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

December 21, 2016

Mr. Charles R. Pierce
Regulatory Affairs Director
Southern Nuclear Operating Company, Inc.
P.O. Box 1295, Bin 038
Birmingham, AL 35201-1295

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNIT 2 – ISSUANCE OF AMENDMENT FOR 2A NUCLEAR SERVICE COOLING WATER TRANSFER PUMP (CAC NO. MF8926)

Dear Mr. Pierce:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 165 to Renewed Facility Operating License No. NPF-81 for the Vogtle Electric Generating Plant, Unit 2, in response to your application dated December 13, 2016.

The amendment modifies the Unit 2 Technical Specifications (TS) Limiting Condition for Operation (LCO) 3.7.9, "Ultimate Heat Sink (UHS)," to add a Note to extend the completion time of Condition D.2.2 of LCO 3.7.9 to 77 days to allow for refurbishing the 2A nuclear service cooling water (NSCW) transfer pump. This TS change is applicable only to the 2A NSCW transfer pump during operating Cycle 19.

A copy of our safety evaluation (SE) is also enclosed. The SE describes the exigent circumstances under which the amendment was issued and provides a final no significant hazards consideration determination. The Notice of Issuance, addressing the final no significant hazards determination and opportunity for a hearing, will be included in the Commission's biweekly *Federal Register* notice.

If you have any questions, regarding this matter, I may be reached at (301) 415-1493 or Robert.Martin@nrc.gov.

Sincerely,

Bob Martin

Bob Martin, Senior Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-425

Enclosure:
1. Amendment No.165 to NPF-81
2. Safety Evaluation

cc w/enclosures: Distribution via Listserv

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

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

GEORGIA POWER COMPANY

OGLETHORPE POWER CORPORATION

MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA

CITY OF DALTON, GEORGIA

DOCKET NO. 50-425

VOGTLE ELECTRIC GENERATING PLANT, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 165
Renewed License No. NPF-81

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

   A. The application for amendment to the Vogtle Electric Generating Plant, Unit 2 (the facility), Renewed Facility Operating License No. NPF-81, filed by Southern Nuclear Operating Company, Inc. (the licensee), acting for itself, Georgia Power Company Oglethorpe Power Corporation; Municipal Electric Authority of Georgia; and City of Dalton, Georgia (the owners), dated December 13, 2016, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as 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 set forth in 10 CFR Chapter I;

   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.

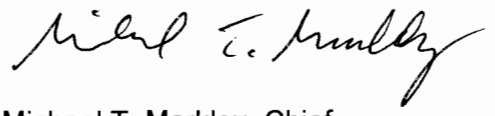
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications (TSs) as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-81 is hereby amended to read as follows:

   C. Technical Specifications and Environmental Protection Plan

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 165 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Michael T. Markley, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed NPF-81
and Technical Specifications

Date of Issuance: December 21, 2016

ATTACHMENT

VOGTLE ELECTRIC GENERATING PLANT, UNIT 2

LICENSE AMENDMENT NO. 165

RENEWED FACILITY OPERATING LICENSE NO. NPF-81

DOCKET NO. 50-425

Replace the following page of the Renewed Facility Operating License and the Appendix A Technical Specifications (TSs) with the attached revised page. The revised pages are identified by amendment number and a marginal line indicating the area of change.

Remove Page	Insert Page
License 3	License 3
TSs 3.7.9-2	TSs 3.7.9-2

(2) Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia, pursuant to the Act and 10 CFR Part 50, to possess but not operate the facility at the designated location in Burke County, Georgia, in accordance with the procedures and limitations set forth in this license;

(3) Southern Nuclear, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;

(4) Southern Nuclear, pursuant to the Act and 10 CFR Parts 30, 40, and 70 to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

(5) Southern Nuclear, 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;

(6) Southern Nuclear, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as my be produced by the operation of the facility authorized herein.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter 1 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

Southern Nuclear is authorized to operate the facility at reactor core power levels not in excess of 3625.6 megawatts thermal (100 percent 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. 165 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

The Surveillance requirements (SRs) contained in the Appendix A Technical Specifications and listed below are not required to be performed immediately upon implementation of Amendment No. 74. The SRs listed below shall be

