



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

October 22, 2015

Mr. Bryan C. Hanson
Senior Vice President
Exelon Generation Company, LLC
President and Chief Nuclear Officer (CNO)
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: CLINTON POWER STATION, UNIT 1 – ISSUANCE OF AMENDMENT
RELATED TO ONE-TIME EXTENSION OF COMPLETION TIME FOR
SHUTDOWN SERVICE WATER (CAC NO. MF6705)(RS-15-264)

Dear Mr. Hanson:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 207 to Facility Operating License No. NPF-62 for the Clinton Power Station, Unit 1. The amendment is in response to an application from Exelon Generation Company, LLC, dated September 10, 2015, as supplemented by letters dated September 30, and October 20, 2015 (Agencywide Documents Access and Management System (ADAMS) Nos. ML15253A833, ML15273A234, and ML15293A554, respectively).

The amendment allows a one-time extension of the technical specification completion time of Action B.1 from 72 hours to 7 days to preemptively replace the Division 2 service water (SX) pump due to degrading performance. This approval allows the licensee to use this extension one time during a planned Division 2 SX subsystem outage window scheduled for the week of October 26, 2015. A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

/RA/

Eva A. Brown, Senior Project Manager
Plant Licensing III-2 and
Planning and Analysis Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-461

Enclosures:

1. Amendment No. 207 to NPF-62
2. Safety Evaluation

cc w/encls: Distribution via Listserv



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

EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-461

CLINTON POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 207
License No. NPF-62

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC (the licensee), September 10, 2015, as supplemented by letters dated September 30, and October 20, 2015, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment. and paragraph 2.C.(2) of Facility Operating License No. NPF-62 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 207, are hereby incorporated into this license. Exelon Generation Company 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 of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Travis L. Tate". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Travis L. Tate, Chief
Plant Licensing III-2 and
Planning and Analysis Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications and Facility Operating License

Date of Issuance: October 22, 2015

ATTACHMENT TO LICENSE AMENDMENT NO. 207

FACILITY OPERATING LICENSE NO. NPF-62

DOCKET NO. 50-461

Replace the following pages of the Facility Operating License and Appendix "A" Technical Specifications (TSs) with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

Insert

License NPF-62
Page 3

License NPF-62
Page 3

TSs
3.7-1
3.7-2

TSs
3.7-1
3.7-2
3.7-2a
3.7-2b

- (4) Exelon Generation Company, pursuant to the Act and to 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) Exelon Generation Company, 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) Exelon Generation Company, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility. Mechanical disassembly of the GE14i isotope test assemblies containing Cobalt-60 is not considered separation; and
- (7) Exelon Generation Company, pursuant to the Act and 10 CFR Parts 30, to intentionally produce, possess, receive, transfer, and use Cobalt-60.

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 I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Exelon Generation Company is authorized to operate the facility at reactor core power levels not in excess of 3473 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 207, are hereby incorporated into this license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3.7 PLANT SYSTEMS

3.7.1 Division 1 and 2 Shutdown Service Water (SX) Subsystems and Ultimate Heat Sink (UHS)

LCO 3.7.1 Division 1 and 2 SX subsystems and the UHS shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. UHS water volume not within limit	A.1 Restore UHS water volume to within limit.	90 days
<p>-----NOTE----- Not applicable during replacement of Division 2 SX pump during the Division 2 SX system outage window from October 26 through November 8, 2015. -----</p> <p>B. Division 1 or 2 SX subsystem inoperable.</p>	<p>-----NOTES-----</p> <p>1. Enter applicable Conditions and Required Actions of LCO 3.8.1, "AC Sources—Operating," for diesel generator made inoperable by SX.</p> <p>2. Enter applicable Conditions and Required Actions of LCO 3.4.9, "Residual Heat Removal (RHR) Shutdown Cooling System—Hot Shutdown," for RHR shutdown cooling subsystem made inoperable by SX.</p> <p>-----</p> <p>B.1 Restore SX subsystem to OPERABLE status.</p>	72 hours

(continued)

Actions (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>-----NOTE----- Only applicable during replacement of Division 2 SX pump during the Division 2 SX system outage window from October 26 through November 8, 2015. -----</p> <p>C. Division 2 SX subsystem inoperable.</p>	<p>-----NOTES----- 1. Enter applicable Conditions and Required Actions of LCO 3.8.1, "AC Sources—Operating," for diesel generator made inoperable by SX. 2. Enter applicable Conditions and Required Actions of LCO 3.4.9, "Residual Heat Removal (RHR) Shutdown Cooling System—Hot Shutdown," for RHR shutdown cooling subsystem made inoperable by SX. -----</p> <p>C.1 Restore Division 2 SX subsystem to OPERABLE status.</p>	7 Days
<p>D. Required Action and associated Completion Time of Condition B or C not met.</p>	<p>-----NOTE----- LCO 3.0.4.a is not applicable when entering MODE 3. -----</p> <p>D.1 Be in MODE 3.</p>	12 hours
<p>E. Required Action and associated Completion Time of Condition A not met.</p> <p><u>OR</u></p> <p>Division 1 and 2 SX subsystems inoperable.</p>	<p>E.1 Be in MODE 3.</p> <p><u>AND</u></p> <p>E.2 Be in MODE 4.</p>	12 hours 36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.1.1 Verify UHS water volume is \geq 593 acre-ft.	In accordance with UHS Erosion, Sediment Monitoring, and Dredging Program
SR 3.7.1.2 Verify each required SX subsystem manual, power operated, and automatic valve in the flow path servicing safety related systems or components, that is not locked, sealed, or otherwise secured in position, is in the correct position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.1.3 Verify each SX subsystem actuates on an actual or simulated initiation signal.	In accordance with the Surveillance Frequency Control Program

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UNITED STATES
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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 207 TO FACILITY OPERATING LICENSE NO. NPF-62

EXELON GENERATION COMPANY, LLC

CLINTON POWER STATION, UNIT 1

DOCKET NO. 50-461

1.0 INTRODUCTION

By application to the U.S. Nuclear Regulatory Commission (NRC, the Commission) dated September 10, 2015, as supplemented by letters dated September 30, and October 30, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML15253A833, ML15273A234, and ML15293A554, respectively), Exelon Generation Company, LLC (EGC, or the licensee) requested a one-time extension of the technical specification (TS) Completion Time (CT) related to the Division 2, Shutdown Service Water (SX) subsystem for Clinton Power Station, Unit 1 (CPS).

