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10 CFR 50.90

March 24, 2016

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

Peach Bottom Atomic Power Station, Units 2 and 3
Renewed Facility Operating License Nos. DPR-44 and DPR-56
NRC Docket Nos. 50-277 and 50-278

SUBJECT: License Amendment Request to Revise Surveillance Requirement 3.5.1.5 Involving Recirculation Pump Discharge Valves

Pursuant to 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (EGC), proposes a change to the Technical Specifications (TS), Appendix A of Renewed Facility Operating License Nos. DPR-44 and DPR-56 for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3, respectively.

The proposed change revises PBAPS TS Limiting Condition for Operation (LCO) 3.5.1, "ECCS – Operating," Surveillance Requirement (SR) 3.5.1.5. The proposed change revises the Frequency of SR 3.5.1.5 from "Once each startup prior to exceeding 23% RTP," as modified by a Note stating, "Not required to be performed if performed within the previous 31 days" to "In accordance with the Surveillance Frequency Control Program."

EGC has concluded that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92.

The proposed change has been reviewed by the PBAPS Plant Operations Review Committee and approved by the Nuclear Safety Review Board in accordance with the requirements of the EGC Quality Assurance Program.

This license amendment request contains no regulatory commitments.

Attachment 1 provides the evaluation of the proposed change. Attachment 2 provides a copy of the marked up TS pages that reflect the proposed change. For information, the marked up TS Bases pages are provided in Attachment 3.

EGC requests approval of the proposed amendment by March 24, 2017. Upon NRC approval, the amendment shall be implemented within 60 days of issuance.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), EGC is notifying the Commonwealth of Pennsylvania of this application for license amendment by transmitting a copy of this letter and its attachments to the designated State Official.

If you have any questions or require additional information, please contact Stephanie J. Hanson at 610-765-5143.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 24th day of March 2016.

Respectfully,

D. P. Helker

David P. Helker
Manager, Licensing & Regulatory Affairs
Exelon Generation Company, LLC

Attachments:
1. Evaluation of Proposed Change
2. Markup of Technical Specifications Page
3. Markup of Technical Specifications Bases Page (For Information Only)

cc: USNRC Region I, Regional Administrator
USNRC Senior Resident Inspector, PBAPS
USNRC Project Manager, PBAPS
R. R. Janati, Bureau of Radiation Protection
S. T. Gray, State of Maryland

ATTACHMENT 1

EVALUATION OF PROPOSED CHANGE

Peach Bottom Atomic Power Station, Units 2 and 3

Docket Nos. 50-277 and 50-278

Subject: License Amendment Request to Revise SR 3.5.1.5 Involving Recirculation Pump Discharge Valves

1.0 SUMMARY DESCRIPTION

Pursuant to 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (EGC), proposes a change to the Technical Specifications (TS), Appendix A of Renewed Facility Operating License Nos. DPR-44 and DPR-56 for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3, respectively.

The proposed change revises PBAPS TS Limiting Condition for Operation (LCO) 3.5.1, "ECCS – Operating," Surveillance Requirement (SR) 3.5.1.5. The proposed change revises the Frequency of SR 3.5.1.5 from "Once each startup prior to exceeding 23% RTP," as modified by a Note stating, "Not required to be performed if performed within the previous 31 days" to "In accordance with the Surveillance Frequency Control Program."

2.0 DETAILED DESCRIPTION

PBAPS TS SR 3.5.1.5 requires that each recirculation pump discharge valve shall be OPERABLE by cycling the valves through one complete cycle of full travel during each startup prior to exceeding 23% of rated thermal power (RTP). The SR is modified by a note that indicates that the surveillance is only required if it has not been performed within the previous 31 days.

PBAPS operates on a 24-month refueling cycle. With the current TS, if the plant operates in Mode 1 for the entire operating cycle, the period between performances of this SR would be approximately 24 months. However, if the plant enters Mode 3 (hot shutdown), during the operating cycle, the TS would require that SR 3.5.1.5 be performed if it had not been performed within the previous 31 days. This testing frequency is currently beyond what is required by the 10 CFR 50.55a(f) In-Service Testing (IST) program requirements since the IST program would only require testing in certain cases in Mode 4 (cold shutdown).