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. One NSCW basin transfer pump inoperable.	D.1 Restore the transfer pump to OPERABLE status. OR D.2.1 Implement an alternate method of basin transfer. AND D.2.2 Restore the transfer pump to OPERABLE status.	8 days 8 days ----------NOTE---------- A one-time only change of the Completion Time to 77 days is permitted until January 23, 2017 during Vogtle Unit 2, Cycle 19. ---------- 31 days
E. Required Action and associated Completion Time not met. OR UHS inoperable for reasons other than Conditions A, B, C, or D.	E.1 Be in MODE 3. AND E.2 ----------NOTE---------- LCO 3.0.4.a is not applicable when entering MODE 4. ---------- Be in MODE 4.	6 hours 12 hours

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

AMENDMENT NO. 165 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-81

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

VOGTLE ELECTRIC GENERATING PLANT, UNIT 2

1.0 INTRODUCTION

By letter dated December 13, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16348A227), Southern Nuclear Operating Company, Inc. (the licensee), submitted a license amendment request to revise the Vogtle Electric Generating Plant, Unit 2, Technical Specification (TS) Limiting Condition for Operation 3.7.9, "Ultimate Heat Sink (UHS)." Specifically, an existing note extending the Completion Time of Condition 3.7.9.D.2.2 for one inoperable Nuclear Service Cooling Water (NSCW) transfer pump to 46 days would be further extended to 77 days. This TS change would be a one-time change and in effect only until January 23, 2017, for repair of the Unit 2, Train A NSCW transfer pump. The licensee requested this change on an exigent basis because the Train A pump became inoperable during testing to restore the Train B pump to operable status following Train B pump refurbishment. The licensee determined that TS Condition 3.7.9.E, which would require an orderly shutdown, would be entered prior to the expected completion of necessary repairs to the Train A NSCW transfer pump.

2.0 REGULATORY EVALUATION

2.1 System Description

Sections 9.2.1 and 9.2.5 of the Vogtle Electric Generating Plant (VEGP) Final Safety Analysis Report (FSAR) provide a description of the VEGP NSCW system and the VEGP UHS, respectively. The UHS for each VEGP unit consists of two NSCW towers, with one tower associated with each train of the NSCW system. Each NSCW tower includes a large water basin, three NSCW pumps (two 50 percent capacity and one standby), one NSCW transfer pump (for the opposite train), and a mechanical-draft cooling tower structure with four fan cells. The two normally operating NSCW pumps in each train provide water from the basin to remove heat from equipment supporting normal operation, reactor cooldown, and accident mitigation. The NSCW system flow returns to the basin via the mechanical draft cooling tower, which transfers heat to the atmosphere. Each tower provides 100 percent of the required heat removal capacity.

The VEGP UHS is operable when the basin level and water temperature are within limits, the required number of fans for the atmospheric conditions and basin water temperature are operable, and the NSCW transfer pumps are operable. Section 1.9.27 of the VEGP FSAR states that VEGP conforms to Regulatory Guide (RG) 1.27, "Ultimate Heat Sink for Nuclear Power Plants," Revision 2, January 1976, which specifies sufficient water inventory to support design-basis post-accident and safe-shutdown heat removal requirements for 30 days without makeup. The combined inventory of both basins is necessary to provide this capability. The 30 day performance reflects operation of both NSCW trains for one day, operation of one NSCW train for the following 29 days, and transfer of water from the non-operating tower basin to the operating tower basin as necessary to maintain adequate cooling water inventory.

2.2 Amendment Request Scope

By letter dated October 31, 2016, the NRC staff issued Amendment 164 to Renewed Facility Operating License No. NPF-81 for VEGP Unit 2 (ADAMS Accession No. ML16265A162). The change to TS 3.7.9 supported refurbishment of the Train B NSCW transfer pump with VEGP Unit 2 operating at power. The TS 3.7.9 limiting condition for operation requires the UHS to be operable in operating modes 1, 2, 3, and 4. Condition D of TS 3.7.9 applies when the UHS is inoperable because one NSCW basin transfer pump is inoperable. The required actions and completion times for this condition are to either restore the transfer pump to operable status within 8 days (Required Action D.1) or implement an alternative method of basin transfer within 8 days (Required Action D.2.1) and restore the transfer pump to operable status within 31 days (Required Action D.2.2). Amendment 164 added the following note to the Completion Time of Required Action D.2.2:

> A one-time only change of the Completion Time to 46 days is permitted for the 2B NSCW transfer pump refurbishment during Vogtle Unit 2, Cycle 19. The increased Completion Time is applicable only to the 2B NSCW transfer pump.

