

RS-21-016

10 CFR 50.90

January 29, 2021

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

Dresden Nuclear Power Station, Units 2 and 3  
Renewed Facility Operating License Nos. DPR-19 and DPR-25  
NRC Docket Nos. 50-237 and 50-249

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: Supplement to Application to Revise Technical Specifications to Adopt TSTF-566, "Revise Actions for Inoperable RHR Shutdown Cooling Systems"

Reference: Letter from P.R. Simpson (Exelon) to U.S. NRC, "Application to Revise Technical Specifications to Adopt TSTF-566, 'Revise Actions for Inoperable RHR Shutdown Cooling Systems'," dated April 13, 2020 (ML20104C104)

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (EGC), proposed a change to the Technical Specifications (TS), Appendix A of Facility Operating License (FOL) No. NPF-62 for Clinton Power Station, Unit 1, Renewed FOL Nos. DPR-19 and DPR-25 for Dresden Nuclear Power Station, Units 2 and 3, Renewed FOL No. DPR-59 for James A. FitzPatrick Nuclear Power Plant, Renewed FOL Nos. NPF-11 and NPF-18 for LaSalle County Station, Units 1 and 2, Renewed FOL No. NPF-69 for Nine Mile Point Nuclear Station, Unit 2, Renewed FOL Nos. DPR-44 and DPR-56 for Peach Bottom Atomic Power Station, Units 2 and 3, and Renewed FOL Nos. DPR-29 and DPR-30 for Quad Cities Nuclear Power Station, Units 1 and 2. The proposed changes are consistent with previously NRC-approved Industry/Technical Specifications Task Force Traveler 566 (TSTF-566), Revision 0, "Revise Actions for Inoperable RHR Shutdown Cooling Systems."

During preparation and review of clean TS pages to be submitted to the NRC, it was identified that the addition of the word "required" for the proposed new Required Action B.1 would result in improved consistency of wording within the TS for Dresden Nuclear Power Station and Peach Bottom Atomic Power Station. The updated marked-up TS pages for these two plants are included in Attachments 1 and 2, respectively. These pages supersede those included in the Reference for these two plants in their entirety.

EGC has reviewed the information supporting a finding of no significant hazards consideration, and the environmental consideration, that were previously provided to the NRC in Reference 1. EGC has concluded

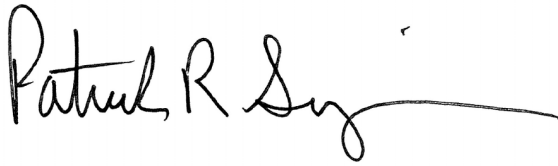
that the information provided in this response does not affect the bases for concluding that the proposed license amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92. In addition, EGC has concluded that the information in this supplemental letter does not affect the bases for concluding that neither an environmental impact statement nor an environmental assessment needs to be prepared in connection with the proposed amendment.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), EGC is notifying the State of Illinois and the State of Pennsylvania of this supplement to the proposed TS pages by transmitting a copy of this letter and its attachments to the designated State Officials.

There are no regulatory commitments contained in this letter. Should you have any questions concerning this letter, please contact Ms. Rebecca L. Steinman at (630) 657-2831.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 29<sup>th</sup> day of January 2021.

Respectfully,

A handwritten signature in black ink, appearing to read "Patrick R. Simpson", followed by a long horizontal flourish.

