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

H.B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 DOCKET NO. 50-261 RENEWED LICENSE NO. DPR-23

SUBJECT: LICENSE AMENDMENT REQUEST PROPOSING TO REVISE TECHNICAL SPECIFICATION 3.8.2, "AC SOURCES – SHUTDOWN," SURVEILLANCE REQUIREMENT 3.8.2.1

Ladies and Gentlemen:

Pursuant to 10 CFR 50.90, Duke Energy Progress, LLC (Duke Energy) hereby submits a license amendment request (LAR) for H.B. Robinson Steam Electric Plant, Unit No. 2 (HBRSEP). The proposed change will revise HBRSEP Technical Specification (TS) 3.8.2, "AC Sources - Shutdown," Surveillance Requirement (SR) 3.8.2.1 to reflect that HBRSEP SR 3.8.1.18 is not required to be met in the TS 3.8.2 Applicability (i.e., Modes 5 and 6 and during movement of irradiated fuel assemblies).

HBRSEP SR 3.8.1.18 ("Verify manual transfer of AC power sources from the normal offsite circuit to each alternate offsite circuit.") is currently required in the TS 3.8.2 Applicability. However, SR 3.8.2.1 in NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Revision 4 specifically states that SR 3.8.1.8, which is consistent with HBRSEP site-specific SR 3.8.1.18, is not applicable. Therefore, a conforming change to NUREG-1431 is being proposed. Also, a primary purpose of SRs per 10 CFR 50.36 is to assure that a LCO is met and since only one qualified offsite circuit is required to be operable by HBRSEP LCO 3.8.2, SR 3.8.1.18 is not necessary to assure that the LCO is met.

Enclosure 1 provides a description and assessment of the proposed change. Enclosure 2 provides the existing HBRSEP TS pages marked to show the proposed change.

The proposed change has been evaluated in accordance with 10 CFR 50.91(a)(1) using criteria in 10 CFR 50.92(c), and it has been determined that the proposed change involves no significant hazards consideration. The bases for these determinations are included in Enclosure 1.

Issuance of the proposed amendment is requested within one year of the date the application is accepted by the NRC staff for review. Once approved, Duke Energy shall implement the amendment within 120 days.

There are no new regulatory commitments contained in this letter.

In accordance with 10 CFR 50.91, Duke Energy is notifying the State of South Carolina of this license amendment request by transmitting a copy of this letter and enclosure to the designated State Official.

If there are any questions or if additional information is needed, please contact Mr. Art Zaremba, Manager – Nuclear Fleet Licensing at 980-373-2062.

I declare under penalty of perjury that the foregoing is true and correct. Executed on June 4, 2019.

Sincerely,

Ernest J. Kapopoulos, Jr. Site Vice President

EJK/jlv

Enclosures:

- 1. Description and Assessment of the Proposed Change
- 2. Existing Technical Specifications Page Marked to Show the Proposed Change

cc (with Enclosures):

- C. Haney, USNRC Region II Regional Administrator
- M. Fannon, USNRC Senior Resident Inspector RNP
- N. Jordan, NRR Project Manager RNP
- A. Gantt, Chief, Bureau of Radiological Health (SC)
- A. Wilson, Attorney General (SC) S. E. Jenkins, Manager, Radioactive and Infectious Waste Management (SC)

ENCLOSURE 1

Description and Assessment of the Proposed Change

Subject: License Amendment Request Proposing to Revise Technical Specification 3.8.2, "AC Sources – Shutdown," Surveillance Requirement 3.8.2.1

- 1. SUMMARY DESCRIPTION
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1. SUMMARY DESCRIPTION

The proposed change will revise H.B. Robinson Steam Electric Plant, Unit No. 2 (HBRSEP) Technical Specification (TS) 3.8.2, "AC Sources - Shutdown," Surveillance Requirement (SR) 3.8.2.1 to reflect that HBRSEP SR 3.8.1.18 is not required to be met in the TS 3.8.2 Applicability (i.e., MODES 5 and 6 and during movement of irradiated fuel assemblies). HBRSEP SR 3.8.1.18 ("Verify manual transfer of AC power sources from the normal offsite circuit to each alternate offsite circuit.") is consistent with NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Revision 4 (Reference 1) SR 3.8.1.8, which is not required to be met for TS 3.8.2 Applicability. Therefore, a conforming change that will align HBRSEP TS 3.8.2 with TS 3.8.2 of Reference 1 is being proposed. Also, performance of HBRSEP SR 3.8.1.18 is not necessary to assure that LCO 3.8.2 will be met (a primary purpose of SRs per 10 CFR 50.36 is to assure a LCO is met) because only one qualified offsite circuit is required to be operable in the TS 3.8.2 Applicability. By not requiring performance of SR 3.8.1.18 during shutdown modes, plant resources can be directed to more important tasks.