The licensee completed refurbishment of the 2B NSCW transfer pump on December 9, 2016, but experienced problems with the 2A NSCW transfer pump before the 2B pump was declared operable. The licensee removed the 2B NSCW transfer pump from service on November 7, 2016, while Unit 2 was operating at power. The licensee completed the refurbishment and reinstalled the pump in the Train A NSCW tower basin. On December 9, 2016, the licensee performed functional testing of the 2B NSCW transfer pump and operated the 2A NSCW transfer pump to manage the change in NSCW tower A and B basin levels. During this testing of the 2B NSCW transfer pump, the 2A NSCW transfer pump received a low discharge pressure alarm and tripped on high motor current.

Since the 2A NSCW transfer pump became inoperable before the 2B NSCW transfer pump was fully returned to OPERABLE status, Condition D of TS 3.7.9 remained in effect. If the time needed to restore the 2A NSCW transfer pump to OPERABLE status is greater than the time allowed to operate the plant while in Condition D, the plant would enter Condition E of TS 3.7.9, which requires an orderly shutdown of the reactor. The licensee determined that that time allowed to operate the plant while in Condition D would be insufficient for repair of the 2A NSCW transfer pump and requested a license amendment on an exigent basis to replace the note modifying the Completion Time for Condition D of TS 3.7.9. The proposed replacement note would state:

A one-time change of the Completion Time to 77 days is permitted until January 23, 2017 during Vogtle Unit 2, Cycle 19.

This one-time note will expire once TS 3.7.9 Condition D is exited or at 2400 EST on January 23, 2017, whichever is more restrictive. Thus, the proposed change allows a period of approximately 45 days to complete the repair with the reactor operating at power, beginning at the time of pump failure on December 9, 2016.

The licensee stated that substantial time is necessary for the removal and repair of the pump due to the complexity of the associated activities. The NSCW transfer pumps are a deep vertical column design over 80 feet in length, and each pump column is held in place by 7 pairs of seismic restraint pins spaced along the column. The licensee stated that the mating loops for the restraint pins were welded in position with the pump in place, establishing a custom fit for the column restraints, which makes removal and replacement of the pump challenging. The licensee has provided a repair timeline in Enclosure 1 to the license amendment request, which reflected the complexity of the repair activities and the status as of December 12, 2016. As of that date, the 2A NSCW transfer pump had been removed from the Train B NSCW tower. From this timeline, the 2A NSCW transfer pump is expected to be restored to operable status by approximately January 9, 2017. The licensee requested the additional 14 days permitted by the note as a contingency for unexpected circumstances that may affect the repair schedule.

2.3 Regulatory Criteria

The proposed license amendment involves a change to the content of the TSs. The staff reviews the proposed TS changes for compliance with applicable regulations and conformance with associated regulatory guidance.

Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.36 requires that each Operating License issued by the Commission contain TSs that include limiting conditions for operation, which 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 TSs until the condition can be met. As required by the portions of 10 CFR 50.40 and 50.57 made applicable by 50.92(a), the remedial actions must provide reasonable assurance that the steps taken when the LCO is not met will not endanger the health and safety of the public.

Guidance for staff review of TSs is contained in NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition," Section 16.0, "Technical Specifications." The NRC staff has prepared Standard Technical Specifications (STS) for each of the light–water reactor nuclear steam supply systems and associated balance–of–plant equipment systems. The guidance specifies that the staff review whether content and format are consistent with the applicable STS. Where TS provisions depart from the reference TSs, the staff determines whether proposed differences are justified by uniqueness in plant design or other considerations.

The applicable STS for VEGP are contained in NUREG-1431, "Standard Technical Specifications - Westinghouse Plants," Revision 4.0. Due to the unique design of the VEGP UHS, the STS do not address the aspects of the UHS configuration relevant to the proposed change.

Regulatory Position C.1 of RG 1.27 states the following with respect to cooling capacities of less than 30 days:

> A cooling capacity of less than 30 days may be acceptable if it can be demonstrated that replenishment or use of an alternate water supply can be effected to assure the continuous capability of the sink to perform its safety functions, taking into account the availability of replenishment equipment and limitations that may be imposed on "freedom of movement" following an accident or the occurrence of severe natural phenomena.

3.0 TECHNICAL EVALUATION

The proposed change to VEGP TS 3.79 Required Action D.2.2 adds a note extending the existing completion time to restore an inoperable NSCW transfer pump to operable status when an alternative method of basin inventory transfer is available from 31 days to a total of 77 days, with 32 days of that time consumed by the planned refurbishment of the 2B NSCW Transfer pump. The use of an alternative method of basin inventory transfer is explicitly included in the existing TS as a basis to extend the completion time to restore an inoperable NSCW pump to service from 8 days to 31 days. The proposed change adds an additional 46 days to extend the completion time to a total of 77 days. Since the change is effectively an increase in the time the facility relies on the alternative method of basin inventory transfer, the staff concluded acceptance should be based on reliability commensurate with the duration of the refurbishment and potential challenges to the operation of the alternative method.