In order to optimize the frequency of testing the recirculation pump discharge valves, the following proposed change to the PBAPS TS is being requested:

1. The proposed change would revise the Frequency of TS SR 3.5.1.5 from "Once each startup prior to exceeding 23% RTP," as modified by a Note stating, "Not required to be performed if performed within the previous 31 days" to "In accordance with the Surveillance Frequency Control Program" for PBAPS, Units 2 and 3.

Additionally, the PBAPS Surveillance Frequency Control Program will be revised to incorporate SR 3.5.1.5 and the frequency will be set to a 24-month interval.

The marked up TS pages that reflect the proposed change are provided in Attachment 2. For information, the marked up TS Bases pages are provided in Attachment 3.

3.0 TECHNICAL EVALUATION

Background:

The Reactor Coolant Recirculation System is designed to provide a forced coolant flow through the core to remove heat from the fuel. The forced coolant flow removes more heat from the fuel

than would be possible with just natural circulation. The forced flow, therefore, allows operation at significantly higher power than would otherwise be possible. The recirculation system also controls reactivity over a wide span of reactor power by varying the recirculation flow rate to control the void content of the moderator. The Reactor Coolant Recirculation System consists of two recirculation pump loops external to the reactor vessel. These loops provide the piping path for the driving flow of water to the reactor vessel jet pumps. Each external loop contains one variable speed motor-driven recirculation pump, associated piping, jet pumps, a suction valve, a discharge valve, and instrumentation. The recirculation loops are part of the reactor coolant pressure boundary and are located inside the drywell (primary containment) structure, which contains an inert atmosphere during power operations.

If a postulated Design Basis Accident – Loss of Coolant Accident (DBA-LOCA) were to occur, the Recirculation Loop discharge valves would receive an automatic signal to close to ensure Low Pressure Coolant Injection (LPCI) subsystem flow injection into the reactor via the recirculation jet pumps. LPCI is an independent operating mode of the Residual Heat Removal (RHR) System. There are two LPCI subsystems, each consisting of two motor-driven pumps and piping and valves to transfer water from the suppression pool to the Reactor Pressure Vessel (RPV) via the corresponding recirculation loop. The two LPCI pumps and associated motor operated valves in each LPCI subsystem are powered from separate 4 kV emergency buses. Both pumps in a LPCI subsystem inject water into the reactor vessel through a common inboard injection valve and depend on the closure of the recirculation pump discharge valve following a LPCI injection signal. Therefore, each LPCI subsystems' common inboard injection valve and recirculation pump discharge valve is powered from one of the two 4 kV emergency buses associated with that subsystem (normal source) and has the capability for automatic transfer to the second 4 kV emergency bus associated with that LPCI subsystem.

The recirculation discharge valves are normally-open, motor-operated, safety related 28" double-disk gate valves. These valves perform an active safety function in the closed position to prevent diversion of LPCI injection flow following a DBA-LOCA. They must close in sufficient time so that coolant is injected through a direct path into the reactor vessel within the time limit required by the safety analysis to flood the core and minimize damage to the nuclear fuel. These valves automatically close following a LPCI injection signal after reactor pressure has lowered to below the recirculation discharge permissive pressure. The closure is necessary to isolate the pipe rupture postulated by the DBA-LOCA event occurring in the suction line of the associated recirculation loop, thereby ensuring that LPCI operation will not discharge makeup water back through the recirculation pump and out the break. These valves have no safety function in the open position and remain in the open position during normal power operation to provide a recirculation flow path for normal reactivity control. They are not required to be placed in the open position during any accident or transient conditions.

Testing and Maintenance History of the PBAPS Recirculation Discharge Valves:

There are four recirculation pump discharge valves provided for Units 2 and 3 (one for each of the two recirculation loops per unit). The valve designations are MO-2-02-053A, MO-2-02-053B, MO-3-02-053A and MO-3-02-053B. An investigation of the historical test performance of these valves was performed:

Unit 2 Recirculation Discharge Valves (MO-2-02-053A(B)):