2. DETAILED DESCRIPTION

2.1 System Design and Operation

The HBRSEP offsite power system consists of those facilities necessary to interconnect the generating unit with the remainder of the Duke Energy Progress transmission system. The offsite power system provides capability for delivering power from HBRSEP when the unit is generating power, and also provides capability for delivering power to the unit when it is not generating power. The offsite power system includes the generator, the main power transformers, the 230 kV and 115 kV switchyards, the unit auxiliary and startup transformers and the transmission lines from the site.

HBRSEP is equipped with two startup transformers (one 115 kV transformer and one 230 kV transformer) which connect the multiple sources of offsite power to the onsite electric distribution system. One of the HBRSEP offsite circuits consists of the 115 kV startup transformer, which is supplied from the 115 kV switchyard and ultimately powers Engineered Safety Feature (ESF) bus E1 through its normal feeder breaker. The other HBRSEP offsite circuit consists of a 230 kV startup transformer, which is supplied from the 115 kV switchyard from the 230 kV switchyard and ultimately powers ESF bus E2 through its normal feeder breaker. Both the 115 kV and 230 kV startup transformers are capable of energizing Emergency Buses E1 and E2 independently. Should a failure of either startup transformer occur, the other startup transformer would be capable of supplying power to the onsite distribution system. A manual transfer is made to the alternate offsite circuit upon a loss of either startup transformer.

2.2 <u>Current Technical Specifications Requirements</u>

The existing HBRSEP TS 3.8.2, SR 3.8.2.1 specifies that for AC sources required to be OPERABLE, the SRs of TS 3.8.1, "AC Sources – Operating," are applicable (except for SRs 3.8.1.16 and 3.8.1.17). Therefore, HBRSEP SR 3.8.1.18 ("Verify manual transfer of AC power sources from the normal offsite circuit to each alternate offsite circuit.") is applicable in Modes 5 and 6 and during the movement of irradiated fuel assemblies (i.e., the TS 3.8.2 Applicability).

HBRSEP Limiting Condition for Operation (LCO) 3.8.2 requires one offsite circuit to be operable and capable of supplying the onsite power distribution subsystem(s) of LCO 3.8.10, "Distribution Systems – Shutdown" to ensure that all required loads are powered from offsite power. In the

event of an accident during shutdown, LCO 3.8.2 ensures the capability to support systems necessary to avoid immediate difficulty, assuming a loss of all offsite power or a loss of all onsite diesel generator power.

2.3 Reason for the Proposed Change

HBRSEP TS 3.8.1 contains SR 3.8.1.18 ("Verify manual transfer of AC power sources from the normal offsite circuit to each alternate offsite circuit."), which is currently required in the TS 3.8.2 Applicability. However, SR 3.8.2.1 in NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Revision 4 specifically states that SR 3.8.1.8, which is consistent with HBRSEP site-specific SR 3.8.1.18, is not applicable.

To align the TS with NUREG-1431, Duke Energy is proposing to list HBRSEP SR 3.8.1.18 as an exception in HBRSEP SR 3.8.2.1. Only one offsite circuit is required to be OPERABLE by LCO 3.8.2 and performance of SR 3.8.1.18 in shutdown modes is not necessary to meet the intent of 10 CFR 50.36. Per 10 CFR 50.36(c)(3), part of the purpose of SRs is to assure that the limiting conditions for operation will be met. Since SR 3.8.1.18 is not necessary to assure that HBRSEP LCO 3.8.2 will be met, it is proposed that that HBRSEP SR 3.8.1.18 not be required to be met in the TS 3.8.2 Applicability such that plant resources can be directed to more important tasks.

2.4 Description of the Proposed Change

TS 3.8.1, "AC Sources - Shutdown" will be revised as follows and the TS markups that reflect the proposed change are contained in Enclosure 2.

SR 3.8.2.1 is modified to state: "For AC sources required to be OPERABLE, the SRs of Specification 3.8.1, "AC Sources-Operating," except SR 3.8.1.16, SR 3.8.1.17, and SR 3.8.1.18, are applicable."

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For convenience, SR 3.8.1.18 is provided as follows but is not part of the proposed change.

SR 3.8.1.18	NOTENOTE This Surveillance shall not be performed in MODE 1 or 2.	
	Verify manual transfer of AC power sources from the normal offsite circuit to each alternate offsite circuit.	24 months

3. TECHNICAL EVALUATION

HBRSEP SR 3.8.1.18, which is to verify manual transfer of AC power sources from the normal offsite circuit to each alternate offsite circuit, was authorized by the NRC staff in a Safety Evaluation (Reference 2). The addition of SR 3.8.1.18 more closely aligned HBRSEP to the guidance in NUREG-1431 (Reference 1) and continues to satisfy the regulatory requirements of 10 CFR 50.36.

