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

January 3, 2024

Mr. John Dent, Jr.
Executive Vice President and
Chief Nuclear Officer
Nebraska Public Power District
Cooper Nuclear Station
72676 648A Avenue
P.O. Box 98
Brownville, NE 68321

SUBJECT: COOPER NUCLEAR STATION - ISSUANCE OF AMENDMENT NO. 274 RE: REVISION TO TECHNICAL SPECIFICATIONS TO ADOPT TSTF-551, REVISION 3, "REVISE SECONDARY CONTAINMENT SURVEILLANCE REQUIREMENTS" (EPID L-2023-LLA-0068)

Dear Mr. Dent:

The U.S. Nuclear Regulatory Commission (NRC, the Commission) has issued the enclosed Amendment No. 274 to Renewed Facility Operating License No. DPR-46 for the Cooper Nuclear Station (Cooper). The amendment consists of changes to the Technical Specifications (TS) in response to your application dated May 3, 2023, as supplemented by letter dated October 10, 2023.

The amendment revises Cooper TS 3.6.4.1, "Secondary Containment," surveillance requirements (SRs) to allow the secondary containment vacuum limit to not be met provided that the standby gas treatment system remains capable of establishing the required secondary containment vacuum. The amendment also revised the SR to permit secondary containment access openings to be open for the purpose of entry and exit. These changes are consistent with Technical Specifications Task Force (TSTF) Traveler TSTF-551, Revision 3, "Revise Secondary Containment Surveillance Requirements," dated October 3, 2016.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's monthly *Federal Register* notice.

Sincerely,

/RA/

Thomas J. Byrd, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-298

Enclosures:
1. Amendment No. 274 to DPR-46
2. Safety Evaluation

cc: Listserv

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

NEBRASKA PUBLIC POWER DISTRICT

DOCKET NO. 50-298

COOPER NUCLEAR STATION

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 274
Renewed License No. DPR-46

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Nebraska Public Power District (the licensee) dated May 3, 2023, as supplemented by letter dated October 10, 2023, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-46 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 274, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of its date of issuance and shall be implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Jennivine K. Rankin

Digitally signed by Jennivine K. Rankin
Date: 2024.01.03 16:00:48 -05'00'

Jennivine K. Rankin, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. DPR-46
and the Technical Specifications

Date of Issuance: January 3, 2024

ATTACHMENT TO LICENSE AMENDMENT NO. 274

RENEWED FACILITY OPERATING LICENSE NO. DPR-46

COOPER NUCLEAR STATION

DOCKET NO. 50-298

Replace the following pages of the Renewed Facility Operating License No. DPR-46 and the Appendix A, Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Renewed Facility Operating License

REMOVE	INSERT
-3-	-3-

Technical Specifications

REMOVE	INSERT
3.6-35	3.6-35

(5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 2419 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 274, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Cooper Nuclear Station Safeguards Plan," submitted by letter dated May 17, 2006.

NPPD shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The NPPD CSP was approved by License Amendment No. 238 as supplemented by changes approved by License Amendments 244 and 249.

(4) Fire Protection

NPPD shall implement and maintain in effect all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c), as specified in the license amendment request dated April 24, 2012 (and supplements dated July 12, 2012, January 14, 2013, February 12, 2013, March 13, 2013, June 13, 2013, December 12, 2013, January 17, 2014, February 18, 2014, and April 11, 2014), and as approved in the safety evaluation dated April 29, 2014. Except where NRC approval for changes or deviations is required by 10 CFR 50.48(c), and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval, the licensee may make changes to the fire protection program without prior approval of the Commission if

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.1.1	----------NOTE---------- Not required to be met for 4 hours if analysis demonstrates one standby gas treatment (SGT) subsystem is capable of establishing the required secondary containment vacuum. ---------- Verify secondary containment vacuum is ≥ 0.25 inch of vacuum water gauge.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.1.2	Verify all secondary containment equipment hatches are closed and sealed.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.1.3	Verify one secondary containment access door in each access opening is closed, except when the access opening is being used for entry and exit.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.1.4	Verify each SGT subsystem can maintain ≥ 0.25 inch of vacuum water gauge in the secondary containment for 1 hour at a flow rate ≤ 1780 cfm.	In accordance with the Surveillance Frequency Control Program

