

10 CFR 50.90
10 CFR 50.51

RS-18-105

September 17, 2018

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001Clinton Power Station, Unit 1
Facility Operating License No. NPF-62
NRC Docket No. 50-461

Subject: License Amendment Request to Recapture Low-Power Testing Time

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.

The proposed amendment would revise the expiration date of the operating license to recapture low-power testing time. Specifically, the expiration date of Clinton's full-power operating license (FPOL) would be revised such that it would expire 40 years from the date of issuance of the FPOL, as opposed to 40 years from the date of the low-power testing license (No. NPF-55), as permitted by 10 CFR 50.51. If this amendment is approved, the FPOL would be extended for approximately 6.5 months, and would expire on April 17, 2027 instead of September 29, 2026.

In the Staff Requirements Memorandum (SRM) for SECY-98-296, "Agency Policy Regarding Licensee Recapture of Low-Power Testing or Shutdown Time for Nuclear Power Plants," dated March 30, 1999, the Commission established NRC policy regarding recapture of low-power testing time for nuclear power plants. Specifically, the Commission approved the NRC staff's plan to grant license amendment requests to amend the expiration dates of certain licenses to recover time spent in low-power testing before issuance of an FPOL. As discussed in Attachment 1, this license amendment request falls within the scope of that policy.

As discussed in Section 4.3 of Attachment 1, the proposed change does not involve a significant hazards consideration, as evaluated under 10 CFR 50.92(c). Furthermore, EGC has determined that this license amendment request meets the eligibility criteria in 10 CFR 51.22(c)(9) for a categorical exclusion. Therefore, under 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

The proposed change has been reviewed by the Clinton Plant Operations Review Committee, in accordance with the requirements of the EGC Quality Assurance Program.

EGC requests approval of the proposed license amendment by September 17, 2019. There are no regulatory commitments contained in this submittal.

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

Should you have any questions concerning this submittal, please contact Ms. Rebecca L. Steinman at (630) 657-2831.

I declare under penalty of perjury that the foregoing is true and correct. This statement was executed on the 17th day of September 2018.

Respectfully,

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

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

Attachments: 1. Evaluation of Proposed Change to Recapture Low-Power Testing Time
2. Mark-up of Proposed Change to Operating License

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

Attachment 1
Evaluation of Proposed Change to Recapture Low-Power Testing Time

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1.0 SUMMARY DESCRIPTION

In accordance with 10 CFR 50.90 (Reference 6.1), "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.

The proposed amendment would revise the expiration date of the operating license to recapture low-power testing time. Specifically, the expiration date of Clinton Power Station's full-power operating license (FPOL) would be revised such that it would expire 40 years from the date of issuance of the FPOL, as opposed to 40 years from the date of the low-power testing license, as permitted by 10 CFR 50.51 (Reference 6.2). If this amendment is approved, the FPOL would be extended for approximately 6.5 months, and would expire on April 17, 2027 instead of September 29, 2026.

2.0 DETAILED DESCRIPTION

Section 103.c of the Atomic Energy Act of 1954, as amended (AEA), provides that the term of a license issued under that section "...not exceed[] forty years from the authorization to commence operations." 10 CFR 50.51(a) also specifies that "[e]ach license will be issued for a fixed period of time to be specified in the license but in no case to exceed 40 years from date of issuance." Additionally, 10 CFR 50.56 and 10 CFR 50.57 allow the issuance of an operating license pursuant to 10 CFR 50.51 after the construction of the facility has been substantially completed, in conformity with the construction permit and when other provisions specified in 10 CFR 50.57 are met.

The NRC issued a license for fuel loading and low-power testing to Clinton Power Station (CPS) on September 29, 1986 (NPF-55) pursuant to AEA Section 103.c and 10 CFR Part 50 regulations. The low-power testing license limited plant operation to power levels not exceeding five percent of full power. The low-power testing license was then superseded by the FPOL, issued by the NRC on April 17, 1987 (NPF-62), also pursuant to AEA Section 103.c and 10 CFR Part 50. However, the FPOL included an expiration date of September 29, 2026; 40 years after issuance of the low-power testing license, versus 40 years after issuance of the FPOL. The proposed amendment would recapture the time spent in low-power testing by extending the FPOL's current expiration date by approximately 6.5 months to April 17, 2027.

In the Staff Requirements Memorandum (SRM) for SECY-98-296, "Staff Requirements – SECY-98-296 - Agency Policy Regarding Licensee Recapture of Low-Power Testing or Shutdown Time for Nuclear Power Plants," dated March 30, 1999 (Reference 6.3), the Commission established NRC policy regarding recapture of low-power testing time for nuclear power plants. Specifically, the Commission approved the NRC staff's plan to grant a license amendment to the Grand Gulf Nuclear Station, Unit 1 (GGNS) licensee to amend the expiration date of the GGNS license to recover time spent in low-power testing before receipt of its FPOL. The Commission also approved granting future license amendment requests from other similarly-situated licensees; i.e., licensees that were issued FPOLs with 40-year license terms commencing on the date of issuance of separate, previously-granted low-power testing licenses. This license amendment request falls within the scope of that policy.

