

RS-15-121

10 CFR 50.90

April 21, 2015

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

Clinton Power Station, Unit 1  
Facility Operating License No. NPF-62  
NRC Docket No. 50-461

Subject: Response to Request for Additional Information Regarding License Amendment Request to Revise Technical Specification 5.5.2, "Primary Coolant Sources Outside Containment"

- References: (1) Letter from Patrick R. Simpson (Exelon Generation Company, LLC) to U.S. NRC, "License Amendment Request to Revise Technical Specification 5.5.2, 'Primary Coolant Sources Outside Containment'," dated November 17, 2014
- (2) Letter from Blake Purnell (U.S. NRC) to Bryan C. Hanson (Exelon Generation Company, LLC), "Clinton Power Station, Unit 1 – Request for Additional Information Regarding License Amendment Request to Revise Technical Specification 5.5.2, 'Primary Coolant Sources Outside Containment' (TAC No. MF5291)," dated March 24, 2015

In Reference 1, Exelon Generation Company, LLC, (EGC) requested, in accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," NRC approval of a proposed revision to the interval for performance of the integrated leak tests required by Technical Specification (TS) 5.5.2, "Primary Coolant Sources Outside Containment." Specifically, the proposed change would revise the current frequency for integrated leak testing of "at refueling cycle intervals" to "at least once per 24 months." The proposed change would also add a statement that allows the provisions of TS Surveillance Requirement (SR) 3.0.2 to be applicable to TS 5.5.2 integrated leak test requirements.

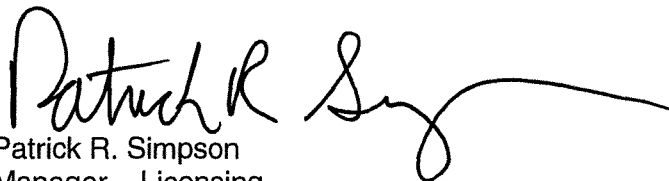
In Reference 2, the NRC requested that EGC provide additional information to support their review of the subject amendment request (i.e., Reference 1). The response to these requests is provided in Attachment 1. Based on the response to the RAI, EGC has revised the No Significant Hazards Consideration which is also provided in Attachment 1. Attachment 2 provides a revised mark-up of the TS page.

In a March 23, 2015 teleconference between Blake Purnell (U.S. NRC) and Timothy Byam (EGC), it was agreed that EGC would provide the requested information to the NRC on or before April 23, 2015.

This letter contains no new regulatory commitments. If you have any questions concerning this letter, please contact Timothy A. Byam at (630) 657-2818.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 21<sup>st</sup> day of April 2015.

Respectfully,

A handwritten signature in black ink, appearing to read "Patrick R. Simpson", with a long horizontal flourish extending to the right.

Patrick R. Simpson  
Manager – Licensing  
Exelon Generation Company, LLC

Attachments:

1. Response to Request for Additional Information
2. Revised Mark-up of CPS Technical Specifications Page

cc: NRC Regional Administrator, Region III  
NRC Senior Resident Inspector – Clinton Power Station  
Illinois Emergency Management Agency – Division of Nuclear Safety

## ATTACHMENT 1

### Response to Request for Additional Information

In a letter from Blake Purnell (U.S. NRC) to Bryan Hanson (Exelon Generation Company, LLC), "Clinton Power Station, Unit 1 – Request for Additional Information Regarding License Amendment Request to Revise Technical Specification 5.5.2, 'Primary Coolant Sources Outside Containment' (TAC No. MF5291)," dated March 24, 2015, the following request for additional information was provided.

*By application dated November 17, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML 14321A882), Exelon Generation Company, LLC (the licensee) submitted a request to revise technical specification (TS) 5.5.2, "Primary Coolant Sources Outside Containment," for Clinton Power Station (CPS), Unit 1. The reason for the request is to support the CPS transition from 2-year to 1-year refueling cycles. Currently, TS 5.5.2 requires that an integrated leak test be performed on each system subject to TS 5.5.2 at refueling cycle intervals or less. The proposed change would require this test to be performed at least once per 24 months and adds a provision to apply surveillance requirement (SR) 3.0.2 to TS 5.5.2 requirements. The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing the submittal and has determined that additional information below is needed to complete its review.*