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 274 TO

RENEWED FACILITY OPERATING LICENSE NO. DPR-46

NEBRASKA PUBLIC POWER DISTRICT

COOPER NUCLEAR STATION

DOCKET NO. 50-298

1.0 INTRODUCTION

By application dated May 3, 2023 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML23124A234), as supplemented by letter dated October 10, 2023, (ML23283A217), Nebraska Public Power District (the licensee) requested changes to the technical specifications (TSs) for Cooper Nuclear Station (Cooper). The amendment would adopt Technical Specifications Task Force (TSTF) Traveler, TSTF-551, Revision 3, "Revise Secondary Containment Surveillance Requirements," dated October 3, 2016 (ML16277A226). The U.S. Nuclear Regulatory Commission (NRC, the Commission) approved the traveler on September 21, 2017 (Package ML17236A365).

The proposed amendment would revise Cooper TS 3.6.4.1, "Secondary Containment," surveillance requirements (SRs) to allow the secondary containment vacuum limit to not be met provided that the standby gas treatment (SGT) system remains capable of establishing the required secondary containment vacuum. In addition, the proposed amendment would revise the SR to permit secondary containment access openings to be open for the purpose of entry and exit.

The supplemental letter dated October 10, 2023, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination as published in the *Federal Register* (FR) on July 11, 2023 (88 FR 44167).

2.0 REGULATORY EVALUATION

2.1 System Description

The secondary containment is a structure that encloses the primary containment including components that may contain primary system fluid. The safety function of the secondary containment is to contain, dilute, and hold up fission products that may leak from primary containment following a design-basis accident (DBA) to ensure the control room operator and

offsite doses are within the regulatory limits. There is no redundant train or system that can perform the secondary containment function should the secondary containment be inoperable.

The secondary containment boundary is the combination of walls, floor, roof, ducting, doors, hatches, penetrations, and equipment that physically form the secondary containment. Routinely used secondary containment access openings contain at least one inner and one outer door in an airlock configuration. In some cases, secondary containment access openings are shared such that there are multiple inner or outer doors. All secondary containment access doors are normally kept closed except when the access opening is being used for entry and exit of personnel, equipment, or material.

Secondary containment operability is based on its ability to contain, dilute, and hold up fission products that may leak from primary containment following a DBA. To prevent ground level exfiltration of radioactive material while allowing the secondary containment to be designed as a mostly conventional structure, the secondary containment requires support systems to maintain the pressure at less than atmospheric pressure. During normal operation, non-safety-related systems are used to maintain the secondary containment at a slight negative pressure to ensure any leakage is into the building and that any secondary containment atmosphere exiting is via a pathway monitored for radioactive material. However, during normal operation, it is possible for the secondary containment vacuum to be momentarily less than the required vacuum for a number of reasons, such as during wind gusts or swapping of the normal ventilation subsystems.

During emergency conditions, the SGT system is designed to be capable of drawing down the secondary containment to a required vacuum within a prescribed time and continue to maintain the negative pressure as assumed in the accident analysis. For Cooper, the maximum time to establish the required secondary containment vacuum, determined by a pressurization analysis, is 657 seconds. This time period bounds all design-basis scenarios by assuming multiple failures (e.g., one SGT subsystem and the reactor building heating and ventilation system air-operated inlet valve), an initial reactor building pressure equal to atmospheric pressure (0.0 inches water gauge) and 99th percentile 1-hour average wind speeds. Therefore, the SGT must be able to establish the required vacuum within 657 seconds. The leak tightness of the secondary containment together with the SGT system ensure that radioactive material is either contained in the secondary containment or filtered through the SGT system filter trains before being discharged to the outside environment via the elevated release point.

2.2 Proposed TS Changes

The proposed changes to the Cooper TS would allow the secondary containment vacuum limit to not be met provided the SGT system remains capable of establishing the required secondary containment vacuum. The proposed changes would also allow for the temporary opening of the inner and outer doors of secondary containment for the purpose of entry and exit (i.e., normal opening and prompt closure of a door for transit).

2.2.1 Revision to Surveillance Requirement 3.6.4.1.1

Surveillance Requirement (SR) 3.6.4.1.1 requires verification that secondary containment vacuum is greater than or equal to (≥) 0.25 inch of vacuum water gauge. This SR would be modified by a note that states:

> Not required to be met for 4 hours if analysis demonstrates one standby gas treatment (SGT) subsystem is capable of establishing the required secondary containment vacuum.