In Enclosure 1 to the license amendment request provided by letter dated December 13, 2016, the licensee described the alternative method of basin inventory transfer. The alternative method consists of connecting a 6 inch diameter hose between the 2B NSCW cross pumping flange in the 2B NSCW tower and the basin in the 2A NSCW tower. To improve readiness, the licensee stated that a flange with a fire hose adapter would be connected to the 6 inch cross pumping flange within the 2B NSCW tower and 6 inch hose will be pre-staged. In the case of an event requiring water transfer from the 2B NSCW tower to the 2A NSCW tower, a 6 inch fire hose would be routed the approximately 330 feet to the 2B tower basin. Flow from the 2B NSCW pumps could be directed to the cross pumping flange connection by operation of a single valve, and both the NSCW pumps and the valve are safety-related and seismically qualified.

The 2A NSCW transfer pump undergoing repair is located in the 2B NSCW tower, but receives power from the A-Train. Its use would be important if the B-Train was providing the post-accident cooling function. The proposed alternative method of basin inventory transfer would rely on the 2B NSCW pumps, which receive power from the B-Train, and would not necessarily be available when the 2A NSCW tower is performing the UHS function. However, the transfer function would not be necessary for several days post-accident, and the likelihood that only the B-Train would be available at that time is very low. These reasons allowed the staff to find that the new remedial action, which was to continue to operate while repairs were under way for a

longer period than before, provided the requisite reasonable assurance that the amended steps taken when the LCO is not met will not endanger the health and safety of the public.

Furthermore, the licensee described the following measures that would enhance the reliability of the proposed alternative method of transfer:

- A Temporary Configuration Change will cover maintenance personnel implementation of the alternative inventory transfer in the field and give operators clear guidance in the event the transfer system is called upon to perform its function.
- By procedure, B-Train power would be protected for the duration of the extension, and work would be limited to ensure the reliability of B-Train power.
- NSCW transfer would only be needed following a design basis event, when the Emergency Response Organization would be available to complete any necessary repairs expeditiously.

Therefore, the staff found the proposed alternative method of basin inventory transfer suitably reliable to support the extension in the completion time to a total of 77 days for Required Action D.2.2.

In addition, the licensee identified supplemental equipment that could be used to perform the inventory transfer function in the event the proposed alternative method was not available. This equipment included a hydraulically-driven submersible pump and a diesel-hydraulic power skid that, combined with appropriate hoses and fittings, would be able to pump water from one NSCW basin to another. The licensee stated that operational guidance attached to the Temporary Configuration Change will describe the use of this supplemental equipment. The staff found this additional capability enhances defense-in-depth and adds to the reliability of the transfer function.

Summary

The staff concludes that the proposed change to TS 3.7.9 Required Action D.2.2 acceptable. The changed remedial action satisfies the applicable portions of 50.40 and 50.57 and is consistent with the guidance of RG 1.27. The provision of an alternative method for basin inventory transfer has been explicitly identified in the existing required actions as an acceptable basis to extend the completion time to restore an inoperable NSCW Transfer pump to operable status. The licensee proposed a specific, reliable alternative method for NSCW basin inventory transfer, identified reasonable administrative controls to ensure the availability of the alternative method, and identified additional equipment capable of performing the inventory transfer function. Considering the timing of the water transfer function in the post-accident sequence of events, the staff found the proposed increase in the completion time for TS 3.7.9 Required Action D.2.2 acceptable because the Train B NSCW equipment is operable and reliable alternative equipment has been prepared for the water transfer function in the event the Train A NSCW equipment were called upon for post-accident cooling. Based on the above, the NRC staff concludes that the requirements of 10 CFR 50.36 are met and the license amendment request is, therefore, acceptable.

4.0 EXIGENT CIRCUMSTANCES

4.1 Background

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; and (3) the NRC determines that the amendment involves no significant hazards consideration. As discussed in the licensee's application dated December 13, 2016, the licensee requested that the proposed amendment be processed by the NRC on an exigent basis.

