the duplicative nature of its requirements with current regulations.

STSB RAI #2

The intent of TSTF-5, Revision 1, is to remove administrative actions from the TSs that duplicate Title 10 of the *Code of Federal Regulations* Sections 50.72, 50.73, and 50.36 requirements to report safety limit violations and requirements to preclude restart after a safety limit violation without NRC approval. TS Sections 6.7.1.b and 6.7.1.c require a safety limit

violation report be prepared and reviewed by the plant nuclear safety committee. This report shall describe: (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems, or structures, and (3) corrective action taken to prevent recurrence. The safety limit violation report shall also be submitted within 14 days of the violation to the Commission; the Manager, Nuclear Assessment Section, Shearon Harris; and the Vice President, Shearon Harris. TSTF-5 did not address the plant-specific changes contained in Shearon Harris TS Sections 6.7.1.b and 6.7.1.c. Provide justification for deletion of the plant-specific requirements contained in TS Sections 6.7.1.b and 6.7.1.c, which are part of the licensing basis and are outside the scope of TSTF-5, Revision 1.

HNP Response:

The current structure of the HNP TS does not readily allow for the direct adoption of the TS markups as provided in TSTF-5, Revision 1. The HNP TS are modeled after NUREG-0452, "Standard Technical Specifications for Westinghouse Pressurized Water Reactors," Revision 4, whereas the applicable markup in TSTF-5 is based on the Improved Standard TS (i.e., NUREG-1431, "Standard Technical Specifications – Westinghouse Plants"). The proposed amendment would credit the approved changes to the structure of the safety limit violation requirements from NUREG-0452 to NUREG-1431, as well as the intent of the NRC-approved TSTF-5 to remove administrative actions from TS that duplicate requirements already present in 10 CFR 50.36, 10 CFR 50.72, and 10 CFR 50.73.

The safety limit violation report identified in TS 6.7.1.b of NUREG-0452, as well as the requirement to submit it to the NRC within 14 days of the violation in TS 6.7.1.c, was replaced by the required submittal of a Licensee Event Report (LER) within 30 days as provided in TS 2.2.5 of NUREG-1431, Revision 0. With the approval of TSTF-5 by the NRC, TS 2.2.5 of NUREG-1431 was deleted since the requirement to submit a 30-day LER to report safety limit violations was determined to be redundant to the action required by 10 CFR 50.36(c)(8), *Written Reports*, that requires a report be submitted in accordance with the requirements of 10 CFR 50.73. As it relates to HNP TS 6.7.1.b, the required content of the safety limit violation report (i.e., applicable circumstances preceding the violation, effects of the violation upon facility components, systems, or structures, and corrective action taken to prevent recurrence) is equivalent to the required content of an LER as prescribed in 10 CFR 50.73(b). In alignment with NUREG-1431 and TSTF-5, the requirement to prepare a safety limit violation report is found to be equivalent to the 10 CFR 50.36(c)(8) requirement to submit a report performed in accordance with the requirements of 10 CFR 50.73 and therefore a redundant action that can be deleted. Similarly, the HNP TS 6.7.1.c requirement to submit the report to the NRC is redundant to the 10 CFR 50.36(c)(1)(i)(A) requirement to submit an LER to the Commission as required by 10 CFR 50.73. As such, it too may be deleted.

The HNP TS 6.7.1.b requirement for the report to be reviewed by the PNSC [Plant Nuclear Safety Committee] or the URG [Unit Review Group] per NUREG-0452 was removed during the development of NUREG-1431, Revision 0. The proposed removal of this review requirement is adequately addressed in the HNP Quality Assurance (QA) Program description in Final Safety Analysis Report (FSAR) Section 17.3.4.1.2.5, which covers the responsibilities of the PNSC. The HNP QA Program, along with the implementing procedures, dictates that the PNSC is responsible for reviewing all reportable events, as does HNP TS 6.6.1.b. Therefore, this administrative action is adequately addressed and may be deleted from HNP TS 6.7.1.c.

Similarly, the proposed removal of the HNP TS 6.7.1.c submittal of the report to the Manager – Nuclear Assessment Section and the Vice President - Harris Nuclear Plant, is adequately addressed in the HNP QA Program description in the FSAR. Section 17.3.4.1.2.5 of the FSAR requires the PNSC to forward reports to the HNP Site Vice President that cover the evaluation and recommendations to prevent recurrence of TS violations. Section 17.3.4.1.3.4 of the FSAR requires the Nuclear Oversight Section (i.e., Nuclear Assessment Section) to review reportable events which required reporting to the NRC in writing as specified in 10 CFR 50.73. In addition, HNP TS 6.6.1.b requires the results of PNSC review of reportable events to be submitted to the Manager – Nuclear Assessment Section and the Vice President – Harris Nuclear Plant. As such, the requirement to provide the violation report to utility management is adequately addressed and may be deleted from HNP TS 6.7.1.c.

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Attachment 2

SERIAL HNP-17-041

ATTACHMENT 2

PROPOSED TECHNICAL SPECIFICATION CHANGES

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1

DOCKET NO. 50-400

RENEWED LICENSE NUMBER NPF-63

2 PAGES (INCLUDING COVER)

2.0 SAFETY LIMITS AND LIMITING SAFETY SYSTEM SETTINGS

2.1 SAFETY LIMITS

REACTOR CORE

2.1.1 The combination of THERMAL POWER, pressurizer pressure, and the highest operating loop coolant temperature (T_{avg}) shall not exceed the limits shown in ~~Figure 2.1-1 for 3-loop operation.~~

APPLICABILITY: MODES 1 and 2.

specified in the COLR; and the following SLs shall not be exceeded:

ACTION:

ADD: INSERT 2

ADD: INSERT 1

- a. ~~Whenever the point defined by the combination of the highest operating loop average temperature and THERMAL POWER has exceeded the appropriate pressurizer pressure line, be in HOT STANDBY within 1 hour, and comply with the requirements of Specification 6.7.1.~~
- b. ~~Operation with less than 3 loops is governed by Specification 3.4.1.1.~~

REACTOR COOLANT SYSTEM PRESSURE

2.1.2 The Reactor Coolant System pressure shall not exceed 2735 psig except during hydrostatic testing.

APPLICABILITY: MODES 1, 2, 3, 4, and 5.

ACTION:

MODES 1 and 2:

~~Whenever the Reactor Coolant System pressure has exceeded 2735 psig, be in HOT STANDBY with the Reactor Coolant System pressure within its limit within 1 hour, and comply with the requirements of Specification 6.7.1.~~

MODES 3, 4, and 5:

~~Whenever the Reactor Coolant System pressure has exceeded 2735 psig, reduce the Reactor Coolant System pressure to within its limit within 5 minutes, and comply with the requirements of Specification 6.7.1.~~

2.2 LIMITING SAFETY SYSTEM SETTINGS

REACTOR TRIP SYSTEM INSTRUMENTATION SETPOINTS

2.2.1 The Reactor Trip System Instrumentation and Interlock Setpoints shall be set consistent with the Trip Setpoint values shown in Table 2.2-1.

APPLICABILITY: As shown for each channel in Table 3.3-1.