2.2.2 Revision to Surveillance Requirement 3.6.4.1.3

SR 3.6.4.1.3 requires verification that one secondary containment access door in each access opening is closed. This SR would be modified by adding the following phrase to the end of the SR statement, "... except when the access opening is being used for entry and exit."

2.3 Regulatory Requirements and Guidance

The regulation at Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.36(a)(1), requires an applicant for an operating license to include in the application proposed TS in accordance with the requirements of 10 CFR 50.36, "Technical specifications." The applicant must include in the application, a "summary statement of the bases or reasons for such specifications, other than those covering administrative controls." However, per 10 CFR 50.36(a)(1), these TS bases "shall not become part of the technical specifications."

Additionally, 10 CFR 50.36(b) requires:

> Each license authorizing operation of a … utilization facility … will include technical specifications. The technical specifications will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to 10 CFR 50.34 ["Contents of applications; technical information"]. The Commission may include such additional technical specifications as the Commission finds appropriate.

The categories of items required to be in the TSs are provided in 10 CFR 50.36(c). As required by 10 CFR 50.36(c)(2)(i), the TSs will include limiting conditions for operation (LCOs), which are the lowest functional capability or performance levels of equipment required for safe operation of the facility. Per 10 CFR 50.36(c)(2)(i), "[w]hen a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met."

The regulation at 10 CFR 50.36(c)(3) requires TSs to include items in the category of SRs, which are "requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met."

The NRC staff's guidance for review of TSs is in Chapter 16, "Technical Specifications," of NUREG-0800, Revision 3, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition" (SRP), dated March 2010 (ADAMS Accession No. ML100351425).

NUREG-0800, SRP, Section 15.0.1, "Radiological Consequence Analyses Using Alternative Source Terms," Revision 0, dated July 2000 (ML003734190), provides guidance to the NRC staff for the review of alternative source term (AST) amendment requests. SRP section 15.0.1 states that the NRC reviewer should evaluate the proposed change against the guidance in Regulatory Guide (RG) 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors," Revision 0, dated July 2000 (ML003716792).

RG 1.183 provides an acceptable methodology for analyzing the radiological consequences of several DBAs to show compliance with 10 CFR 50.67, “Accident source term.” RG 1.183 provides guidance to licensees on an acceptable application of AST (also known as the accident source term) submittals, including acceptable radiological analysis assumptions for use in conjunction with the accepted AST.

The regulations in 10 CFR 50.67(b)(2) states in part:

(i) An individual located at any point on the boundary of the exclusion area for any 2-hour period following the onset of the postulated fission product release, would not receive a radiation dose in excess of 0.25 Sv [sievert] (25 rem [roentgen equivalent man])[1] total effective dose equivalent (TEDE).

(ii) An individual located at any point on the outer boundary of the low population zone, who is exposed to the radioactive cloud resulting from the postulated fission product release (during the entire period of its passage), would not receive a radiation dose in excess of 0.25 Sv (25 rem) total effective dose equivalent (TEDE).

(iii) Adequate radiation protection is provided to permit access to and occupancy of the control room under accident conditions without personnel receiving radiation exposures in excess of 0.05 Sv (5 rem) TEDE for the duration of the accident.

3.0 TECHNICAL EVALUATION

The NRC staff evaluated the licensee’s application to determine if the proposed changes are consistent with the guidance, regulations, and licensing information discussed in section 2.3 of this safety evaluation (SE) and the approved traveler TSTF-551, Revision 3. In determining whether an amendment to a license will be issued, the Commission is guided by the considerations that govern the issuance of initial licenses to the extent applicable and appropriate. In making its determination as to whether to amend the license, the NRC staff considered those regulatory requirements that are automatically conditions of the license through 10 CFR 50.54, “Conditions of licenses.”

The regulation at 10 CFR 50.36(a)(1) states, in part: “A summary statement of the bases or reasons for such specifications … shall also be included in the application but shall not become part of the technical specifications.” Accordingly, along with the proposed TS changes, the licensee also submitted TS Bases changes that correspond to the proposed TS changes for information only.

[1] The use of 0.25 Sv (25 rem) TEDE is not intended to imply that this value constitutes an acceptable limit for emergency doses to the public under accident conditions. Rather, this 0.25 Sv (25 rem) TEDE value has been stated in this section as a reference value, which can be used in the evaluation of proposed design basis changes with respect to potential reactor accidents of exceedingly low probability of occurrence and low risk of public exposure to radiation.

