



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

September 29, 2014

Mr. Adam C. Heflin  
President, Chief Executive Officer,  
and Chief Nuclear Officer  
Wolf Creek Nuclear Operating Corporation  
P.O. Box 411  
Burlington, KS 66839

SUBJECT: WOLF CREEK GENERATING STATION - ISSUANCE OF AMENDMENT  
UNDER EXIGENT CIRCUMSTANCES RE: TECHNICAL SPECIFICATION  
3.4.15, "RCS LEAKAGE DETECTION INSTRUMENTATION," COMPLETION  
TIME EXTENSION (TAC NO. MF4777)

Dear Mr. Heflin:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 211 to Renewed Facility Operating License No. NPF-42 for the Wolf Creek Generating Station. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated September 10, 2014. This amendment is being issued under exigent circumstances in accordance with paragraph 50.91(a)(6) of Title 10 of the *Code of Federal Regulations*.

The amendment revises the TSs to incorporate a one-time Completion Time extension in TS 3.4.15, "RCS [reactor coolant system] Leakage Detection Instrumentation." The amendment added a Note to the 30-day Completion Time of Required Action A.2 to extend the Completion Time to allow the continued operation for Cycle 20 with the containment sump level and flow monitoring system inoperable until startup from a plant shutdown or startup from Refueling Outage 20 (spring 2015).

A. Heflin

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A copy of our related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink, appearing to read "C. F. Lyon". The signature is written in a cursive style with a large initial "C" and "F".

Carl F. Lyon, Project Manager  
Plant Licensing Branch IV-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-482

Enclosures:

1. Amendment No. 211 to NPF-42
2. Safety Evaluation

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

WOLF CREEK NUCLEAR OPERATING CORPORATION

WOLF CREEK GENERATING STATION

DOCKET NO. 50-482

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 211  
License No. NPF-42

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment to the Wolf Creek Generating Station (the facility) Renewed Facility Operating License No. NPF-42 filed by the Wolf Creek Nuclear Operating Corporation (the Corporation), dated September 10, 2014, 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, as amended, 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 license 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. NPF-42 is hereby amended to read as follows:

- (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 211, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated in the license. The Corporation shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance and shall be implemented within 30 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Eric R. Oesterle, Acting Chief  
Plant Licensing Branch IV-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Renewed Facility  
Operating License and  
Technical Specifications

Date of Issuance: September 29, 2014

ATTACHMENT TO LICENSE AMENDMENT NO. 211

RENEWED FACILITY OPERATING LICENSE NO. NPF-42

DOCKET NO. 50-482

Replace the following pages of the Renewed Facility Operating License No. NPF-42 and 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

4

INSERT

4

Technical Specifications

REMOVE

3.4-37

INSERT

3.4-37

- (5) The Operating Corporation, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (6) The Operating Corporation, 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 the operation of the facility.
- C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations in 10 CFR Chapter I and 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 Operating Corporation is authorized to operate the facility at reactor core power levels not in excess of 3565 megawatts thermal (100% power) in accordance with the conditions specified herein.
- (2) Technical Specifications and Environmental Protection Plan
- The Technical Specifications contained in Appendix A, as revised through Amendment No. 211, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated in the license. The Corporation shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
- (3) Antitrust Conditions
- Kansas Gas & Electric Company and Kansas City Power & Light Company shall comply with the antitrust conditions delineated in Appendix C to this license.
- (4) Environmental Qualification (Section 3.11, SSER #4, Section 3.11, SSER #5)\*
- Deleted per Amendment No. 141.