The September 30, and October 20, 2015, supplements, provided additional information that clarified the application, did not expand the scope of the application as originally noticed in the *Federal Register* and did not change the NRC staff's initial proposed finding of no significant hazards consideration (September 18, 2015, 80 FR 56498).

2.0 REGULATORY EVALUATION

2.1 Detailed Description of the Proposed Change

The CPS TS Limiting Condition for Operation (LCO) 3.7.1 requires that the Division 1 and 2 SX subsystems be operable in Modes 1, 2, and 3. The associated Required Action B.1, states that with the Division 1 or 2 SX subsystem inoperable, the inoperable subsystem is required to be restored to operable status within 72 hours. The proposed change temporarily revises the CT of Action B.1 from 72 hours to 7 days to preemptively replace the Division 2 SX pump due to degrading performance (this pump currently meets both design and inservice testing acceptance limits and is considered operable).

The licensee proposes to use this extension one time during a planned Division 2 SX subsystem outage window scheduled for the week of October 26, 2015. Replacement of the SX pump is not a typical maintenance activity that can be performed within the existing 72 hour CT window due to the need to isolate the Division 2 SX subsystem during the activity. Given the duration of the maintenance activity, the unit would be required by the current TS 3.7.1, Required Action C.1, to be shutdown.

The licensee stated that the Division 2 SX pump replacement is expected to take approximately 137 hours with an additional 24 hours contingency to account for potential weather delays. If the work exceeds the proposed 7-day CT, the unit will be shutdown in accordance with the TSs. Shutdown of the unit with the Division 2 SX subsystem out of service results in no different plant response actions than if the subsystem were to become inoperable under the current TS CT of 72 hours.

2.2 Regulatory Requirements and Guidance

Section 182a of the Atomic Energy Act (the Act) requires applicants for nuclear power plant operating licenses to include the TSs as part of the license. The TS ensures the operational capability of structures, systems and components (SSCs) that are required to protect the health and safety of the public. The regulatory requirements related to the content of the TSs are contained in Section 50.36 to Title 10 of the *Code of Federal Regulations* (10 CFR). That regulation requires that the TSs include items in the following specific categories: (1) safety limits, limiting safety systems settings, and limiting control settings (10 CFR 50.36(c)(1)); (2) LCO (10 CFR 50.36(c)(2)); (3) Surveillance requirements (10 CFR 50.36(c)(3)); (4) design features (10 CFR 50.34(c)(4)); and (5) administrative controls (10 CFR 50.36(c)(5)).

Section 50.36(c)(2) to 10 CFR states in part:

Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met.

Required Action B.1 is the remedial action permitted by the TS when one SX subsystem is inoperable. It requires the licensee to restore the subsystem to OPERABLE status within a CT of 72 hours. The licensee requested to add a new one-time CONDITION C for the situation where the Division 2 SX subsystem is inoperable because of maintenance on the Division 2 SX pump.

The NRC staff may grant a licensee's request to revise the TSs, provided that the NRC staff plant-specific review supports a finding of continued adequate safety because: (1) the change is editorial, administrative, or provides clarification (i.e., no requirements are materially altered); (2) the change is more restrictive than the licensee's current requirement; or (3) the change is less restrictive than the licensee's current requirement, but nonetheless still affords adequate assurance of safety when judged against current regulatory standards.

Appendix A to 10 CFR Part 50, General Design Criteria 17, provides requirements as it relates to the design of the emergency core cooling system (ECCS) having sufficient capacity and capability to assure that specified acceptable fuel design limits and the design conditions of the reactor coolant pressure boundary are not exceeded during anticipated operational occurrences and that the core is cooled during accident conditions.

General Design Criteria 44, provides requirements as to heat transfer from SSCs important to safety to an ultimate heat sink. Acceptance is based on the capability to transfer heat loads

from safety-related SSCs to a heat sink under both normal operating and accident conditions; component redundancy for safety function performance assuming a single, active component failure coincident with the loss of offsite power; and the capability to isolate components, subsystems, or piping if required so that the system safety function will not be compromised.

Regulatory Guide (RG) 1.174, Revision 2, "An Approach for Using Probabilistic Risk Assessment [PRA] in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," describes a risk-informed approach, acceptable to the NRC, for assessing the nature and impact of proposed permanent licensing-basis changes by considering engineering issues and applying risk insights. This RG also provides risk acceptance guidelines for evaluating the results of such assessments. As discussed in RG 1.174, the technical adequacy of the PRA must be compatible with the safety implications of the TS change being requested and the role that the PRA plays in justifying that change. Therefore, the more the potential change in risk or the greater the uncertainty in that risk from the requested TS change, or both, the more rigor that must go into ensuring the technical adequacy of the PRA.

Regulatory Guide 1.177, Revision 1, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications," describes an acceptable risk-informed approach specifically for assessing proposed one-time TS changes in CTs. This RG also provides risk acceptance guidelines for evaluating the results of such assessments. Regulatory Position 2.3.2 of RG 1.177 states that the scope of the analysis should include all hazard groups (i.e., internal events, internal flood, internal fires, seismic events, high winds, transportation events, and other external hazards) unless it can be shown that the contribution from specific hazard groups does not affect the decision.