3.1 Proposed Change to SR 3.6.4.1.1

A note is being added to SR 3.6.4.1.1. The note allows the SR to not be met for up to 4 hours if an analysis demonstrates that one SGT subsystem is capable of establishing the required secondary containment vacuum. During normal operation, conditions may occur that result in SR 3.6.4.1.1 not being met for short durations. For example, wind gusts that lower external pressure or loss of the normal ventilation system that maintains secondary containment vacuum may affect secondary containment vacuum. These conditions may not be indicative of degradations of the secondary containment boundary or of the ability of the SGT system to perform its specified safety function.

The proposed note provides an allowance for the licensee to confirm secondary containment operability by confirming that one SGT subsystem is capable of performing its specified safety function. This confirmation is necessary to apply the note allowing a 4-hour exception to meeting the SR acceptance criterion. While the duration of occurrences in which the secondary containment vacuum limit is not met is anticipated to be very brief, the allowance is permitted for a maximum of 4 hours which is consistent with the time permitted for secondary containment to be inoperable per Condition A of LCO 3.6.4.1.

The NRC staff has evaluated the impact of this note on the licensee's design-basis radiological consequence analyses to ensure that the proposed change will not result in an increase in the dose consequences and that the resulting calculated doses remain within the current radiological consequence analyses.

The proposed addition of the note to SR 3.6.4.1.1 does not change the TS requirement to meet SR 3.6.4.1.4. SR 3.6.4.1.4 requires verification that "each SGT subsystem can maintain ≥ 0.25 inch of vacuum water gauge in the secondary containment for 1 hour at a flow rate ≤ 1780 cfm [cubic feet per minute]." In addition, TS LCO 3.6.4.3, "Standby Gas Treatment (SGT) System," must be met; otherwise, the licensee shall shut down the reactor or follow any remedial action permitted by TSs until the condition can be met.

As discussed above, secondary containment operability is based on its ability to contain, dilute, and hold up fission products that may leak from primary containment following a DBA. To prevent ground level exfiltration of radioactive material, the secondary containment pressure must be maintained at a pressure that is less than atmospheric pressure. The secondary containment requires support systems to maintain the control volume pressure less than atmospheric pressure. Following an accident, the SGT system ensures the secondary containment pressure is less than the external atmospheric pressure. During normal operation, non-safety-related systems are used to maintain the secondary containment at a negative pressure. However, during normal operation it is possible for the secondary containment vacuum to be momentarily less than the required vacuum for a number of reasons. These conditions may not be indicative of degradations of the secondary containment boundary or of the ability of the SGT system to perform its specified safety function. Since the licensee meets the requirements of SR 3.6.4.1.4, meets the LCO or is following the Actions of TS LCO 3.6.4.3, and the licensee's analysis confirms secondary containment operability by confirming that one SGT subsystem is capable of performing its specified safety function, then there is reasonable assurance that the secondary containment and SGT subsystem will maintain the vacuum requirements during a DBA.

Therefore, the NRC staff has determined that if: (1) the secondary containment pressure can be maintained during an accident, at a vacuum that is consistent with the accident analyses, and

(2) the time assumed in the accident analyses to draw down the secondary containment pressure is maintained, then the secondary containment can perform its safety function and may be considered TS operable. This is evident by being able to successfully perform and meet SR 3.6.4.1.4 and requires the SGT system to establish and maintain the required vacuum in the secondary containment as assumed in the accident analyses.

Furthermore, because the specified safety functions of the secondary containment and SGT subsystem can be performed in the time assumed in the licensee's accident analysis, then the fission products that bypass or leak from primary containment, or are released from the reactor coolant pressure boundary components located in secondary containment prior to release to the environment, will be contained and processed as assumed in the licensee's design-basis radiological consequence dose analyses. The NRC staff finds that the proposed change does not affect the current radiological consequence analyses and concludes that the proposed change is acceptable with respect to the radiological consequences of DBAs.

3.2 Proposed Change to SR 3.6.4.1.3

The NRC staff review was limited to the licensee's request to provide an allowance for the brief simultaneous opening of redundant secondary containment access doors during normal entry and exit conditions. Normal entry and exit conditions do not include planned activities that could result in the simultaneous opening of redundant secondary containment access openings, such as maintenance of a secondary containment personnel access door or movement of large equipment through the openings that would take longer than the normal transit time.