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\*The parenthetical notation following the title of many license conditions denotes the section of the supporting Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.15 RCS Leakage Detection Instrumentation

LCO 3.4.15 The following RCS leakage detection instrumentation shall be OPERABLE:

- a. The containment sump level and flow monitoring system;
- b. One containment atmosphere particulate radioactivity monitor; and
- c. One containment air cooler condensate monitoring system.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. Required containment sump level and flow monitoring system inoperable.</p>	<p>A.1 -----NOTE----- Not required until 12 hours after establishment of steady state operation. -----</p> <p>Perform SR 3.4.13.1.</p> <p><u>AND</u></p> <p>A.2 Restore required containment sump level and flow monitoring system to OPERABLE status.</p>	<p>Once per 24 hours</p> <p>-----NOTE----- The Completion Time is extended beyond the 30 days until startup from a plant shutdown or startup from Refueling Outage 20. -----</p> <p>30 days</p>

(continued)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 211 TO

RENEWED FACILITY OPERATING LICENSE NO. NPF-42

WOLF CREEK NUCLEAR OPERATING CORPORATION

WOLF CREEK GENERATING STATION

DOCKET NO. 50-482

1.0 INTRODUCTION

By application dated September 10, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14259A339), Wolf Creek Nuclear Operating Corporation (the licensee) requested changes to the Technical Specifications (TSs) for Wolf Creek Generating Station (WCGS).

The proposed changes would revise the TSs to incorporate a one-time Completion Time extension in TS 3.4.15, "RCS [reactor coolant system] Leakage Detection Instrumentation." The amendment would add a Note to the 30-day Completion Time of Required Action A.2 to extend the Completion Time to allow the continued operation for Cycle 20 with the containment sump level and flow monitoring system inoperable until startup from a plant shutdown or startup from Refueling Outage 20 (spring 2015).

2.0 REGULATORY EVALUATION

The reactor coolant pressure boundary leakage detection systems are designed to monitor environmental conditions within the containment for significant changes indicative of increased leakage. As described in the WCGS Updated Safety Analysis Report (USAR; not publicly available), Section 5.2.5, the reactor coolant pressure boundary leakage detection systems consist of the sump level and flow monitoring system, the containment air particulate monitoring system, the containment cooler condensate measuring system, and the containment humidity monitoring system. Leakage into the containment normal sump and instrument tunnel sump is monitored by recording the sump levels over time.

WCGS TS 3.4.15 requires that the containment sump level and flow monitoring system, one containment atmosphere particulate radioactivity monitor, and one containment air cooler condensate monitoring system to be operable in Modes 1, 2, 3, and 4. These systems together provide assurance that leakage from the reactor coolant pressure boundary can be detected promptly with adequate time to place the reactor in a safe condition. With the sump level and flow monitoring system inoperable, Condition A of TS 3.4.15 applies, and the licensee must



perform Surveillance Requirement (SR) 3.4.13.1 (i.e., Verify RCS operational LEAKAGE is within limits by performance of RCS water inventory balance) at an increased frequency (every 24 hours instead of every 72 hours) and return the system to operable status within 30 days.

As described in USAR Section 5.2.5.2.2, "Component Description," in part,

CONTAINMENT SUMP LEVEL AND FLOW MONITORING SYSTEM - Since a leak in the primary system would result in reactor coolant flowing into the containment normal or instrument tunnel sumps, leakage would be indicated by a level increase in the sumps. Indication of increasing sump level is transmitted from the sump to the control room level indicator by means of a sump level transmitter. The system provides measurements of low leakages by monitoring level increase versus time.

The normal and tunnel sump level indication system inputs are averaged to provide input to the RCS leakage instrument in the control room, so if one sump level indication system is inoperable, then the containment sump level and flow monitoring system is considered inoperable. In this case, with the instrument tunnel sump level transmitter inoperable, the normal sump level indication system is considered functional, but not operable. The normal sump level indication system is provided with a backup system that is not provided in the tunnel sump indication system. In addition, the normal sump level indication system is accessible in the containment, so a containment entry could be done to conduct repairs, if necessary.

The instrument tunnel sump level transmitter was declared inoperable on September 1, 2014, and Condition A of TS 3.4.15 was entered. Troubleshooting determined that a complete failure of the level transmitter had occurred. Due to radiological conditions, replacement of the tunnel sump level transmitter cannot be performed at power; that is, the transmitter is located in an area posted as "Grave Danger, Very High Radiation Area."