The RG also provides the following three tiered TS acceptance guidelines specific to one-time only CT changes for evaluating the risk associated with the revised CT:

1. The licensee has demonstrated that implementation of the one-time only TS CT change impact on plant risk is acceptable (Tier 1):
 - Incremental conditional core damage probability (ICCDP) of less than 1.0×10^{-6} and an incremental conditional large early release probability (ICLERP) of less than 1.0×10^{-7} , or
 - ICCDP of less than 1.0×10^{-5} and an ICLERP of less than 1.0×10^{-6} with effective compensatory measures implemented to reduce the sources of increased risk.
2. The licensee has demonstrated that there are appropriate restrictions on dominant risk-significant configurations associated with the change (Tier 2).
3. The licensee has implemented a risk-informed plant configuration control program. The licensee has implemented procedures to utilize, maintain, and control such a program (Tier 3).

Regulatory Guide 1.200, Revision 2, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities" describes one acceptable approach for determining whether the quality of the PRA, in total or the parts that are used to support an application, is sufficient to provide confidence in the results, such that the PRA can

be used in regulatory decisionmaking for light-water reactors.

The RG clarifies the American Society of Mechanical Engineers/American Nuclear Society (ASME/ANS) PRA standard to be ASME/ANS RA-Sa-2009, "Addenda to ASME/ANS RA-S-2008, Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment for Nuclear Power Plant Applications." The ASME/ANS PRA standard provides technical supporting requirements in terms of three capability categories (CCs). The intent of the delineation of the CCs within the supporting requirements is generally that the degree of scope and level of detail, the degree of plant specificity and the degree of realism increase from CC I to CC III. In general, the NRC staff anticipates that current good practice (i.e., CC II of the ASME/ANS standard), is the level of detail that is adequate for the majority of applications.

General guidance for evaluating the technical basis for proposed risk-informed changes is provided in Chapter 19, Section 19.2, "Review of Risk Information Used to Support Permanent Plant-Specific Changes to the Licensing Basis: General Guidance," of the NRC Standard Review Plan (SRP), NUREG-0800. Guidance on evaluating PRA technical adequacy is provided in Chapter 19, Section 19.1, "Determining the Technical Adequacy of Probabilistic Risk Assessment for Risk-Informed License Amendment Requests After Initial Fuel Load," of the SRP. More specific guidance related to risk-informed TS changes is provided in SRP, Section 16.1, "Risk-Informed Decisionmaking: Technical Specifications," which includes CT changes as part of risk-informed decisionmaking.

Chapter 19 of the SRP states that a risk-informed application should be evaluated to ensure that the proposed changes meet the following key principles:

- The proposed change meets the current regulations, unless it explicitly relates to a requested exemption or rule change.
- The proposed change is consistent with the defense-in-depth philosophy.
- The proposed change maintains sufficient safety margins.
- When proposed changes increase core damage frequency (CDF) or risk, the increase(s) should be small and consistent with the intent of the Commission's Safety Goal Policy Statement.
- The impact of the proposed change should be monitored using performance measurement strategies.

3.0 TECHNICAL EVALUATION

3.1 Evaluation of Key Risk Principles

3.1.1 Key Principle 1: Compliance with Current Regulations

The NRC staff reviewed bases information in the Updated Safety Analyses Report and the associated regulatory and design criteria in the TS Bases for TS 3.7.1. The licensee does not

propose to deviate from existing regulatory design criteria and requirements and compliance with existing design regulations is maintained by the proposed TS changes. Therefore, with respect to compliance with current regulations, the NRC staff considers the proposed extension in the allowed completion time for one inoperable SX system division to be acceptable.

3.1.2 Key Principle 2: Evaluation of Defense-in-Depth

The NRC staff has reviewed the information contained in the submittal, as supplemented, and evaluated the information provided against the defense-in-depth attributes included in RG 1.177. The NRC staff determined the attributes were adequately satisfied as described in the following evaluation:

- A reasonable balance among prevention of core damage, prevention of containment failure, and consequence mitigation is preserved.

The primary accident safety functions of the SX system are to provide cooling for safety-related equipment relied upon to prevent core damage and to remove heat to prevent containment failure. The proposed change does not affect the balance between prevention of core damage and prevention of containment failure in that the system continues to support both functions. Although the reliability of the functions is reduced by a decrease in redundancy for the one-time 4-day extension to the CT to restore an inoperable SX division to operable status, the NRC staff finds a reasonable balance among these performance goals would be maintained by the operable Division 1 of the SX system during the extended CT to restore Division 2 of the SX system.

- Over-reliance on programmatic activities to compensate for weaknesses in plant design is avoided.

The proposed change does not change the design and operation of the SX system. However, the licensee proposed implementation of certain programmatic activities to assure that the operable Division 1 of the SX system would remain capable of performing its safety functions during the period of time Division 2 would be inoperable. These programmatic measures increase the likelihood that Division 1 would function properly if required to operate, but they are compensating for temporary reduction in system redundancy rather than a weakness in plant design. Therefore, the NRC staff finds that the proposed TS change would not involve an over-reliance on programmatic activities.

- System redundancy, independence, and diversity are preserved commensurate with the expected frequency, consequences of challenges to the system, and uncertainties (e.g., no risk outliers). The proposed change increases the length of time redundancy is reduced. However, the proposed one-time increase in the CT to restore one inoperable division of the SX system to operable status is explicitly modeled in the PRA. Since the risk assessment shows changes in safety metrics fall within acceptable bounds, the NRC staff finds it provides reasonable assurance no risk outliers are introduced due to inadequate system redundancy, independence, or diversity. The SX system includes provisions for cross-connection that may further reduce the risk associated with removal

of the Division 2 pump, but the licensee stated that these capabilities were conservative and not modeled in the risk assessment.