The NRC staff reviewed the proposed changes to SR 3.6.4.1.3. The NRC staff determined that the SR continues to provide appropriate confirmation that secondary containment boundary doors are properly positioned and capable of performing their function in preserving the secondary containment boundary. The NRC staff determined that the SRs continue to appropriately verify the operability of the secondary containment and provide assurance that the necessary quality of systems and components are maintained in accordance with 10 CFR 50.36(c)(3).

Additionally, the NRC staff evaluated the impact of modifying the licensee's TS to allow secondary containment access openings to be open for entry and exit on the licensee's design-basis radiological consequence dose analyses to ensure that the modification will not result in an increase in the radiation dose consequences and that the resulting calculated radiation doses will remain within the design criteria specified in the current radiological consequence analyses. The NRC staff review of these DBAs determined that the loss-of-coolant accident (LOCA) is the one DBA that takes credit for the secondary containment, and is possibly impacted by the brief simultaneous opening of both an inner and outer access door during normal entry and exit conditions.

3.2.1 LOCA

Following a LOCA, the secondary containment structure is maintained at a negative pressure ensuring that leakage from primary containment to secondary containment can be collected and filtered prior to release to the environment. The SGT system performs the function of maintaining a negative pressure within the secondary containment, as well as collecting and filtering the leakage from primary containment. The licensee credits the SGT system for mitigation of the radiological releases from the secondary containment. In the LOCA analysis, the secondary containment draw down analysis assumes that SGT system can draw down the

secondary containment within 657 seconds. TS SR 3.6.4.1.4 verifies each SGT subsystem can maintain greater than or equal to 0.25 inches of vacuum water gauge in the secondary containment at a flow rate of less than or equal to 1780 cfm.

Conservatively, the DBA LOCA radiological consequence analysis in the licensee's Updated Safety Analysis Report (USAR), Chapter XIV-6.3, "Loss-of-Coolant Accident" (ML23129A303), assumes that following the start of a DBA LOCA, the secondary containment pressure of less than 0.0 inches of vacuum water gauge is achieved at approximately 657 seconds. The license assumes that releases into the secondary containment prior to the 657 seconds draw down time leak directly to the environment as a ground level release with no filtration. After the assumed 657 seconds draw down, these releases are filtered by the SGT system and released via the SGT system exhaust vent.

Based on this information, the NRC staff concludes that the licensee's DBA LOCA analysis has sufficient conservatism by assuming a draw down time of 657 seconds from the start of the DBA LOCA. Margin exists to ensure that the secondary containment can be reestablished during a brief, simultaneous opening of the inner and outer doors, and there is reasonable assurance that a failure of a safety system needed to control the release of radioactive material to the environment will not result. The brief, simultaneous opening of the secondary containment access doors does not impact the design bases and will not result in an increase in any onsite or offsite dose.

Based on the above discussion, the NRC staff finds that the licensee's proposed change to the TSs does not impact the licensee's design basis LOCA radiological consequence analysis and will not result in an increase in any on-site or offsite dose. Therefore, the NRC staff concludes that this change is acceptable with respect to the radiological consequences of the DBAs.

The licensee was approved for AST methodology and the radiological dose consequences analyses for DBAs by License Amendment 234, dated September 15, 2009 (ML092310349) for Cooper and most recently updated the radiological dose consequences analyses for DBAs by 10 CFR 50.59, "Changes, tests, and experiments," on January 23, 2023. The NRC staff reviewed the impact of the proposed changes to the Cooper TSs on all DBAs currently analyzed in the Cooper USAR that could have the potential for significant dose consequences. Chapter XIV of the Cooper USAR describes the DBAs and their radiological consequence analysis results.

3.2.2 Conclusion

As described above, the NRC staff reviewed the technical basis provided by the licensee to assess the radiological impacts of the changes to the secondary containment in the licensee's TSs. The NRC staff finds that the licensee's proposed change to SR 3.6.4.1.3 is consistent with regulatory requirements and guidance identified in section 2.3 of this SE. The NRC staff finds with reasonable assurance that the licensee's proposed change to the TSs will continue to comply with these criteria and that the licensee's estimate of the dose consequence of a design-basis LOCA will comply with the requirements of the current radiological consequence analyses. Therefore, the proposed changes are acceptable with regard to the radiological consequences of the postulated DBAs.