The licensee proposes adding a note to Condition A of TS 3.4.15 to extend the Completion Time from 30 days "until startup from a plant shutdown or startup from the Refueling Outage 20." During this time leakage into the instrument tunnel sump will be monitored by recording the frequency of operation of the instrument tunnel sump pump rather than by direct measurement of the instrument tunnel sump level. Water will be introduced into the instrument tunnel sump at a constant rate to ensure that a 1 gallon per minute (gpm) leak can be detected within four hours. During this time period, all leakage collected in the instrument tunnel sump will be treated as unidentified leakage.

General Design Criteria (GDC) 30, "Quality of reactor coolant pressure boundary," of Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Appendix A, states, in part, that "Means shall be provided for detecting and, to the extent practical, identifying the location of the source of reactor coolant leakage." WCGS conforms to GDC 30 as described in USAR Section 3.1. This section states, in part that:

Leakage inside the reactor containment is drained to the reactor building sump where the level is monitored. Leakage is also detected by measuring the airborne activity and humidity of the containment.

Regulatory Guide (RG) 1.45, Revision 0, "Reactor Coolant Pressure Boundary Leakage Detection Systems," describes acceptable methods for implementing the requirement of GDC 30. WCGS USAR Section 5.2.5.1.2 states, in part, that

POWER GENERATION DESIGN BASIS ONE - For leaks of 1 gpm or greater, other than identified leakage sources, the reactor coolant boundary leakage detection systems are designed to detect leaks and determine the leakage rate (in accordance with Regulatory Guide 1.45 and 10 CFR 50, Appendix A, General Design Criterion 30).

The reactor coolant pressure boundary leakage detection systems conform to the regulatory positions of RG 1.45, Revision 0 (ADAMS Accession No. ML003740113), as described in USAR Table 5.2-6. The applicable regulatory positions in RG 1.45, Revision 0 are substantially the same as in RG 1.45, Revision 1 (ADAMS Accession No. ML073200271).

Section 50.36, "Technical specifications," of 10 CFR establishes the regulatory requirements related to the content of TSs. Pursuant to 10 CFR 50.36, TS are required to include items in the following five specific categories related to station operation: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) surveillance requirements; (4) design features; and (5) administrative controls. The regulation further states that limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When 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.

### 3.0 TECHNICAL EVALUATION

The licensee proposes measuring leakage to the instrument tunnel sump by monitoring the frequency of operation of the instrument tunnel sump pump. The instrument tunnel sump pump is activated by water level in the instrument tunnel sump. This signal is independent of the instrument sump level transmitter and is not impacted by the inoperable level transmitter. Once water level in the instrument tunnel sump has dropped the sump pump is automatically stopped.

The licensee's methodology establishes a maximum volume associated with a single activation of the instrument tunnel sump pump. This volume is calculated using the maximum recorded level for the sump pump start signal and the minimum recorded level for the sump pump stop signal. An additional inch was added for conservatism. The maximum volume of water that could accumulate in the instrument tunnel sump before a sump pump would start was determined to be 260.5 gallons. This total volume is divided by the time elapsed between sump pump activations to determine an average leak rate.

Measuring leakage to the instrument tunnel sump by monitoring the frequency of sump pump operation increases the amount of time required to detect a 1 gallon per minute (gpm) leak. This method cannot detect a 1-gpm leak in 1 hour, in accordance with Regulatory Position 3 of RG 1.45, Revision 0. The licensee has stated that water will be introduced to the instrument tunnel sump at a rate of 0.5 gpm, such that a 1 gpm increase in leakage can be detected within

4 hours. Water intentionally introduced to the instrument tunnel sump will be included in the total unidentified leakage rate, as measured with respect to the LCO 3.4.13, which requires that:

RCS operational LEAKAGE shall be limited to:

- a. No pressure boundary LEAKAGE;
- b. 1 gpm unidentified LEAKAGE;
- c. 10 gpm identified LEAKAGE; and
- d. 150 gallons per day primary to secondary LEAKAGE through any one steam generator (SG).