- Defense against potential common cause failures is preserved, and the potential for the introduction of new common cause failure mechanisms is assessed.

Neither the mode of operation, nor the configuration of the SW system is changed by the proposed TS changes. The system will continue to be operated, maintained, and tested in the same manner as before. However, the activities associated with replacement of the Division 2 SX system pump could involve conditions that could threaten the continued operability of the other SX system divisions, such as the movement of heavy components.

To address the potential for the pump replacement activity itself to disable more than just Division 2, the NRC staff requested that the licensee describe protection against potential impacts affecting the other SX system divisions. The licensee provided the following description of the independence of the divisions in the screenhouse where the pump replacement activities would occur:

The shutdown service water system equipment is the only equipment in the screen house that is required to safely shut down the reactor or to maintain it in a safe shutdown condition. The three shutdown service water pumps and strainers are in their own missile-protected cubicles. Each cubicle has its own cooling unit which is electrically segregated from the others. Each cubicle is flood protected by bulkhead doors. No single failure of the equipment associated with one cubicle will have a detrimental effect on the rest of the system.

Furthermore, the licensee described the following measures to protect equipment near the pump replacement activities from potential heavy load impacts:

The movement of Division 2 SX pump, pump motor, and screen house roof plugs has been planned to ensure that the loads will not travel over the WS System or the Circulating Water System pumps. In addition, there are no Division 1 or Division 3 SX System piping or electrical components in the planned load path for removal of the Division 2 SX System pump.

Therefore, the NRC staff finds that the proposed TS change and associated maintenance activities would neither degrade existing protections against common mode failures nor introduce credible new common cause failure mechanisms.

- Independence of barriers is not degraded.

The relationship of the SX system to individual fission product barriers, such as the fuel cladding, the reactor coolant system pressure boundary and containment, will not change as a result of the proposed TS change. Therefore, the NRC staff finds that the independence of these barriers would not be degraded by the proposed change.

- Defense against human errors is preserved.

Operator response is not expected to change during normal, abnormal or emergency operating conditions. Therefore, the NRC staff finds that this attribute is satisfied by the proposed TS change.

- The intent of the General Design Criteria in Appendix A to 10 CFR, Part 50, is maintained.

The proposed TS change does not involve any physical changes to the design of the SX system. Therefore, the NRC staff finds that this attribute is satisfied by the proposed TS change.

3.1.3 Key Principle 3: Evaluation of Safety Margins

The proposed TS change does not modify or otherwise impact codes and standards that are applicable to the SX system. The SX system is not being physically modified, and the proposed action CT does not result in an unreasonable decrease in the availability of a redundant train of the system. Therefore, the NRC staff finds that an adequate margin of safety will be maintained.

3.1.4 Key Principle 4: Change in Risk Consistent with the Commission's Safety Goal Policy Statement

Regulatory Position 2.3.2 of RG 1.177 provides the following three-tiered TS acceptance guidelines for evaluating the risk associated with one-time only CT changes.

1. The licensee has demonstrated that implementation of the one-time only TS CT change impact on plant risk is acceptable (Tier 1):
 - Incremental conditional core damage probability (ICCDP) of less than 1.0×10^{-6} and an incremental conditional large early release probability (ICLERP) of less than 1.0×10^{-7} , or
 - ICCDP of less than 1.0×10^{-5} and an ICLERP of less than 1.0×10^{-6} with effective compensatory measures implemented to reduce the sources of increased risk.
2. The licensee has demonstrated that there are appropriate restrictions on dominant risk-significant configurations associated with the change (Tier 2).
3. The licensee has implemented a risk-informed plant configuration control program. The licensee has implemented procedures to utilize, maintain, and control such a program (Tier 3).

The evaluation presented below addresses the NRC staff's philosophy of risk-informed decision making: that when the proposed changes result in a change in CDF or risk, the increase should be small and consistent with the intent of the Commission's Safety Goal Policy Statement. The

NRC staff evaluation of Key Principal 4 for the proposed one-time TS change is described below.

3.1.4.1 Tier 1: PRA Capability and Insights

The first tier evaluates the impact of the proposed change on plant operational risk. The Tier 1 review involves two aspects: (1) evaluation of the technical adequacy of the CPS PRA model and its application to the proposed change, and (2) evaluation of the PRA results and insights based on the licensee's proposed change.

Internal Events PRA (Including Internal Flooding)

The CPS, Unit 1, PRA is a full-power, internal events PRA that addresses both CDF and large early release frequency (LERF). The licensee's risk management process for maintaining and updating the PRA ensures that the PRA model remains an accurate reflection of the as-built and as-operated plant. The licensee used the 2014 update to the CPS internal events (including internal flooding) PRA model (CL14A) to evaluate the impact of the proposed change on plant risk for internal events and internal flooding.

The CPS internal events PRA model has been subjected to several peer reviews and self-assessments, including the most recent full scope peer review performed in October 2009. Details about these peer reviews and self-assessments, including peer-review findings and their disposition, are discussed in the submittal, as supplemented, and the February 15, 2010 (ADAMS Accession No. ML100470787) submittal requesting adoption of Technical Specifications Task Force (TSTF) 425. Tables 4-2 and 4-3 in Attachment 5 of the September 10, 2015, submittal, identifies five facts and observations (F&Os) from these peer reviews and self-assessments that are associated with supporting requirements that were assessed as not meeting CC II or findings associated with supporting requirements that were otherwise met at CC II. All other internal events supporting requirements were judged to meet at least CC II. Based on the NRC staff evaluation of the licensee's disposition of the F&Os, and the NRC staff's safety evaluation (SE) dated February 15, 2011 (ADAMS Accession No. ML102380477), which evaluated the disposition to three of these F&Os, the NRC staff concludes that all F&O findings associated with the CPS internal events PRA model were properly assessed and dispositioned to support the internal events PRA technical adequacy for the proposed one-time CT extension. Also, the large margin in the results of this risk assessment (i.e., ICCDP and ICLERP for the proposed one-time CT extension are much less than the acceptance criteria) provides high confidence that any uncertainty associated with the CPS internal events PRA model would not change the conclusions of this assessment.