#### **NRC RAI 1:**

##### Background

*The CPS SR 3.0.2 is consistent with the improved standard technical specifications (STS) (see NUREG-1434, Revision 4, "Standard Technical Specifications - General Electric Plants (BWR/6)," Revision 4, April 2012). SR 3.0.2 states, in part:*

*The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met.*

*On August 23, 2012, the NRC issued Regulatory Issue Summary (RIS) 2012-10, "NRC Staff Position on Applying Surveillance Requirements 3.0.2 and 3.0.3 to Administrative Controls Program Tests," which states:*

*[An NRC] review determined that restructuring TS chapters during the development of improved [STS] resulted in unintended consequences when Section 3.0, "Surveillance Requirement Applicability," provisions were made applicable to Section 5.0 TS. Specifically, applying STS rules of usage would prohibit licensees from using the SR 3.0.2 and SR 3.0.3 allowances in Section 5.0 TS, unless the Section 5.0 TS tests are associated with a TS SR.*

*The RIS further states:*

*SR 3.0.2 and SR 3.0.3 cannot be applied to TS 5.5 for tests that are not associated with a TS SR. Therefore, programmatic test frequencies cannot be extended in accordance with SR 3.0.2, and programmatic test frequencies cannot be delayed in accordance with SR 3.0.3, when there is no associated requirement from SR 3.0.1 for program tests to be both performed and met. Using SR 3.0.2 to extend a program test or using SR 3.0.3 to*

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*delay declaring a missed program test "not met" without having a TS SR related to the program test would result in noncompliance with TS or nonconformance with other regulatory requirements because these SR allowances cannot be applied to non-SR tests.*

#### Issue

*The licensee's application requests that SR 3.0.2 be made applicable to TS 5.5.2 requirements. The application states:*

*Additionally, to be consistent with normal surveillance requirements that allow for a 25% extension of the frequency in accordance with SR 3.0.2, the SR 3.0.2 allowance is also being proposed to be applied to TS 5.5.2. This is acceptable since TS 5.5.2 testing is considered a surveillance requirement. As stated in TSTF [Technical Specification Task Force]-299-A, since SR 3.0.2 only applies to TS [limiting condition for operation] Sections 3.0 through 3.9, it is appropriate to add the explicit SR 3.0.2 statement to TS 5.5.2. The application of the SR 3.0.2 allowance to CPS TS 5.5.2 ensures CPS consistency with the [improved STS] 5.5.2 provided in [NUREG-1434, Revision 4].*

*The purpose of TSTF-299 is to allow a 25 percent extension of a TS administrative control program frequency, similar to the way SR 3.0.2 is applied to SRs. The concern is that SR 3.0.2 is not applicable to programs which do not have an associated SR. The NRC staff is working on correcting the STS in this regard.*

#### Request

*Revise the wording of the proposed change to address the concern described above.*

#### **EGC Response to NRC RAI 1:**

Based on discussions with the NRC on March 23, 2015, Exelon Generation Company, LLC (EGC) understands that SR 3.0.2 is not applicable to programs that do not have an associated SR. As noted above, using SR 3.0.2 to extend a program test without having a TS SR related to the program test would result in noncompliance with TS or nonconformance with other regulatory requirements because these SR allowances cannot be applied to non-SR tests. Since the testing requirements of TS 5.5.2 are not associated with a TS SR, SR 3.0.2 is not applicable to this program requirement. Therefore, the proposed change to TS 5.5.2 to add a reference to SR 3.0.2 is not appropriate. The NRC did state, however, that the use of a 25% extension of a TS administrative control program frequency is acceptable assuming the program description includes a statement that allows for the extension. Based on this NRC position, EGC intends to revise the proposed changes to TS 5.5.2 in support of the subject amendment request.

The proposed license amendment will continue to request that the current (i.e., 24 month) frequency for the CPS integrated leak test requirements for primary coolant sources outside containment be maintained. This will allow CPS to maintain a minimal amount of testing during the "refueling only" outage as defined in the referenced amendment request and still maintain the same level of quality and safety by continuing the 24 month frequency that the primary coolant sources outside containment have historically been leak tested at during the refueling/maintenance outage. Changing TS 5.5.2 will provide the necessary flexibility to perform the testing based on a calendar month basis rather than on cycle length.

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CPS TS 5.5.2, "Primary Coolant Sources Outside Containment," currently states:

"The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at refueling cycle intervals or less."