The total volume associated with one operation of the instrument tunnel sump pump was conservatively determined. The instrument tunnel sump pump operates automatically and indication of increased leakage to the instrument tunnel sump is provided in the control room. Therefore, the NRC staff concludes that the proposed method of monitoring leakage to the instrument tunnel sump is sufficient to detect increased leakage within the stated response time. The NRC staff concludes that water intentionally introduced to the instrument tunnel sump will not mask leakage from the reactor coolant system because it is included in the total unidentified leakage rate. TS 3.4.13 limits the unidentified leakage rate to 1 gpm; therefore, the inclusion of intentionally introduced water in the total unidentified leakage rate conservatively reduces the plant's ability to accommodate additional unidentified leakage.

The licensee will continue to perform the Required Actions associated with TS 3.4.15 Condition A for the duration of the proposed one-time extension. Additionally, leakage to the instrument tunnel sump will continue to be monitored with the capability to detect a 1 gpm leak in 4 hours. While the response time for detecting leakage to the instrument tunnel sump is increased, the methodology proposed by the licensee preserves the ability to identify the location of leakage in accordance with GDC 30. In addition, the diverse leakage detection systems within containment provide further assurance that leakage from the reactor coolant system can be detected during this time. As the licensee stated in its application, in part,

The proposed one-time extension ... is acceptable for the following reasons:

- RCS leakage into the containment instrument tunnel sump is minimal as there are no directed water sources and the three separate entry locations from a spray source cascading into the instrument tunnel are small

- The containment atmosphere particulate radioactivity monitors are the leading indicating parameter and are still effective under low RCS activity conditions.
  
- Other diverse methods of detecting a RCS leak of one gallon per minute in one hour that are currently OPERABLE and/or available, including:
  - the containment normal sump level and flow monitoring system
  - containment atmosphere particulate radioactivity monitor
  - containment air cooler condensate monitoring system
  - containment gaseous radioactivity monitors
  - containment humidity monitoring system
  - containment temperature and pressure monitoring

The NRC staff concludes that the diverse leakage detection systems within containment provide further assurance that leakage from the reactor coolant system can be detected during the extended Completion Time. The NRC staff finds that the continued monitoring of the instrument tunnel sump in addition to the Required Actions of TS 3.4.15 Condition A constitutes sufficient justification for a one-time extension of the Completion Time.

In accordance with 10 CFR 50.36, when an LCO is not met, the licensee must shut down the reactor or follow any remedial action permitted by the TS. With the implementation of the proposed change to the Completion Time, the regulatory requirements of 10 CFR 50.36 will continue be met.

The licensee proposed a revision to TS 3.4.15 to permit a one-time extension of the Completion Time for Condition A. While the licensee remains in Condition A, leakage to the instrument tunnel sump will be monitored with an increased response time and the existing Required Actions of Condition A will continue to be performed. The actions proposed by the licensee provide assurance that leakage to the instrument tunnel sump can be detected and distinguished from other leakage for the duration of this one-time extension. Therefore the NRC staff concludes that the proposed revision to TS 3.4.15 is acceptable.

#### 4.0 EXIGENT CIRCUMSTANCES

The NRC's regulations contain provisions for issuance of amendments when the usual 30-day public comment period cannot be met. These provisions are applicable under exigent circumstances. Consistent with the requirements in 10 CFR 50.91(a)(6), exigent circumstances exist when: (1) a licensee and the NRC must act quickly; (2) time does not permit the NRC to publish a *Federal Register* notice allowing 30 days for prior public comment. The NRC requires the licensee to explain the exigency and why the licensee cannot avoid it, and use its normal public notice and comment procedures.

As discussed in the licensee's application dated September 10, 2014, the licensee requested that the proposed amendment be processed by the NRC on an exigent basis.

In its application, the licensee provided the following as the basis for exigency:

On August 31, 2014 at 2317 CDT [central daylight time] the instrument tunnel sump level transmitter was declared inoperable when the transmitter failed high and was found in the "failsafe" mode. After troubleshooting the transmitter, the fault was cleared and returned to "normal" mode. The transmitter failed high an additional four times between September 1, 2014 and September 3, 2014. After the last failure on September 3, 2014, the transmitter was no longer able to be reset. With the instrument tunnel sump level transmitter declared inoperable on September 1, 2014 at 1816 CDT, Condition A of LCO [limiting condition for operation] 3.4.15 was entered with Required Action A.2 requiring restoration of the containment sump level and flow monitoring system to OPERABLE status in 30 days.