Fire PRA

The CPS individual plant examination for external events (IPEEE) developed a fire PRA (FPRA) in response to the Generic Letter 88-20, Supplement 4. The NRC staff's review of the CPS IPEEE is described in a safety evaluation dated December 6, 2000 (ADAMS Accession No. ML003775246), which concluded that the licensee's IPEEE results are reasonable given the CPS design, operation, and history and that the IPEEE process is capable of identifying the most likely severe accidents and severe accident vulnerabilities.

In 2008, the licensee updated the CPS FPRA model in the IPEEE. The primary objective of the update effort was to develop an analysis with supporting documentation and tools that would facilitate risk assessment of maintenance activities and other licensing applications (e.g., TSTF-425). The 2008 FPRA model is an interim implementation of the methodology of NUREG/CR-6850, because not all tasks identified in this document are fully implemented. In 2014, the FPRA model was updated to be based on the 2014 internal events PRA model to reflect CPS's current design and operating practices and to include LERF. The 2014 FPRA model was used to evaluate the impact of the proposed one-time CT extension on plant risk for internal fire events. The 2014 FPRA model includes a full scope representation from the risk of fire for over 120 fire zones and the yard area. The selection of the global plant analysis boundary and the criteria for including/excluding plant areas are consistent with the current NUREG/CR-6850 guidance and methods. Therefore, the NRC staff finds the scope of areas included in the FPRA is sufficient for this application. Analysis refinements were made to those conditions that were identified as potentially risk significant. In Section B.2.3 of Attachment 5 to the submittal, the licensee discusses in detail the completeness of the 2014 FPRA model and concludes: there were no major form of completeness uncertainty that would change the results of this assessment (i.e., ICCDP and ICLERP for the proposed one-time CT extension are much less than the acceptance criteria) and that the 2014 PRA model is sufficiently complete to develop risk insights for the development of compensatory actions.

Based on NRC staff review of the technical adequacy of the 2008 CPS FPRA associated with the submittal dated February 15, 2010, on adoption of TSTF-425, the NRC staff concludes that the 2014 CPS FPRA is sufficiently adequate to provide risk insights for the proposed one-time CT extension. Also, the large margin in the results of this risk assessment (i.e., ICCDP and ICLERP for the proposed one-time CT extension are much less than the acceptance criteria) provides high confidence that any uncertainty associated with the CPS FPRA model would not change the conclusions of this assessment.

Seismic and Other External Hazards

CPS does not have a quantitative seismic PRA model; therefore, the licensee performed a qualitative assessment to evaluate seismic risk. Section 3.3.2 and Appendix A of Attachment 5 to the license amendment request (LAR) presents the qualitative analysis to screen seismic risk as a non-significant contributor to the risk assessment of the proposed one-time CT extension. To support the qualitative assessment of seismic risk, the licensee used seismic risk insights, representative SSCs fragility information, and seismic walkdown information that were developed in 2013 for the Phase 1 seismic PRA. The licensee concluded that the additional risk due to a seismic event is qualitatively evaluated as low and would not have a significant impact on the overall results or conclusion for this risk evaluation.

The licensee stated that the CPS IPEEE study assesses the vulnerability of the site to other external hazards, including high winds and tornadoes, external floods, transportation accidents, and nearby facility accidents. The design of the CPS plant facilities meets the NRC's 1975 SRP criteria for each of the other external events evaluated. The licensee reviewed the IPEEE conclusions for applicability to the Division 2 SX one-time CT extension and concluded that there were no significant quantitative contribution from these other external events. The licensee also evaluated accidental aircraft impacts, turbine-generated missiles, external fires, release of chemicals stored on site, and pipeline accidents and concluded that the bounding analyses demonstrated that these external hazards do not pose a credible threat to CPS.

Regulatory Position 2.3.2 of RG 1.177 states that the scope of the analysis should include all hazard groups (i.e., internal events, internal flood, internal fires, seismic events, high winds, transportation events, and other external hazards) unless it can be shown that the contribution from specific hazard groups does not affect the decision. The staff finds that the licensee followed RG 1.177 by providing a qualitative analysis of seismic impact, performing qualitative bounding analyses of other external hazards and determining that those hazards do not impact this application. In addition, the compensatory actions listed in the LAR would reduce any risk associated with these external hazards.

Sensitivity and Uncertainty Analyses

Regulatory Position 2.3.5 of RG 1.177 states that the risk resulting from TS CT changes is relatively insensitive to uncertainties, because uncertainties associated with CT changes tend to similarly affect the base case and the change case. Section 3.5, and Appendix B, of Attachment 5 of the LAR present the uncertainty and sensitivity analyses associated with the risk evaluation for one-time CT extension. The LAR addresses parameter, modeling, and completeness uncertainties. The parameter uncertainty assessment indicates that the direct use of point estimate CDF/LERF results, as compared to the use of mean CDF/LERF results, is acceptable for this assessment. The large margin between the risk evaluation results and the ICCDP and ICLERP acceptance guidelines in RG 1.177, in addition to the multiple compensatory measures that the licensee committed to implement, provide confidence that modeling uncertainty would not change the conclusions of the risk evaluation. The LAR describes how the PRA models are sufficiently complete and no new initiating events or failure modes are introduced by the one-time CT extension and, therefore, the PRA models are able to adequately predict the change in CDF and LERF for the one-time CT extension. Based on the discussion above, the NRC staff finds that the licensee's assessment of sensitivity and uncertainty is consistent with RG 1.177.