3.3 Variation from the Approved Traveler

The licensee is proposing the following variations from the TS changes described in TSTF-551 or the applicable parts of TSTF-551 or the NRC staff's SE. These variations do not affect the applicability of TSTF-551 or the NRC staff's SE to the proposed license amendment.

- The Cooper TSs do not contain an SR equivalent to Standard Technical Specifications (STS) SR 3.6.4.1.4 modified by TSTF-551. Therefore, the editorial change to STS SR 3.6.4.1.4 is not applicable.

- Traveler TSTF-551 discusses the applicable regulatory requirements and guidance, including the 10 CFR Part 50, Appendix A, "General Design Criteria for Nuclear Power Plants." Cooper was not licensed to the 10 CFR Part 50, Appendix A, General Design Criteria (GDC). Cooper was designed and constructed to comply with the intent of the 70 GDCs for Nuclear Power Plant Construction Permits proposed by the Atomic Energy Commission (AEC) in July 1967. The Cooper equivalents of the referenced GDCs are discussed in Cooper USAR Appendix F, "Conformance to AEC Proposed General Design Criteria" (ML23129A294). These differences do not alter the conclusion that the proposed change is applicable to Cooper.

- The final model SE for TSTF-551 discusses that the NRC staff review determined that there are two DBAs that take credit for the secondary containment and are possibly impacted by the brief and simultaneous opening of both an inner and outer access door during normal entry and exit conditions: the LOCA and the fuel handling accident (FHA) in secondary containment. The Cooper FHA does not credit the secondary containment or SGT system for mitigation of FHAs greater than 24 hours following reactor shutdown. Because the Cooper FHA radiological consequence analysis does not credit the secondary containment or the SGT system, the FHA in secondary containment analysis is not impacted by the brief and simultaneous opening of both an inner and outer access door during normal entry and exit conditions. This difference does not alter the conclusion that the proposed change is applicable to Cooper.

3.4 Summary

The NRC staff reviewed the proposed changes to the TS and determined that they meet the standards for TSs in 10 CFR 50.36(b). The proposed SRs assure that the necessary quality of systems and components is maintained that facility operation will be within safety limits, and that the LCOs will be met, and satisfy 10 CFR 50.36(c)(3). Additionally, the proposed changes to the TS were reviewed for technical clarity and consistency with customary terminology and format in accordance with SRP, Chapter 16.

Additionally, the NRC staff has evaluated the impact of the proposed changes on the design basis radiological consequence analyses against the regulatory requirements and guidance identified in section 2.3 of this SE. The NRC staff finds with reasonable assurance that the licensee's proposed changes to the TS will continue to comply with the requirements of the current radiological consequence analyses. Therefore, the proposed changes are acceptable with regard to the radiological consequences of the postulated DBAs.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Nebraska State official was notified of the proposed issuance of the amendment on November 30, 2023**.** The State official had no comments or any public comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes SRs. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, published in the *Federal Register* on July 11, 2023 (88 FR 44167), and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that 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.

Principal Contributors: D. Garmon
B. Lee
C. Ashley

Date: January 3, 2024

SUBJECT: COOPER NUCLEAR STATION - ISSUANCE OF AMENDMENT NO. 274 RE: REVISION TO TECHNICAL SPECIFICATIONS TO ADOPT TSTF-551, REVISION 3, “REVISE SECONDARY CONTAINMENT SURVEILLANCE REQUIREMENTS” (EPID L-2023-LLA-0068) DATED JANUARY 3, 2024

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TByrd, NRR

ADAMS Accession No. ML23334A201 ***concurrence via email** **NRR-058**

OFFICE	NRR/DORL/LPL4/PM*	NRR/DORL/LPL4/LA*	NRR/DSS/STSB/BC*	NRR/DSS/SCPB/BC*
NAME	TByrd	PBlechman	SMehta	BWittick
DATE	11/30/2023	12/4/2023	12/04/2023	12/05/2023
OFFICE	NRR/DSS/ARCB/BC*	OGC – NLO*	NRR/DORL/LPL4/BC*	NRR/DORL/LPL4/PM*
NAME	KHsueh	AGnoshNaber	JRankin	TByrd
DATE	12/05/2023	12/20/2023	01/03/2024	01/03/2024

OFFICIAL RECORD COPY