Outage	Stroke Test Results	Comments
Refueling Outage 2R16 (fall 2006)	Satisfactory	
Refueling Outage 2R17 (fall 2008)	Satisfactory	24 month frequency due to no plant shutdowns during cycle
Refueling Outage 2R18 (fall 2010)	Satisfactory	24 month frequency due to no plant shutdowns during cycle
Refueling Outage 2R19 (fall 2012)	Satisfactory	24 month frequency due to no plant shutdowns during cycle
Refueling Outage 2R20 (fall 2014)	Satisfactory	24 month frequency due to no plant shutdowns during cycle
Maintenance Outage (December 2015)	Satisfactory	

Unit 3 Recirculation Discharge Valves (MO-3-02-053A(B)):

Outage	Stroke Test Results	Comments
Refueling Outage 3R15 (fall 2005)	Satisfactory	
Refueling Outage 3R16 (fall 2007)	Satisfactory	24 month frequency due to no plant shutdowns during cycle
Maintenance Outage (February 2008)	Satisfactory	
Maintenance Outage (January 2009)	Satisfactory	
Refueling Outage 3R17 (fall 2009)	Satisfactory	
Maintenance Outage (November 2010)	Satisfactory	
Refueling Outage 3R18 (fall 2011)	Satisfactory	
Refueling Outage 3R19(fall 2013)	Satisfactory	24 month frequency due to no plant shutdowns during cycle
Refueling Outage 3R20 (fall 2015)	Satisfactory	24 month frequency due to no plant shutdowns during cycle

Each recirculation discharge valve has been successfully stroked since 2005 as depicted above. In several cases, the interval between stroke time tests was 24 months as a result of several breaker-to-breaker cycle runs at PBAPS. Additionally, a Plant Information Management System (PIMS) maintenance history search was performed back to 2000 for the valves as well as the motor-operated valve operators. No significant adverse failure trends were identified. Based on the above analysis, a stroke time testing frequency of 24 months was determined to be justified.

Transition to Surveillance Frequency Control Program:

TS 5.5.14, Surveillance Frequency Control Program, provides control of the majority of TS surveillance frequencies at PBAPS. The program ensures that SRs specified in the TS are performed at intervals sufficient to assure the associated LCOs are met. The frequencies are controlled in accordance with Nuclear Energy Institute (NEI) 04-10, "Risk-Informed method for Control of Surveillance Frequencies," Rev. 1, which includes NRC-approved methodologies for changing the frequencies of SRs. Although the recirculation discharge valve testing frequencies were not specifically included in the Technical Specification Task Force (TSTF) 425, NRC approved traveler, other plants have applied and been granted approval for including the recirculation discharge valve testing frequency within the SFCP. As part of this proposed license amendment, adequate technical justification exists for a 24-month frequency of the recirculation discharge valves as discussed previously. Since this justification exists, it is appropriate to transfer the control of the surveillance frequency to the SFCP.

The intent of moving the SR 3.5.1.5 frequency to within the SFCP is to allow for licensee control of changing the frequency. Based on the test and maintenance history of the recirculation discharge valves, these valves would initially be placed into the SFCP with a frequency of once per 24 months. Currently, the SR 3.5.1.5 frequency requires cycling of the recirculation discharge valves during every mid-cycle plant shutdown regardless of whether Mode 3 or Mode 4 was achieved. In-Service Testing (IST) program requirements would only require testing during certain Mode 4 conditions for mid-cycle plant shut downs in accordance with the ASME OM Code (2001, with 2003 addenda) sections ISTC-3510, ISTC-3521(c) and ISTC-3521(g). The IST program requirements of performing stroke time testing of the recirculation discharge valves during certain Mode 4 conditions would not be affected by this proposed license amendment.

The SFCP ensures that SRs specified in the TS are performed at intervals sufficient to assure the associated LCOs are met. Existing regulatory programs, such as 10 CFR 50.65 (Maintenance Rule) and the corrective action program required by 10 CFR 50, Appendix B, require monitoring of Surveillance test failures and require action be taken to address such failures. One of these actions may be to consider changing the frequency at which the Surveillance is performed. These regulatory requirements are sufficient to ensure that Surveillance Frequencies which are insufficient to assure the LCO is met are identified and action taken. In addition, the SFCP requires monitoring of Surveillance Frequencies that are changed. The SFCP approach for changing Surveillance Frequencies uses existing Maintenance Rule implementation guidance (NUMARC 93-01, Rev. 3), combined with elements of NRC In-service Testing Regulatory Guide (RG) 1.175, to develop risk-informed test intervals for systems, structures and components (SSCs) having Technical Specification Surveillance Requirements.