To further align HBRSEP TS with the guidance of Reference 1, plant-specific SR 3.8.2.1 is proposed to be revised such that SR 3.8.1.18 does not have to be met in Modes 5 and 6 and during the movement of irradiated fuel assemblies (i.e., the TS 3.8.2 Applicability). Note that HBRSEP SR 3.8.1.18 is consistent with SR 3.8.1.8 in Reference 1. The Reference 1 SR 3.8.1.8 is listed as an exception in SR 3.8.2.1 (i.e., the SR is not applicable in TS 3.8.2 Applicability). The Reference 1 Bases for TS 3.8.2 state that "SR 3.8.1.8 is not required to be met since only one offsite circuit is required to be OPERABLE." HBRSEP TS 3.8.2 also only requires one offsite circuit to be OPERABLE, and therefore the justification in the NUREG-1431 Bases regarding SR 3.8.1.8 is not necessary to assure that HBRSEP LCO 3.8.2 will be met, which is a primary purpose of SRs as specified in 10 CFR 50.46(c)(3).

With the proposed change to not require performance of SR 3.8.1.18 during shutdown modes, operability of the equipment specified in HBRSEP LCO 3.8.2 will continue to ensure the availability of sufficient AC sources to operate the unit in a safe manner and to mitigate the consequences of postulated events (e.g., fuel handling accidents). In the event of an accident during shutdown, the LCO will continue to ensure the capability to support systems necessary to mitigate the event and maintain the unit in the shutdown or refueling condition for an extended period, assuming either a loss of all offsite power or a loss of all onsite diesel generator power.

4. **REGULATORY EVALUATION**

4.1 <u>Applicable Regulatory Requirements/Criteria</u>

The following regulatory requirements and guidance documents are applicable to the proposed change.

10 CFR 50.36

Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36, "Technical specifications," establishes the requirements related to the content of the TSs. Pursuant to 10 CFR 50.36(c) TSs will include items in the following categories: (1) safety limits, limiting safety system settings, and limiting control settings, (2) LCOs, (3) SRs, (4) design features; and (5) administrative controls. The proposed change to the HBRSEP TS affects the SR category.

Section 50.36(c)(3) states:

Surveillance requirements. Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, the facility operation will be within safety limits, and that the limiting conditions for operation will be met.

The proposed change revise TS 3.8.2 to list SR 3.8.1.18 as an exception such that SR 3.8.1.18 is not applicable in Modes 5 and 6 and during the movement of recently irradiated fuel assemblies. With the proposed change, SR 3.8.2.1 will continue to assure that LCO 3.8.2 is met since only one offsite circuit is required to be operable. Therefore, the proposed change is consistent with the 10 CFR 50.36 statements regarding SRs.

NUREG-1431

NUREG-1431, "Standard Technical Specifications, Westinghouse Plants, Revision 4.0," contains the improved Standard Technical Specifications (STS) for Westinghouse plants. The improved STS were developed based on the criteria in the Final Commission Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors, dated July 22, 1993 (58 FR 39132), which was subsequently codified by changes to 10 CFR 50.36 (60 FR 36953). The Abstract for NUREG-1431 states the following, in part:

Licensees are encouraged to upgrade their technical specifications consistent with those criteria and conforming, to the practical extent, to Revision 4 to the improved STS. The Commission continues to place the highest priority on requests for complete conversions to the improved STS.

The proposed change to revise TS 3.8.2 to modify SR 3.8.2.1 is consistent with the criteria in Revision 4 to the improved STS. HBRSEP would more closely conform to NUREG-1431 because of the proposed change.

The proposed change does not affect plant compliance with any of the above regulations or guidance and will ensure that the lowest functional capabilities or performance levels of equipment required for safe operation are met.

4.2 <u>No Significant Hazards Consideration Determination</u>

Duke Energy requests approval of a change to the H.B. Robinson Steam Electric Plant, Unit No. 2 (HBRSEP) Technical Specifications (TS). The proposed change will revise TS 3.8.2, "AC Sources - Shutdown," Surveillance Requirement (SR) 3.8.2.1 to reflect that HBRSEP SR 3.8.1.18 is not required to be met in the TS 3.8.2 Applicability (i.e., Modes 5 and 6 and during movement of irradiated fuel assemblies). HBRSEP SR 3.8.1.18 ("Verify manual transfer of AC power sources from the normal offsite circuit to each alternate offsite circuit.") is consistent with NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Revision 4 SR 3.8.1.8, which is not required to be met for TS 3.8.2 Applicability. Therefore, the proposed change associated with HBRSEP TS 3.8.2 is a conforming change to NUREG-1431.