Patrick R. Simpson  
Sr. Manager Licensing  
Exelon Generation Corporation, LLC

Attachments:

1. Markup of Proposed Technical Specifications Pages for Dresden Nuclear Power Station
2. Markup of Proposed Technical Specifications Pages for Point Beach Atomic Power Station

cc: NRC Regional Administrator, Region I  
NRC Regional Administrator, Region III  
NRC Senior Resident Inspector – Dresden Nuclear Power Station  
NRC Senior Resident Inspector – Peach Bottom Atomic Power Station  
Illinois Emergency Management Agency – Division of Nuclear Safety  
R. R. Janati, Pennsylvania Bureau of Radiation Protection

## **ATTACHMENT 1**

### **Markup of Proposed Technical Specifications Pages For Dresden Nuclear Power Station**

**Dresden Nuclear Power Station, Units 2 and 3  
Renewed Facility Operating License Nos. DPR-19 and DPR-25**

#### **REVISED TECHNICAL SPECIFICATIONS PAGES**

*3.4.7-1*

*3.4.7-2*

*3.4.8-1*

*3.4.8-2*

### 3.4 REACTOR COOLANT SYSTEM (RCS)

#### 3.4.7 Shutdown Cooling (SDC) System—Hot Shutdown

LC0 3.4.7 Two SDC subsystems shall be OPERABLE, and, with no recirculation pump in operation, at least one SDC subsystem shall be in operation.

- NOTES-----
1. Both required SDC subsystems and recirculation pumps may be not in operation for up to 2 hours per 8 hour period.
  2. One required SDC subsystem may be inoperable for up to 2 hours for the performance of Surveillances.
- 

APPLICABILITY: MODE 3, with reactor vessel coolant temperature less than the SDC cut-in permissive temperature.

#### ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each SDC subsystem.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or two required SDC subsystems inoperable.	<del>A.1 Initiate action to restore required SDC subsystem(s) to OPERABLE status.</del>  <del>AND</del>	<del>Immediately</del>  (continued)



ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. (continued)	<del>A.2</del> <div style="border: 1px solid red; padding: 2px; display: inline-block;">A.1</div> Verify an alternate method of decay heat removal is available for each inoperable required SDC subsystem.	1 hour  <div style="border: 1px solid red; padding: 5px; display: inline-block;">             AND              Once per 24 hours thereafter           </div>
	<del>AND</del> <del>A.3</del> <del>Be in MODE 4.</del>	<del>24 hours</del> <div style="border: 1px solid red; padding: 2px; display: inline-block;">Immediately</div>
<del>B.</del> No required SDC subsystem in operation. <div style="border: 1px solid red; padding: 2px; display: inline-block;">C.</div> AND No recirculation pump in operation.	<del>B.1</del> <div style="border: 1px solid red; padding: 2px; display: inline-block;">C.1</div> Initiate action to restore one required SDC subsystem or one recirculation pump to operation.  <del>AND</del> <del>B.2</del> <div style="border: 1px solid red; padding: 2px; display: inline-block;">C.2</div> Verify reactor coolant circulation by an alternate method.  <del>AND</del> <del>B.3</del> <div style="border: 1px solid red; padding: 2px; display: inline-block;">C.3</div> Monitor reactor coolant temperature and pressure.	Immediately  1 hour from discovery of no reactor coolant circulation  <del>AND</del> Once per 12 hours thereafter  Once per hour

B. Required Action and associated Completion Time of Condition A not met.

B.1 Initiate action to restore required SDC subsystem(s) to OPERABLE status.

### 3.4 REACTOR COOLANT SYSTEM (RCS)

#### 3.4.8 Shutdown Cooling (SDC) System–Cold Shutdown

LC0 3.4.8 Two SDC subsystems shall be OPERABLE, and, with no recirculation pump in operation, at least one SDC subsystem shall be in operation.

- NOTES-----
1. Both required SDC subsystems may be not in operation during hydrostatic testing.
  2. Both required SDC subsystems and recirculation pumps may be not in operation for up to 2 hours per 8 hour period.
  3. One required SDC subsystem may be inoperable for up to 2 hours for the performance of Surveillances.
- 

APPLICABILITY: MODE 4.

#### ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each shutdown cooling subsystem.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or two required SDC subsystems inoperable.	A.1 Verify an alternate method of decay heat removal is available for each inoperable required SDC subsystem.	1 hour <u>AND</u> Once per 24 hours thereafter

(continued)

*B. Required Action and associated Completion Time of Condition A not met.*

*B.1 Initiate action to restore required SDC subsystem(s) to OPERABLE status.*

*Immediately*

# ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<del>B.</del> No required SDC subsystem in operation. <div style="border: 1px solid red; padding: 2px; display: inline-block;">C.</div> <div style="color: red; font-size: 2em; vertical-align: middle;">↑</div> AND No recirculation pump in operation.	<del>B.1</del> Verify reactor coolant circulating by an alternate method. <div style="border: 1px solid red; padding: 2px; display: inline-block;">C.1</div> <div style="color: red; font-size: 2em; vertical-align: middle;">↑</div> AND <del>B.2</del> Monitor reactor coolant temperature and pressure. <div style="border: 1px solid red; padding: 2px; display: inline-block;">C.2</div> <div style="color: red; font-size: 2em; vertical-align: middle;">↑</div>	1 hour from discovery of no reactor coolant circulation  AND Once per 12 hours thereafter  Once per hour

# SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.4.8.1 Verify one SDC subsystem or recirculation pump is operating.	In accordance with the Surveillance Frequency Control Program
SR 3.4.8.2 Verify SDC subsystem locations susceptible to gas accumulation are sufficiently filled with water.	In accordance with the Surveillance Frequency Control Program

## **ATTACHMENT 2**

### **Markup of Proposed Technical Specifications Pages For Peach Bottom Atomic Power Station**

#### **Peach Bottom Atomic Power Station, Units 2 and 3 Renewed Facility Operating License Nos. DPR-44 and DPR-56**

#### **REVISED TECHNICAL SPECIFICATIONS PAGES**

##### Peach Bottom Atomic Power Station, Unit 2

3.4-16  
3.4-17  
3.4-19  
3.4-20

##### Peach Bottom Atomic Power Station, Unit 3

3.4-16  
3.4-17  
3.4-19  
3.4-20

### 3.4 REACTOR COOLANT SYSTEM (RCS)

#### 3.4.7 Residual Heat Removal (RHR) Shutdown Cooling System—Hot Shutdown

LC0 3.4.7 Two RHR shutdown cooling subsystems shall be OPERABLE, and, with no recirculation pump in operation, at least one RHR shutdown cooling subsystem shall be in operation.

- NOTES-----
1. Both required RHR shutdown cooling subsystems and recirculation pumps may be removed from operation for up to 2 hours per 8 hour period.
  2. One required RHR shutdown cooling subsystem may be inoperable for up to 2 hours for performance of Surveillances.
- 

APPLICABILITY: MODE 3, with reactor steam dome pressure less than the RHR shutdown cooling isolation pressure.

#### ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each RHR shutdown cooling subsystem.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or two required RHR shutdown cooling subsystems inoperable.	<del>A.1 Initiate action to restore required RHR shutdown cooling subsystem(s) to OPERABLE status.</del>  <u>AND</u>	<del>Immediately</del>  (continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. (continued)	<del>A.2</del> <div style="text-align: center;">↑ <b>A.1</b></div> Verify an alternate method of decay heat removal is available for each required inoperable RHR shutdown cooling subsystem.  <del>AND</del> <del>A.3</del> Be in MODE 4.	1 hour  <div style="text-align: right;"> <div style="border: 1px solid red; padding: 2px; display: inline-block;"> <del>AND</del>  Once per 24 hours thereafter </div> </div> 24 hours <div style="text-align: right;"> <div style="border: 1px solid red; padding: 2px; display: inline-block;"> Immediately </div> </div>
<del>B.</del> No RHR shutdown cooling subsystem in operation.  <div style="text-align: center;">↑ <b>C.</b></div> <del>AND</del> No recirculation pump in operation.	<del>B.1</del> <div style="text-align: center;">↑ <b>C.1</b></div> Initiate action to restore one RHR shutdown cooling subsystem or one recirculation pump to operation.  <del>AND</del> <del>B.2</del> <div style="text-align: center;">↑ <b>C.2</b></div> Verify reactor coolant circulation by an alternate method.  <del>AND</del> <del>B.3</del> <div style="text-align: center;">↑ <b>C.3</b></div> Monitor reactor coolant temperature and pressure.	Immediately     1 hour from discovery of no reactor coolant circulation  <del>AND</del> Once per 12 hours thereafter  Once per hour