Although originally developed to address test intervals for pump and valve testing required by the ASME Code, the concepts of RG 1.175 are applicable to the SFCP with minor modifications. In particular, RG 1.175 provides information relative to modeling the effect of the revised Surveillance Frequencies in a probabilistic risk assessment (PRA). The method described is also consistent with RG 1.174, "An Approach for Using Probabilistic Risk Assessments in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," and RG 1.177, "An Approach for Plant-Specific Risk-Informed Decision-making: Technical Specifications" and provides more specific guidelines to facilitate application by the licensee. RG 1.177 provides guidance for changing Surveillance Frequencies and Completion Times. However, for

allowable risk changes associated with Surveillance Frequency changes, it refers to RG 1.174. The RG provides quantitative risk acceptance guidelines for changes to core damage frequency (CDF) and large early release frequency (LERF), along with additional guidelines that have been adapted for this methodology. Following the establishment of adequate PRA capability, the process involves the development of revised Surveillance Frequencies (i.e., Surveillance Test Intervals) based on risk insights from PRAs, plant operational experience, and other factors. The effect of the proposed change, aggregate risk impact of the single revised Surveillance Frequency for all PRA events, and the cumulative risk impact for all Surveillance Frequency changes will be compared to NRC risk acceptance guidelines. Feedback and periodic re-evaluation of the Surveillance Frequencies will be conducted for SSCs. Based on the above, it is concluded that applying the existing NRC-approved SFCP to SR 3.5.1.5 is acceptable.

4.0 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

The following regulatory requirements have been considered:

- Title 10 of the Code of Federal Regulations (10 CFR), Section 50.36, "Technical specifications," in which the Commission established its regulatory requirements related to the contents of the TS. 10 CFR 50.36(c) requires that the TS include, among other things, items in the following categories: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls.

- 10 CFR 50.55a(f) *Inservice testing requirements*. Systems and components of boiling and pressurized water-cooled nuclear power reactors must meet the requirements of the ASME Boiler and Pressure Vessel Code (BPV Code) and the ASME Code for Operation and Maintenance of Nuclear Power Plants (OM Code).

- 10 CFR 50.65(a)(1) states that each holder of a license to operate a nuclear power plant…shall monitor the performance or condition of structures, systems, or components…in a manner sufficient to provide reasonable assurance that these structures, systems, and components…are capable of fulfilling their intended functions.

4.2 Precedence

The proposed change to revise the frequency of TS SR 3.5.1.5 from "Once each startup prior to exceeding 23% RTP," as modified by a Note stating, "Not required to be performed if performed within the previous 31 days" to "In accordance with the Surveillance Frequency Control Program" for PBAPS, Units 2 and 3 is similar to that approved for Fermi, Unit 2 (Reference 1) and E. I. Hatch, Units 1 and 2 (Reference 2).

4.3 No Significant Hazards Consideration

Exelon Generation Company, LLC (EGC), proposes a change to the Technical Specifications (TS), Appendix A of Renewed Facility Operating License Nos. DPR-44 and DPR-56 for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3, respectively.

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

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

Response: No.

The proposed change revises the frequency for cycling the recirculation pump discharge valves from "Once each startup prior to exceeding 23% RTP," as modified by a Note stating, "Not required to be performed if performed within the previous 31 days" to "In accordance with the Surveillance Frequency Control Program". Testing of the recirculation pump discharge valves is not an initiator of any accident previously evaluated. As the recirculation pump discharge valves are still required to be Operable, the ability to mitigate any accident previously evaluated is not affected. The proposed change does not adversely affect the design assumptions, conditions, or configuration of the facility. The proposed change does not alter or prevent the ability of structures, systems, and components (SSCs) from performing their intended function.

Therefore, this change does not significantly increase the probability or consequences of an accident previously evaluated.

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

Response: No.

The proposed change revises the frequency for cycling the recirculation pump discharge valves from "Once each startup prior to exceeding 23% RTP," as modified by a Note stating, "Not required to be performed if performed within the previous 31 days" to "In accordance with the Surveillance Frequency Control Program". This revision will not impact the accident analysis. The change will not alter the methods of operation of the recirculation pump discharge valves. No new or different accidents result. The change does not involve a physical alteration of the plant (i.e., no new or different type of equipment will be installed) or a significant change in the methods governing normal plant operation. The change does not alter assumptions made in the safety analysis.