PRA Results and Insights

The licensee evaluated the impact of the proposed change on plant risk for internal events, internal flooding, and internal fires using the CPS CL14A internal events (with internal flooding) PRA model and the 2014 FPRA model. The licensee has demonstrated that the one-time TS CT change has only a small quantitative impact on the plant risk.

This risk evaluation is specific to the CPS, Unit 1, Division 2 SX pump train outage with all relevant configurations represented in the PRA model, including:

- Division 2 SX pump train is out of service.
- Divisions 1 and 3 systems and offsite power sources are protected in order to ensure functionality of redundant equipment. As a result, maintenance unavailability for key Divisions 1 and 3 trains, as well as, offsite power sources have been effectively eliminated during this period.

- The pump replacement will be done in a workweek where the pump replacement and Division 2 SX will be the focus of the week and there will not be significant concurrent maintenance work.

To determine ICCDP and ICLERP, the licensee calculated the CDF and LERF for the baseline case using the average maintenance models (i.e., the PRA models for internal events, internal flooding, and internal fires based on average test/maintenance unavailability for all equipment). The CDF and LERF were calculated for the one-time CT extension case using the average maintenance models and setting the appropriate basic events in these models to represent the extended CT configuration, which include:

- Division 2 SX pump train unavailable for maintenance is set to TRUE.
- Division 2 SX crosstie valve to plant SX (motor-operated valve 1SX014B) fails to open is set to TRUE.
- Basic events associated with maintenance unavailability for key Divisions 1 and 3 trains, as well as, offsite power sources are set to FALSE.

The licensee reported the following results by calculating ICCDP and ICLERP that reflect the entire 7-day completion time for the Division 2 SX pump train.

ICCDP = 1.6×10^{-6} (RG 1.177 Acceptance Guideline: $< 1 \times 10^{-5}$ with effective compensatory measures implemented to reduce the sources of increased risk)

ICLERP = 6.4×10^{-8} (RG 1.177 Acceptance Guideline: $< 1 \times 10^{-6}$ with effective compensatory measures implemented to reduce the sources of increased risk)

The NRC staff finds that the licensee meets appropriate risk measures specific to one-time only CT changes considering the compensatory measures discussed in Section 3.2.4.2 of this SE, and is therefore acceptable.

3.1.4.2 Tier 2: Avoidance of Risk-Significant Plant Configurations

Under the Tier 2 acceptance guideline in RG 1.177, the licensee should provide reasonable assurance that risk-significant plant equipment outage configurations will not occur when specific plant equipment is taken out of service in accordance with the proposed TS change. Based on configuration-specific risk insights provided by the CPS internal events (including internal flooding) and internal fire PRA models and as part of the CPS Configuration Risk Management Program (CRMP), the licensee identified risk-significant combinations of equipment that if out-of-service during the Division 2 SX pump outage would significantly increase risk, and identified further compensatory actions and restrictions for entry into preventative maintenance (PM) to avoid high risk equipment out-of-service combinations during that time. Section 5.4.1 of Attachment 5 of the LAR discusses in detail these compensatory

measures that will be implemented during the planned SX configuration to assure the risk impacts are acceptably low. These compensatory measures include:

- There will be no concurrent maintenance work on Division 1 or 3 mechanical or electrical equipment as well as offsite power sources (e.g., Reserve Auxiliary Transformers, Emergency Reserve Auxiliary Transformers, Static VAR Compensators, and switchyard). This equipment will be protected for this one-time outage.
- The extended weather forecast will be examined to ensure severe weather conditions are not predicted prior to entry into this one-time outage. In the event of an unforeseen severe weather condition due to rapidly changing conditions, such as severe high winds, a briefing with crew operators will be performed to reinforce operator actions and responses in the event of a loss of offsite power.
- Fire Risk Management Actions applicable for Division 2 SX, which were developed from fire risk insights for inclusion in CPS CRMP, will be completed per plant procedures. These actions protect against fire impacting key redundant equipment.
- Prior to entrance into the one-time Division 2 SX pump outage, shift briefs and pre-job walkdowns to reduce and manage transient combustibles will be used to alert staff about the increased sensitivity to fires in certain fire zones. These fire zones are listed in Section 5.4.1 of Attachment 5 of the LAR. Additionally, hot work activities in these fire zones will be prohibited during the SX outage. These fire zones were identified based on risk insights from the FPRA.

The NRC staff finds that the licensee provided adequate analyses of risk-significant configurations while Division 2 SX is out-of-service and identified appropriate compensatory actions that can mitigate corresponding increases in risk. Therefore, the staff concludes that the licensee's analysis of risk significant combinations and identification of compensatory actions are consistent with RG 1.177 and provide reasonable assurance that risk-significant plant equipment outage configurations will not occur during the PM.

3.1.4.3 Tier 3: Risk-Informed Configuration Risk Management

Tier 3 is the establishment of an overall CRMP to ensure that other potentially lower probability, but nonetheless risk-significant, configurations resulting from maintenance and other operational activities are identified and managed. The licensee's program for compliance with 10 CFR 50.65(a)(4) ensures that the risk impact of out-of-service equipment is appropriately assessed and managed.

The licensee stated in Attachment 1 of the submittal that CPS has an established CRMP that implements 10 CFR 50.65(a)(4) requirements. The CPS CRMP assessment tool is used to perform a configuration dependent assessment of the overall impact on risk of proposed plant configurations prior to, and during, the performance of maintenance activities that remove equipment from service. The licensee further explained that risk is re-assessed if an equipment failure/malfunction or emergent condition produces a plant configuration that has not been previously assessed. Should unforeseen events place the plant in a risk-significant

configuration, compensatory measures to reduce risk are developed. CPS procedures provide for the control, application, and requirements of the CPS PRA models and the CRMP assessment tool for implementation of 10 CFR 50.65(a)(4).