The newly revised TS 5.5.2, would state:

"The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at least once per 24 months.

The specified frequency for integrated leak testing is met if the testing is performed within 1.25 times the interval specified."

The proposed wording is reflected in the mark-up of the CPS TS 5.5.2 provided in Attachment 2.

Based on the revised approach to revising TS 5.5.2 to address the use of a 25% extension of the TS administrative control program frequency without reference to SR 3.0.2, it was determined that the No Significant Hazards Consideration needed to be revised as well and is provided below.

#### **No Significant Hazards Consideration**

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (EGC) requests an amendment to Facility Operating License No. NPF-62 for Clinton Power Station (CPS), Unit 1. The proposed change would revise Technical Specification (TS) 5.5.2, "Primary Coolant Sources Outside Containment." Specifically, the proposed change revises the current frequency for integrated leak testing of "at refueling cycle intervals" to "at least once per 24 months." The change will also add a statement that allows for a 25% extension of the integrated leak rate testing program frequency. The purpose of this change is to support the transition to 12-month refueling cycles.

According to 10 CFR 50.92, "Issuance of amendment," paragraph (c), a proposed amendment to an operating license involves no significant hazards consideration if operation of the facility in accordance with the proposed 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.

EGC has evaluated the proposed change for CPS, Unit 1, using the criteria in 10 CFR 50.92, and has determined that the proposed change does not involve a significant hazards consideration. The following information is provided to support a finding of no significant hazards consideration.

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

Response: No.

The proposed change to the CPS, Unit 1, TS 5.5.2, "Primary Coolant Sources Outside Containment" program, does not involve a physical change to the plant or a change in the manner in which the plant is operated or controlled. The proposed amendment affects only the interval at which integrated system leak tests are performed, not the effectiveness of the integrated leak test requirements for the identified systems. The proposed change effectively results in the performance of the integrated system leak tests at the same frequency that these tests are currently being performed. Incorporation of an allowance to extend the 24-month interval by 25% does not significantly degrade the reliability that results from performing the surveillance at its specified frequency. Implementation of the proposed change will continue to provide adequate assurance that during design basis accidents, the containment and its components would limit leakage rates to less than the values assumed in the plant safety analyses.

Test intervals are not considered as initiators of any accident previously evaluated. As a result, the probability of any accident previously evaluated is not significantly increased by the proposed amendment. TS 5.5.2 continues to require the performance of periodic integrated system leak tests. As stated in TS 5.5.2, the required plan provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. Therefore, accident analysis assumptions will still be verified. The proposed change does not impact the purpose of this plan. As a result, the consequences of any accident previously evaluated are not significantly increased.

Therefore, the probability and consequences of an accident previously evaluated will not be increased by this proposed change.

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

Response: No.

The testing requirements, to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident, exist to ensure the plant's ability to mitigate the consequences of an accident and do not involve any accident precursors or initiators. The proposed amendment affects only the interval at which integrated system leak tests are performed; they do not alter the design or physical configuration of the plant. The proposed change does not involve a physical change to the plant (i.e., no new or different type of equipment will be installed) or a change to the manner in which the plant is currently operated or controlled.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

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

Response: No.

The proposed change does not alter the manner in which safety limits, limiting safety system setpoints, or limiting conditions for operation are determined. The specific requirements and conditions of the primary coolant sources outside containment program, as proposed, will continue to ensure that the leakage from the identified systems outside containment is minimized. The proposed amendment provides operating flexibility without significantly affecting plant operation.

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

Based on the above evaluation, EGC concludes that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92, paragraph (c), and accordingly, a finding of no significant hazards consideration is justified.

## ATTACHMENT 2

Revised Mark-up of CPS Technical Specifications Page



## 5.5 Programs and Manuals

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### 5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

- c. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of, or concurrent with, the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

### 5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include the:

- a. LPCS System;
- b. HPCS System;
- c. RHR System;
- d. RCIC System;
- e. Suppression Pool Makeup System;
- f. Combustible Gas Control System;
- g. Containment Monitoring System; and
- h. Post-accident Sampling System (until such time as a modification eliminates the PASS penetration as a potential leakage path).

The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at ~~refueling cycle intervals or less~~ least once per 24 months.

The specified frequency for integrated leak testing is met if the testing is performed within 1.25 times the interval specified.

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(continued)