Therefore, the possibility of a new or different kind of accident from any accident previously evaluated is not created.

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

Response: No.

The proposed change revises the frequency for cycling the recirculation pump discharge valves from "Once each startup prior to exceeding 23% RTP," as modified by a Note stating, "Not required to be performed if performed within the previous 31 days" to "In accordance with the Surveillance Frequency Control Program." The proposed change does not alter the manner in which safety limits, limiting safety system settings or limiting conditions for operation are determined. The safety analysis acceptance criteria are not affected by this change. The proposed change will not result in plant operation in a configuration outside the design basis. The frequency of testing the recirculation pump discharge valves will be consistent with the frequency of testing other valves in the Emergency Core Cooling System.

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

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

4.4 Conclusions

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

5.0 ENVIRONMENTAL CONSIDERATION

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

6.0 REFERENCES

1. Letter from J. K. Rankin (U.S. NRC) to P. Fessler (DTE Energy Company), "Fermi 2 – Issuance of Amendment RE: Revise Technical Specifications by Relocating Surveillance Frequencies to Licensee Control in Accordance with Technical Specifications Task Force Traveler 425, Revision 3 (TAC No. MF4859)," dated July 14, 2015 (ADAMS Accession No. ML 151558416).

2. Letter from P. G. Boyle (U.S. NRC) to M. J. Ajluni (Southern Nuclear Operating Company, Inc.), "Edwin I. Hatch Nuclear Plant, Unit Nos. 1 and 2, Issuance of Amendments regarding Relocation of Specific Surveillance Frequencies to Licensee Controlled Program TSTF-425, Revision 3 (TAC Nos. ME5016 and ME5017)," dated January 3, 2012 (ADAMS Accession No. ML 11108A129).

3. Nuclear Energy Institute (NEI) 04-10, "Risk-Informed Technical Specifications Initiative 5b Risk-Informed method for Control of Surveillance Frequencies," Rev. 1, dated April 2007.

4. American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants (OM Code) 2001 Edition through the 2003 Addenda.

5. NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants", Rev. 3, dated July 2000.

6. Regulatory Guide (RG) 1.175, "An Approach for Plant-Specific, Risk-Informed Decision-making: Inservice Testing," dated August 1998.

7. Regulatory Guide (RG) 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Bases," dated July 1998.

8. Regulatory Guide (RG) 1.177, "An Approach for Plant-Specific, Risk-Informed Decision-making: Technical Specifications," dated August 1998.

ATTACHMENT 2

Markup of Technical Specifications Pages

Peach Bottom Atomic Power Station, Units 2 and 3
Renewed Facility Operating License Nos. DPR-44 and DPR-56
Docket Nos. 50-277 and 50-278

License Amendment Request to Revise SR 3.5.1.5

Unit 2 TS Pages

3.5-5

Unit 3 TS Pages

3.5-5

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.5.1.5	~~-------------------NOTE-------------------~~ ~~Not required to be performed if performed within the previous 31 days.~~ ~~---~~ Verify each recirculation pump discharge valve cycles through one complete cycle of full travel or is de-energized in the closed position.	In accordance with the Surveillance Frequency Control Program. ~~Once each startup prior to exceeding 23% RTP~~
SR 3.5.1.6	Verify automatic transfer of the power supply from the normal source to the alternate source for each LPCI subsystem inboard injection valve and each recirculation pump discharge valve.	In accordance with the Surveillance Frequency Control Program.
SR 3.5.1.7	-------------------NOTE------------------- For the core spray pumps, SR 3.5.1.7 may be met using equivalent values for flow rate and test pressure determined using pump curves. --- Verify the following ECCS pumps develop the specified flow rate against a system head corresponding to the specified reactor pressure.	In accordance with the Surveillance Frequency Control Program.