Based on the risk metrics provided being consistent with the criteria identified in RG 1.177, the NRC staff finds that risk analysis associated with the proposed one-time TS CT change satisfies the fourth key safety principle of RG 1.177.

3.1.5 Key Principle 5: Performance Measurement Strategies – Implementation and Monitoring Program

Both RG 1.174 and RG 1.177 establish the need for an implementation and monitoring program to ensure that no adverse safety degradation occurs because of the changes to the TS. An implementation and monitoring program is intended to ensure that the impact of the proposed TS change continues to reflect the reliability and availability of SSCs impacted by the change.

In RG 1.177 it is suggested that the licensee use a three-tiered approach in implementing the proposed TS CT change. Application of the three-tiered approach is in keeping with the fundamental principle that the proposed change is consistent with the defense-in-depth philosophy. Application of the three-tiered approach provides assurance that defense-in-depth will not be significantly impacted by the proposed change. Furthermore, RG 1.177 states that to ensure that extension of a TS CT does not degrade operational safety over time, the licensee should ensure, as part of its maintenance rule program (10 CFR 50.65), that when equipment does not meet its performance criteria, the evaluation required under the maintenance rule includes prior related TS changes in its scope.

The NRC staff reviewed the licensee's implementation and monitoring program. The licensee provided a brief evaluation of the proposed TS change against the three-tiered approach in Attachment 1 to the submittal. In the submittal, the licensee confirmed that the SX pumps are monitored under the CPS maintenance rule program. If the pre-established reliability or availability performance criteria for the SX pumps are exceeded, they are evaluated for 10 CFR 50.65(a)(1) actions, which requires increased management attention and goal setting in order to restore their performance to an acceptable level. Additionally, the licensee stated that the proposed CT change is a one-time change, and the additional out-of-service time for the Division 2 SX pump is not expected to result in exceeding the current established maintenance rule performance criteria.

Based on the use of the existing CPS maintenance rule program, the NRC staff finds that the impact of the proposed change will be monitored using acceptable performance measurement strategies. Therefore, the NRC concludes that the licensee satisfies the fifth key safety principle of RG 1.177.

3.1.6 Conclusion on Risk-Informed Information

The NRC staff finds that the risk impact of the licensee's request for a one-time extension of the CT of TS LCO 3.7.1, Required Action B.1, from 72 hours to 7 days, as estimated by ICCDP and ICLERP, is consistent with the acceptance guidelines specified in RG 1.177 and Sections 19.1 and 16.1 of NUREG-0800. The licensee's methodology for assessing the risk impact is

accomplished using PRA models of sufficient scope and technical adequacy. For external hazards, which do not have PRA models, the licensee used qualitative or bounding analyses. Therefore, the NRC staff finds that the licensee has followed the three-tiered approach and performance monitoring programs outlined in RG 1.177.

3.2 Addition of New TS ACTION

3.2.1 Description

The licensee proposed new CONDITION C for the situation where the Division 2 SX subsystem is inoperable because of maintenance on the Division 2 SX pump. The new condition would contain a NOTE stating that it is only applicable during replacement of the Division 2 SX pump during the Division 2 SX system outage window from October 26, 2015 through November 8, 2015. The condition would allow for continued operation at power for up to 7 days when the Division 2 SX subsystem is inoperable during the pump outage. REQUIRED ACTION C.1, which requires restoration of the Division 2 SX subsystem to OPERABLE status within 7 days, would be preceded by two NOTES. NOTE 1 would state "Enter applicable Conditions and Required Actions of LCO 3.8.1, "AC Sources-Operating," for diesel generator made inoperable by SX." NOTE 2 would state "Enter applicable Conditions and Required Actions of LCO 3.4.9, "Residual Heat Removal (RHR) Shutdown Cooling System-Hot Shutdown," for RHR shutdown cooling subsystem made inoperable by SX." PROPOSED NOTES 1 and 2 are identical to CONDITION B NOTES.

The licensee also proposed adding a NOTE above CONDITION B which would state "Not applicable during replacement of Division 2 SX pump during the Division 2 SX system outage window from October 26 through November 8, 2015." Finally, the licensee proposed re-lettering current CONDITIONS C and D and the associated REQUIRED ACTIONS to D and E, respectively.

The licensee's proposed CT for restoration of the Division 2 SX subsystem is 7 days. This request represents an extension of the current TS CT for SX subsystem restoration by 4 days and, therefore, a relaxation of TS requirements.

The NRC staff reviewed the licensee's submittal and questioned whether the proposed language was meant to allow multiple entries during the proposed timeframe into the LCO ACTION or would one entry be made during the proposed timeframe. In the September 30, 2015, supplement, the licensee stated:

Because the proposed CT extension is a one-time change, there will not be repeated entry into the Required Action associated with the proposed CT extension. When the Division 2 SX subsystem is declared to be inoperable in support of the pump replacement it will remain inoperable until the pump is replaced, tested and declared operable again. Once the Division 2 SX pump is replaced, the proposed new Condition C will no longer be applicable and Condition B will be the condition entered whenever Division 1 or 2 SX subsystem is inoperable.

The NRC staff reviewed the proposed changes to determine whether the NOTES preceding the new REQUIRED ACTION maintain existing requirements to enter applicable TS CONDITIONS

for supported systems rendered inoperable by an inoperable SX subsystem. The NRC staff also reviewed whether the limits on use of new CONDITION C, as confirmed by the licensee, ensure the CONDITION will only be entered for one time and the total duration of time in the CONDITION will be limited to a maximum of 7 days while the plant is at power.