Completion of troubleshooting on the level transmitter on September 3, 2014, determined that a complete failure of the level transmitter had occurred and that replacement of the level transmitter is required to restore the containment sump level and flow monitoring system to OPERABLE status. As the instrument tunnel sump level transmitter is in close proximity to the bottom of the reactor vessel, replacement of the level transmitter at power cannot be performed due to radiological conditions in this area that prohibit access by plant personnel. Required Action A.2 of LCO 3.4.15 requires restoring the containment sump level and flow monitoring system to OPERABLE status in 30 days (October 1, 2014 at 1816 hours). Condition E of LCO 3.4.15 requires the plant to be in MODE 3 in 6 hours and in MODE 5 in 36 hours if the containment sump level and flow monitoring system is not restored to OPERABLE status on October 1, 2014 at 1816 hours.

The NRC will not use exigent procedures if it determines that the licensee has failed to use its best efforts to make a timely application for the amendment in order to create the exigency and to take advantage of this procedure. However, in this instance, the NRC staff concludes that the licensee made a timely application for the proposed amendment following identification of the issue. The NRC staff concludes that the licensee could not avoid the exigency because of the untimely failure of the level transmitter.

The NRC staff also concluded that it needed to act quickly and that time did not permit the Commission to publish a *Federal Register* notice allowing 30 days for prior public comment because the amendment is necessary for continued operation.

## 5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Under the provisions in 10 CFR 50.91(a)(6), if the NRC has determined that exigent circumstances exist, and if the NRC also determines that the amendment involves no significant hazards consideration, then it will either issue a *Federal Register* notice providing notice of an opportunity for hearing and allowing at least two weeks from the date of the notice for prior public comment; or it will use local media to provide reasonable notice to the public in the area surrounding a licensee's facility of the licensee's amendment and of its proposed determination

consulting with the licensee on the proposed media release and on the geographical area of its coverage. In this case, a notice was published in the *Topeka Capital-Journal* newspaper on September 18-20, 2014, and the *Wichita Eagle* newspaper on September 22-24, 2014.

The Commission may issue the license amendment before the expiration of the 60-day period provided that its final determination is that the amendment involves no significant hazards consideration. This amendment is being issued prior to the expiration of the 60-day period. Therefore, a final finding of no significant hazards consideration follows.

The Commission has made a final determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment does not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration which is presented 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 does not make any hardware changes and does not alter the configuration of any plant system, structure, or component (SSC). The proposed change allows the continued operation for Cycle 20 with the instrument tunnel sump level transmitter inoperable until a startup from a plant shutdown or startup from Refueling Outage 20. The containment normal sump level indication remains functional and the monitoring of the frequency of operation of the containment instrument tunnel sump pumps would provide indication of RCS leakage. Although not required by TS, additional diverse means of leakage detection capability are available as described in the Updated Safety Analysis Report (USAR) Section 5.2.5. The TS will continue to require diverse means of leakage detection equipment, thus ensuring that leakage due to cracks would continue to be identified prior to propagating to the point of a pipe break and the plant shutdown accordingly.

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.

With respect to any new or different kind of accident, there are no proposed design changes nor or there any changes in the method by

which any safety related plant SSC performs its specified safety function. The proposed change will not affect the normal method of plant operation or change any operating parameters. No new accident scenarios, transient precursors, failure mechanisms, or limiting single failures will be introduced as a result of this amendment.

The proposed change will not alter the design or performance of the 7300 Process Protection System, Nuclear Instrumentation System, Solid State Protection System, Balance of Plant Engineered Safety Features Actuation System, Main Steam and Feedwater Isolation System, or Load Shedder and Emergency Load Sequencers used in the plant protection systems.