B. Required Action and associated Completion Time of Condition A not met.

B.1 Initiate action to restore required RHR shutdown cooling subsystem(s) to OPERABLE status.

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.8 Residual Heat Removal (RHR) Shutdown Cooling System—Cold Shutdown

LC0 3.4.8 Two RHR shutdown cooling subsystems shall be OPERABLE, and, with no recirculation pump in operation, at least one RHR shutdown cooling subsystem shall be in operation.

- NOTES-----
1. Both required RHR shutdown cooling subsystems and recirculation pumps may be removed from operation for up to 2 hours per 8 hour period.
  2. One required RHR shutdown cooling subsystem may be inoperable for up to 2 hours for performance of Surveillances.
- 

APPLICABILITY: MODE 4.

ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each RHR shutdown cooling subsystem.  
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CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or two required RHR shutdown cooling subsystems inoperable.	A.1 Verify an alternate method of decay heat removal is available for each inoperable required RHR shutdown cooling subsystem.	1 hour <u>AND</u> Once per 24 hours thereafter

(continued)

*B. Required Action and associated Completion Time of Condition A not met.*

*B.1 Initiate action to restore required RHR shutdown cooling subsystem(s) to OPERABLE status.*

*Immediately*



ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<del>B.</del> No RHR shutdown cooling subsystem in operation. <div style="border: 1px solid red; padding: 2px; display: inline-block;">C.</div> AND No recirculation pump in operation.	<del>B.1</del> Verify reactor coolant circulating by an alternate method. <div style="border: 1px solid red; padding: 2px; display: inline-block;">C.1</div>  AND <del>B.2</del> Monitor reactor coolant temperature and pressure. <div style="border: 1px solid red; padding: 2px; display: inline-block;">C.2</div>	1 hour from discovery of no reactor coolant circulation  AND Once per 12 hours thereafter  Once per hour

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.4.8.1    Verify one required RHR shutdown cooling subsystem or recirculation pump is operating.	In accordance with the Surveillance Frequency Control Program.
SR 3.4.8.2    -----NOTE----- HPSW system related components are excluded. ----- Verify required RHR shutdown cooling subsystem locations susceptible to gas accumulation are sufficiently filled with water.	In accordance with the Surveillance Frequency Control Program.

### 3.4 REACTOR COOLANT SYSTEM (RCS)

#### 3.4.7 Residual Heat Removal (RHR) Shutdown Cooling System—Hot Shutdown

LCO 3.4.7 Two RHR shutdown cooling subsystems shall be OPERABLE, and, with no recirculation pump in operation, at least one RHR shutdown cooling subsystem shall be in operation.

- NOTES-----
1. Both required RHR shutdown cooling subsystems and recirculation pumps may be removed from operation for up to 2 hours per 8 hour period.
  2. One required RHR shutdown cooling subsystem may be inoperable for up to 2 hours for performance of Surveillances.
- 

APPLICABILITY: MODE 3, with reactor steam dome pressure less than the RHR shutdown cooling isolation pressure.

#### ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each RHR shutdown cooling subsystem.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or two required RHR shutdown cooling subsystems inoperable.	<del>A.1 Initiate action to restore required RHR shutdown cooling subsystem(s) to OPERABLE status.</del>	<del>Immediately</del>
	<u>AND</u>	(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. (continued)	<p><del>A.2</del></p> <p>↑</p> <p><b>A.1</b></p> <p>Verify an alternate method of decay heat removal is available for each required inoperable RHR shutdown cooling subsystem.</p> <p><del>AND</del></p> <p><del>A.3</del></p> <p><del>Be in MODE 4.</del></p>	<p>1 hour</p> <p>← <b>AND</b> Once per 24 hours thereafter</p> <p><del>24 hours</del></p> <p>← <b>Immediately</b></p>
<p><del>B.</del> No RHR shutdown cooling subsystem in operation.</p> <p>↑</p> <p><b>C.</b></p> <p><del>AND</del></p> <p>No recirculation pump in operation.</p>	<p><del>B.1</del></p> <p>↑</p> <p><b>C.1</b></p> <p>Initiate action to restore one RHR shutdown cooling subsystem or one recirculation pump to operation.</p> <p><del>AND</del></p> <p><del>B.2</del></p> <p>↑</p> <p><b>C.2</b></p> <p>Verify reactor coolant circulation by an alternate method.</p> <p><del>AND</del></p> <p><del>B.3</del></p> <p>↑</p> <p><b>C.3</b></p> <p>Monitor reactor coolant temperature and pressure.</p>	<p>Immediately</p> <p>1 hour from discovery of no reactor coolant circulation</p> <p><del>AND</del></p> <p>Once per 12 hours thereafter</p> <p>Once per hour</p>

B. Required Action and associated Completion Time of Condition A not met.

B.1 Initiate action to restore required RHR shutdown cooling subsystem(s) to OPERABLE status.

### 3.4 REACTOR COOLANT SYSTEM (RCS)

#### 3.4.8 Residual Heat Removal (RHR) Shutdown Cooling System—Cold Shutdown

LCO 3.4.8 Two RHR shutdown cooling subsystems shall be OPERABLE, and, with no recirculation pump in operation, at least one RHR shutdown cooling subsystem shall be in operation.

-----NOTES-----

1. Both required RHR shutdown cooling subsystems and recirculation pumps may be removed from operation for up to 2 hours per 8 hour period.
  2. One required RHR shutdown cooling subsystem may be inoperable for up to 2 hours for performance of Surveillances.
- 

APPLICABILITY: MODE 4.

#### ACTIONS

-----NOTE-----

Separate Condition entry is allowed for each RHR shutdown cooling subsystem.

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CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or two required RHR shutdown cooling subsystems inoperable.	A.1 Verify an alternate method of decay heat removal is available for each inoperable required RHR shutdown cooling subsystem.	1 hour <u>AND</u> Once per 24 hours thereafter

(continued)

*B. Required Action and associated Completion Time of Condition A not met.*

*B.1 Initiate action to restore required RHR shutdown cooling subsystem(s) to OPERABLE status.*

*Immediately*

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<del>B.</del> No RHR shutdown cooling subsystem in operation. <div style="border: 1px solid red; padding: 2px; display: inline-block;">C.</div> <u>AND</u> No recirculation pump in operation.	<del>B.1</del> Verify reactor coolant circulating by an alternate method. <div style="border: 1px solid red; padding: 2px; display: inline-block;">C.1</div>  <u>AND</u> <del>B.2</del> Monitor reactor coolant temperature and pressure. <div style="border: 1px solid red; padding: 2px; display: inline-block;">C.2</div>	1 hour from discovery of no reactor coolant circulation  <u>AND</u> Once per 12 hours thereafter  Once per hour

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.4.8.1 Verify one required RHR shutdown cooling subsystem or recirculation pump is operating.	In accordance with the Surveillance Frequency Control Program.
SR 3.4.8.2 -----NOTE----- HPSW system related components are excluded. ----- Verify required RHR shutdown cooling subsystem locations susceptible to gas accumulation are sufficiently filled with water.	In accordance with the Surveillance Frequency Control Program. <div style="border-left: 1px solid black; height: 100px; margin-left: 10px; position: relative;"> <div style="position: absolute; top: 0; right: 0; bottom: 0; left: 0; border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black;"></div> </div>