Under the provisions in 10 CFR 50.91(a)(6), the NRC notifies the public in one of two ways: (1) by issuing a *Federal Register* notice providing an opportunity for hearing and allowing at least 2 weeks from the date of the notice for prior public comments; or (2) by using local media to provide reasonable notice to the public in the area surrounding the licensee's facility. In this case, the NRC used the second approach and published a public notice in a newspaper local to the VEGP, *The Augusta Chronicle,* on December 17 and December 18, 2016

4.2 Licensee's Basis for Exigent Circumstances

A discussion of the exigent circumstances is provided in section 2.2 above. In summary, the licensee states the basis for its request as follows:

> The proposed exigent amendment is requested because the 2A NSCW transfer pump is inoperable and will likely not be declared OPERABLE until after the expiration of the current Required Action and associated Completion Time of TS 3.7.9 Condition D, upon which time Condition E would be entered. TS 3.7.9 Condition E requires the plant to be in MODE 3 [Hot Standby] in 6 hours and in MODE 4 [Hot Shutdown] in 12 hours. The repair of the 2A NSCW transfer pump is in progress.

4.3 NRC Staff Conclusion

Based on the above circumstances, the NRC staff finds that the licensee made a timely application for the proposed amendment following identification of the issue. In addition, the NRC staff finds that the licensee could not avoid the need for an amendment to provide time to repair the 2A basin transfer pump. Based on these findings, and the determination that the amendment involves no significant hazards consideration, as discussed in SE Section 6.0, the NRC staff has determined that a valid need exists for issuance of the license amendment using the exigent provisions of 10 CFR 50.91(a)(6).

5.0 PUBLIC COMMENTS

As discussed in SE Section 4.1, the NRC staff published a public notice concerning the proposed amendment, in a newspaper local to the VEGP, *The Augusta Chronicle*, on December 17 and December 18, 2016. The notice included the NRC staff's proposed no

significant hazards consideration determination. The notice also provided an opportunity for public comment until 5:00 pm on December 19, 2016, regarding the staff's proposed no significant hazards consideration determination. No public comments have been were received regarding the proposed amendment.

6.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The NRC's regulations in 10 CFR 50.92 state that the NRC may make a final determination that a license amendment involves no significant hazards consideration if operation of the facility, in accordance with the amendment, would 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, in its application dated December 13, 2016, provided its analysis of the issue of no significant hazards consideration, using the standards in 10 CFR 50.92, as described below.

First Standard

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 alter any plant equipment or operating practices in such a manner that the probability of an accident is increased. The proposed changes will not alter assumptions relative to the mitigation of an accident or transient event. Furthermore, the ultimate heat sink (UHS) will remain capable of adequately responding to a design basis event during the period of the extended completion time (CT). Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Second Standard

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

Response: No

The proposed change does not introduce any new or unanalyzed modes of operation. The repair of the pump does not involve any unanalyzed modifications to the design or operational limits of the NSCW system. The redundant pump and compensatory measures allowed by the Technical Specifications will remain unaffected. Therefore, no new failure modes or accident precursors are created due to the pump repair during the extended Completion Time. For the reasons

noted above, the proposed change will not create the possibility of a new or different accident previously evaluated.

Third Standard

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

Response: No.

The margin of safety is related to the ability of the fission product barriers to perform their design functions during and following an accident. These barriers include the fuel cladding, the reactor coolant system, and the containment. The performance of these fission product barriers will not be affected by the proposed change; therefore, the margin to the onsite and offsite radiological dose limits are not significantly reduced. During the extended CT for the NSCW transfer pump, the NSCW system and the UHS will remain capable of mitigating the consequences of a design basis event such as a loss of coolant accident (LOCA). Technical Specifications 3.7.9 Action D.2.1 will be taken to provide an alternate method of basin transfer. For the reasons noted above, there is no significant reduction in a margin of safety.

Conclusion

Based on the above evaluation, the NRC staff concludes that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff has made a final determination that no significant hazards consideration is involved for the proposed amendment and that the amendment should be issued as allowed by the criteria contained in 10 CFR 50.91.

7.0 STATE CONSULTATION

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

8.0 ENVIRONMENTAL CONSIDERATION

The amendment changes requirements 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 made a final determination that no significant hazards consideration is involved for the proposed amendment as discussed above in SE Section 6.0. 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) 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 Contributor: Steve Jones

Date: December 21, 2016

If you have any questions, regarding this matter, I may be reached at (301) 415-1493 or Robert.Martin@nrc.gov.

Sincerely,

/RA/

Bob Martin, Senior Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-425

Enclosure:
1. Amendment No. 165 to NPF-81
2. Safety Evaluation

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