The NRC staff determined that while the proposed extended CT is a relaxation to existing TS requirements, it is acceptable because the proposed changes by the licensee still affords adequate assurance of safety when judged against current regulatory standards. Therefore, the NRC staff finds that the proposed changes will continue to meet the requirements of 10 CFR 50.36(c)(2).

3.3 Conclusion

As discussed previously, the NRC staff reviewed the risk-informed submittal and supplement to assess whether the licensee demonstrated that the risk analyses was of sufficient quality to support the NRC's decisionmaking process. The licensee indicated that the submittal as supplemented used an approved RG to assess the nature and impact of the proposed CT by considering engineering issues and applying risk insights. The NRC staff confirmed that the provided assessments considered relevant safety margins and defense-in-depth attributes, including considering success criteria as well as equipment functionality, reliability, and availability. Further, the NRC staff assessed whether the licensee employed an acceptable TS change implementation strategy and performance monitoring plan to ensure that assumptions and analyses supporting the change were verified. Based on this review, the NRC staff finds that the licensee has performed a sufficiently complete and scrutable TS change analysis and that the results of the engineering evaluations support the licensee's request for a one-time extension of the CT from 72 hours to 7 days.

4.0 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 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. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

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

Response: No.

The proposed one-time change to the CT for CPS TS 3.7.1 will not increase the probability of an accident since it will only extend the time period that one SX subsystem can be out of service. The extension of the time duration that one SX subsystem is out of service has no direct physical impact on the plant. The proposed inoperable SX subsystem is

normally in a standby mode while CPS is in Mode 1, 2, or 3 and is not directly supporting plant operation. Therefore, it can have no impact on the plant that would make an accident more likely to occur due to its inoperability. The proposed change does not adversely affect accident initiators or precursors, nor does it alter the design assumptions, conditions, or configuration of the facility or the manner in which the plant is operated and maintained.

The previously analyzed accidents are initiated by the failure of plant structures, systems, or components. The SX system is not considered an initiator for any of these previously analyzed events. The proposed change does not have a detrimental impact on the integrity of any plant structure, system, or component that initiates an analyzed event. No active or passive failure mechanisms that could lead to an accident are affected. The proposed change will not alter the operation of, or otherwise increase the failure probability of any plant equipment that initiates an analyzed accident. Therefore, the proposed change does not involve a significant increase in the probability of an accident previously evaluated.

The proposed change does not alter or prevent the ability of structures, systems, and components (SSCs) from performing their intended function to mitigate the consequences of an initiating event within the assumed acceptance limits. The proposed change does not require any physical change to any plant SSCs nor does it require any change in systems or plant operations. The proposed onetime increase in the CT is consistent with the philosophy of the current TS LCO which allows one SX subsystem to be inoperable for 72 hours. This change only extends the 72 hour CT to 7 days which has been shown to be acceptable from a risk perspective. The minimum equipment required to mitigate the consequences of an accident and/or safely shut down the plant will be Operable or available during the extended CT. The proposed change is consistent with the safety analysis assumptions and resultant consequences. Based on the above, the proposed change does not involve a significant increase in the consequences of an accident previously evaluated. Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No.

The proposed changes do not involve the use or installation of new equipment and the currently installed equipment will not be operated in a new or different manner. No new or different system interactions are created and no new processes are introduced. The proposed changes

will not introduce any new failure mechanisms, malfunctions, or accident initiators not already considered in the design and licensing bases. Based on this evaluation, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

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

Response: No.

The proposed change does not alter any existing setpoints at which protective actions are initiated and no new setpoints or protective actions are introduced. The design and operation of the SX system remains unchanged. The risk associated with the proposed increase in the time an SX pump is allowed to be inoperable was evaluated using the risk-informed processes described in RG 1.174 and RG 1.177. The risk was shown to be acceptable. Based on this evaluation, the proposed change does not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, determined that the three standards of 10 CFR 50.92(c) are satisfied.

5.0 STATE CONSULTATION

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

6.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility located within the restricted area as defined in 10 CFR Part 20. The Commission has previously issued a proposed finding (September 18, 2015, 80 FR 56498) that the amendment involves no significant hazards consideration, and there has been no public comment on such finding. The Commission has made a final determination that the amendment involves no significant hazards consideration. 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 not significant increase in individual or cumulative occupational radiation exposure. 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.

7.0 CONCLUSION

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

Principal Contributors: T. Hilsmeier, NRR
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Date of issuance: **October 22, 2015**

October 22, 2015

Mr. Bryan C. Hanson
Senior Vice President
Exelon Generation Company, LLC
President and Chief Nuclear Officer (CNO)
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: CLINTON POWER STATION, UNIT 1 – ISSUANCE OF AMENDMENT RELATED TO ONE-TIME EXTENSION OF COMPLETION TIME FOR SHUTDOWN SERVICE WATER (CAC NO. MF6705)(RS-15-264)

Dear Mr. Hanson:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 207 to Facility Operating License No. NPF-62 for the Clinton Power Station, Unit 1. The amendment is in response to an application from Exelon Generation Company, LLC, dated September 10, 2015, as supplemented by letters dated September 30, and October 20, 2015 (Agencywide Documents Access and Management System (ADAMS) Nos. ML15253A833, ML15273A234, and ML15293A554, respectively).

The amendment allows a one-time extension of the technical specification of Action B.1 from 72 hours to 7 days to preemptively replace the Division 2 service water (SX) pump due to degrading performance. This approval allows the licensee proposes to use this extension one time during a planned Division 2 SX subsystem outage window scheduled for the week of October 26, 2015. A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,
/RA/
Eva A. Brown, Senior Project Manager
Plant Licensing III-2 and
Planning and Analysis Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-461

Enclosures:

- 1. Amendment No. 207 to NPF-62
- 2. Safety Evaluation

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