The change does not have a detrimental impact on the manner in which plant equipment operates or responds to an actuation signal. The proposed change allows the continued operation for Cycle 20 with the instrument tunnel sump level transmitter inoperable until startup from a plant shutdown or startup from Refueling Outage 20. The containment normal sump level indication remains functional and the monitoring of the frequency of operation of the containment instrument tunnel sump pumps would provide indication of RCS leakage. Although not required by TS, additional diverse means of leakage detection capability are available as described in USAR Section 5.2.5. The TS will continue to require diverse means of leakage detection equipment, thus ensuring that leakage due to cracks would continue to be identified prior to propagating to the point of a pipe break and the plant shutdown accordingly.

Therefore, the proposed change will 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.

There will be no effect on those plant systems necessary to assure the accomplishment of protection functions associated with reactor operation or the Reactor Coolant System. There will be no impact on the overpower limit, departure from nucleate boiling ratio (DNBR) limits, heat flux hot channel factor, nuclear enthalpy rise hot channel factor, loss of coolant accident peak cladding temperature, peak local power density, or any other limit and associated margin of safety. Required shutdown margins in the CORE OPERATING LIMITS REPORT will not be changed.

The proposed change allows the continued operation for Cycle 20 with the instrument tunnel sump level transmitter inoperable until startup from a plant shutdown or startup from Refueling Outage 20. The containment normal sump level indication remains functional and the monitoring of the

frequency of operation of the containment instrument tunnel sump pumps would provide indication of RCS leakage. Although not required by TS, additional diverse means of leakage detection capability are available as described in USAR Section 5.2.5. The TS will continue to require diverse means of leakage detection equipment, thus ensuring that leakage due to cracks would continue to be identified prior to propagating to the point of a pipe break and the plant shutdown accordingly.

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

The NRC staff has reviewed the licensee's analysis, and based on this review, has determined that the three standards of 10 CFR 50.92 are satisfied. Therefore, the Commission has made a final determination that the amendment request involves no significant hazards consideration.

#### 6.0 REGULATORY COMMITMENTS

In its application dated September 10, 2014, the licensee made the following regulatory commitments:

<b>REGULATORY COMMITMENT</b>	<b>DUE DATE</b>
If an instrument tunnel sump pump has not started within 12 hours of when it last stopped running, it will be concluded that a loss of sump pump leakage monitoring has occurred and a RCS water inventory balance will be performed at an increased frequency of once per 12 hours until sump pump leakage monitoring capability has been re-established.	Upon loss of tunnel sump pump leakage monitoring capability
Should a loss of instrument tunnel sump pump leakage monitoring occur, a RCS water inventory balance will be performed at an increased frequency of once per 12 hours and a plant shutdown initiated within 14 days to MODE 3 to complete the necessary repairs. If sump pump leakage monitoring capability is reliably re-established a plant shutdown will not be conducted.	Upon loss of instrument tunnel sump pump leakage monitoring capability

The NRC staff has reviewed the commitments and finds them acceptable for enhancing RCS leakage monitoring and response.

#### 7.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Kansas State official was notified of the proposed issuance of the amendment. The State official had no comments.

#### 8.0 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. 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, and there has been no public comment on such finding, which was noticed in the *Topeka Capital-Journal* newspaper on September 18-20, 2014, and the *Wichita Eagle* newspaper on September 22-24, 2014. 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.

#### 9.0 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:           R. Grover, NRR/DSS/STSB  
  E. Davidson, NRR/DSS/SBPB

Date: September 29, 2014

A. Heflin

- 2 -

A copy of our related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

*/RA/*

Carl F. Lyon, Project Manager  
Plant Licensing Branch IV-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-482

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- 1. Amendment No. 211 to NPF-42
- 2. Safety Evaluation

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**ADAMS Accession No. ML14267A016**

**\*\*via email**

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DATE	9/29/14	9/25/14	9/26/14	9/25/14
OFFICE	OGC – NLO**	NRR/DORL/LPL4-1/BC(A)	NRR/DORL/LPL4-1/PM	
NAME	DRoth	EOesterle	FLyon	
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