Duke Energy has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of Amendment," as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed change revises TS 3.8.2, SR 3.8.2.1 to reflect that HBRSEP SR 3.8.1.18 is not required to be met in the TS 3.8.2 Applicability (i.e., Modes 5 and 6 and during movement of irradiated fuel assemblies). The proposed change modifies the SR 3.8.2.1 to be consistent with NUREG-1431. The AC power systems are not an initiator of any accident previously evaluated. As a result, the probability of an accident previously evaluated is not increased. The consequences of an accident with the proposed SR 3.8.2.1 listing HBRSEP SR 3.8.1.18 as an exception are no different than the

consequences of an accident in Modes 5 or 6 or during the movement of irradiated fuel assemblies with the existing SR 3.8.2.1 that requires SR 3.8.1.18 to be met.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change revises TS 3.8.2, SR 3.8.2.1 to reflect that HBRSEP SR 3.8.1.18 is not required to be met in the TS 3.8.2 Applicability (i.e., Modes 5 and 6 and during movement of irradiated fuel assemblies). The proposed change modifies the SR 3.8.2.1 to be consistent with NUREG-1431. Limiting Condition for Operation (LCO) 3.8.2 ensures that in the event of an accident during shutdown, sufficient capability exists to support systems necessary to mitigate the event and maintain the unit in the shutdown or refueling condition for an extended period, assuming either a loss of all offsite power or a loss of all onsite diesel generator power. SR 3.8.2.1 helps ensure that LCO 3.8.2 is met but SR 3.8.2.1 does not create the possibility of a new or different kind of accident from any accident previously evaluated. Thus, not requiring SR 3.8.1.18 to be met in the TS 3.8.2 Applicability does not alter that fact. The proposed change also does not alter the design, physical configuration or mode of operation of any plant structure, system or component. No physical changes are being made to any portion of the plant, so no new accident causal mechanisms are being introduced. The proposed change also does not result in any new mechanisms that could initiate damage to the reactor or its principal safety barriers (i.e., fuel cladding, reactor coolant system or primary containment).

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The proposed change revises TS 3.8.2, SR 3.8.2.1 to reflect that HBRSEP SR 3.8.1.18 is not required to be met in the TS 3.8.2 Applicability (i.e., Modes 5 and 6 and during movement of irradiated fuel assemblies). The proposed change modifies the SR 3.8.2.1 to be consistent with NUREG-1431. Only one offsite circuit is required to be Operable by LCO 3.8.2 and SR 3.8.2.1 will continue to ensure that the LCO is met. With the proposed change, adequate AC power continues to be provided to mitigate events postulated during shutdown, such as a fuel handling accident. Furthermore, the proposed change does not alter any design basis or safety limit established in the UFSAR or license.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, Duke Energy concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and accordingly, a finding of "no significant hazards consideration" is justified.

4.3 <u>Conclusions</u>

In conclusion, based on the considerations discussed above: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner; (2) such activities will be conducted in compliance with the Commission's regulations; and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

5. ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or a significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

6. **REFERENCES**

- 1. NUREG-1431, *Standard Technical Specifications Westinghouse Plants Revision 4.0*, U.S. Nuclear Regulatory Commission, April 2012.
- NRC letter, H.B. Robinson Steam Electric Plant, Unit No. 2 Issuance of Amendment No. 261 to Add a Second Qualified Offsite Circuit and For Automatic Operation of Load Tap Changers (CAC No. MG0276; EPID L-2017-LLA-0308), dated September 10, 2018 (ADAMS Accession No. ML18228A584).

Enclosure 2

Existing Technical Specifications Page Marked to Show the Proposed Change

ACTIONS

CONDITION	R	EQUIRED ACTION	COMPLETION TIME
B. (continued)	B.3	Suspend operations involving positive reactivity additions that could result in loss of required SDM or boron concentration.	Immediately
	<u>AND</u>		
	B.4	Initiate action to restore required DG to OPERABLE status.	Immediately

SURVEILLANCE REQUIREMENTS

	FREQUENCY	
SR 3.8.2.1	NOTE The following SRs are not required to be performed: SR 3.8.1.3, SR 3.8.1.8, SR 3.8.1.9, SR 3.8.1.11 through SR 3.8.1.15. For AC sources required to be OPERABLE, the SRs of Specification 3.8.1, "AC Sources-Operating," except SR 3.8.1.16, and SR 3.8.1.17, and SR 3.8.1.18, are applicable.	In accordance with applicable SRs