SYSTEM	FLOW RATE	NO. OF PUMPS	SYSTEM HEAD CORRESPONDING TO A REACTOR PRESSURE OF
Core Spray	≥ 3,125 gpm	1	≥ 105 psig
LPCI	≥ 8,600 gpm	1	≥ 20 psig

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SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.5.1.5	~~-------------------NOTE-------------------~~ ~~Not required to be performed if performed within the previous 31 days.~~ ~~--~~ Verify each recirculation pump discharge valve cycles through one complete cycle of full travel or is de-energized in the closed position.	In accordance with the Surveillance Frequency Control Program. ~~Once each startup prior to exceeding 23% RTP~~
SR 3.5.1.6	Verify automatic transfer of the power supply from the normal source to the alternate source for each LPCI subsystem inboard injection valve and each recirculation pump discharge valve.	In accordance with the Surveillance Frequency Control Program.
SR 3.5.1.7	-------------------NOTE------------------- For the core spray pumps, SR 3.5.1.7 may be met using equivalent values for flow rate and test pressure determined using pump curves. -- Verify the following ECCS pumps develop the specified flow rate against a system head corresponding to the specified reactor pressure. SYSTEM / FLOW RATE / NO. OF PUMPS / SYSTEM HEAD CORRESPONDING TO A REACTOR PRESSURE OF Core Spray / ≥ 3,125 gpm / 1 / ≥ 105 psig LPCI / ≥ 8,600 gpm / 1 / ≥ 20 psig	In accordance with the Surveillance Frequency Control Program.

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ATTACHMENT 3

Markup of Technical Specifications Bases Pages

Peach Bottom Atomic Power Station, Units 2 and 3
Renewed Facility Operating License Nos. DPR-44 and DPR-56
Docket Nos. 50-277 and 50-278

License Amendment Request to Revise SR 3.5.1.5

Unit 2 TSB Pages

B 3.5-12

Unit 3 TSB Pages

B 3.5-12

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.5.1.5

Cycling the recirculation pump discharge valves through one complete cycle of full travel demonstrates that the valves are mechanically OPERABLE and will close when required. Upon initiation of an automatic LPCI subsystem injection signal, these valves are required to be closed to ensure full LPCI subsystem flow injection in the reactor via the recirculation jet pumps. De-energizing the valve in the closed position will also ensure the proper flow path for the LPCI subsystem. Acceptable methods of de-energizing the valve include de-energizing breaker control power, racking out the breaker or removing the breaker.

~~The specified Frequency is once during reactor startup before THERMAL POWER is > 23% RTP. However, this SR is modified by a Note that states the Surveillance is only required to be performed if the last performance was more than 31 days ago. Verification during reactor startup prior to reaching > 23% RTP is an exception to the normal Inservice Testing Program generic valve cycling Frequency, but is considered acceptable due to the demonstrated reliability of these valves.~~ If the valve is inoperable and in the open position, the associated LPCI subsystem must be declared inoperable.

The Frequency of this SR is in accordance with the Surveillance Frequency Control Program.

SR 3.5.1.6

Verification of the automatic transfer between the normal and the alternate power source (4 kV emergency bus) for each LPCI subsystem inboard injection valve and each recirculation pump discharge valve demonstrates that AC electrical power will be available to operate these valves following loss of power to one of the 4 kV emergency buses. The ability to provide power to the inboard injection valve and the recirculation pump discharge valve from either 4 kV emergency bus associated with the LPCI subsystem ensures that the single failure of an DG will not result in the

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BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.5.1.5

Cycling the recirculation pump discharge valves through one complete cycle of full travel demonstrates that the valves are mechanically OPERABLE and will close when required. Upon initiation of an automatic LPCI subsystem injection signal, these valves are required to be closed to ensure full LPCI subsystem flow injection in the reactor via the recirculation jet pumps. De-energizing the valve in the closed position will also ensure the proper flow path for the LPCI subsystem. Acceptable methods of de-energizing the valve include de-energizing breaker control power, racking out the breaker or removing the breaker.

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The Frequency of this SR is in accordance with the Surveillance Frequency Control Program.

SR 3.5.1.6

Verification of the automatic transfer between the normal and the alternate power source (4 kV emergency bus) for each LPCI subsystem inboard injection valve and each recirculation pump discharge valve demonstrates that AC electrical power will be available to operate these valves following loss of power to one of the 4 kV emergency buses. The ability to provide power to the inboard injection valve and the recirculation pump discharge valve from either 4 kV emergency bus associated with the LPCI subsystem ensures that the single failure of an DG will not result in the

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