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Aging effects are not safety-significant because the license recapture period, about 6.5 months for CPS, is short when compared to the overall license period. Additionally, as described in Section 4.3 below, the proposed amendment to the facility operating license presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

3.0 TECHNICAL EVALUATION

The proposed amendment would revise the expiration of the facility operating license such that the expiration date of the 40-year license is calculated from the issuance date of the FPOL rather than the issuance date of the low-power testing license. As described above, the Commission has established a policy of granting license amendments to recover time spent in low-power testing within their FPOL. The request to recapture low-power testing time for the CPS falls within the scope of this Commission policy.

Clinton Power Station was designed and constructed to ensure at least a 40-year service life. Design features allow for routine inspection of structures, systems, and components during this service life in accordance with NRC requirements and CPS procedures. Surveillance, inspection, and maintenance practices, which have been implemented in accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code and the CPS Technical Specifications (TS), provide assurance that any degradation in plant safety-related equipment will be identified and corrected to provide continued safe operation of the unit throughout the duration of the facility operating license, including the proposed license extension (i.e., low-power testing recapture) period.

3.1 Safety Assessment of Reactor Pressure Vessel

The reactor pressure vessel (RPV) was designed and fabricated in accordance with the requirements of Section III, Class 1, of the ASME Code edition, addenda, and Code Cases applicable at the time of plant design and construction. Operating limitations of the ASME Code and of 10 CFR Part 50, Appendix G, "Fracture Toughness Requirements," also apply. The RPV and the reactor coolant system were designed to allow inspections in accordance with Section XI of the ASME Code. Industry experience with steel structures confirms a service life in excess of 40 years.

Over the operating life of a reactor vessel, ferritic materials exposed to neutron irradiation will undergo changes in material properties and a decrease in fracture toughness. The decrease in fracture toughness is of importance because the ability of ferritic materials to resist failure caused by the propagation of a crack decreases with increasing irradiation. A surveillance program in accordance with 10 CFR Part 50, Appendix H, "Reactor Vessel Materials Surveillance Program Requirements," was developed to monitor the fracture toughness of the RPV. The purpose of the program is to help ensure RPV integrity by monitoring changes in the fracture toughness properties of the RPV beltline materials. Input from this program is used to develop operating limits, in the form of pressure/temperature (P/T) limit curves, which ensure adequate margin with regard to brittle failure of the RPV and piping of the reactor coolant pressure boundary.

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In 1996, the P/T limit curves in TS 3.4.11, "RCS Pressure and Temperature (P/T) Limits," were revised to incorporate specific P/T limits for the bottom head region of the reactor vessel, separate from the curves for the core beltline region of the reactor vessel (Reference 6.4). The separate curves account for the fact that during leak and hydrostatic pressure testing and during heatup and cooldown, the temperatures in the bottom head region may be lower than in the higher elevations of the vessel if the recirculation pumps are either stopped or operating at low speed, and if there is injection through the control rod drives. The P/T curves were based on conformance with the requirements of 10 CFR Part 50, Appendix G, and satisfied Generic Letter 88-11 since Regulatory Guide 1.99, Rev. 2, "Radiation Embrittlement of Reactor Vessel Materials" (May 1988) was used to calculate the adjusted reference temperature (ART).

The current P/T limit curves in TS 3.4.11 are based on an alternative methodology based on ASME B&PV Code Cases N-640, "Alternative Requirement Fracture Toughness for Development of P-T Curves for ASME B&PV Code Section XI, Division I," and N-588, "Alternative to Reference Flow Orientation of Appendix G for circumferential welds in Reactor Vessels, Section XI, Division I." This methodology is described in "Pressure Temperature Curves for AmerGen, Clinton Power Station Using the K_{IC} Methodology" (August 2000) (Reference 6.5). This alternative P/T development methodology was approved by the NRC in October 2000 (Reference 6.6). The P/T limit curves are valid for 32 Effective Full Power Years (EFPY) of operation.

The RPV is discussed in Section 5.3 of the Clinton Updated Safety Analysis Report (USAR). Per USAR Section 5.3.1.6.1, Clinton Power Station's participation in the BWR Vessel and Internals Project (BWRVIP) Integrated Surveillance Program (ISP), as described in BWRVIP-86 (Reference 6.7) was approved in 2003. The ISP, which meets the requirements of 10 CFR Part 50, Appendix H, provides data that are factored into plant operations sooner than the site-specific program would have allowed.

As part of the plant-specific implementation of the ISP, the existing operating P/T curves were reviewed to confirm that the projection of ART used in developing the curves remains valid. Reassessment of the validity of the P/T limit curves occurs as new data become available from the ISP. Based on the current withdrawal schedule in the latest NRC-approved revision of BWRVIP-86, the next scheduled ISP surveillance capsule withdrawal applicable to the CPS RPV material is not scheduled until 2025.

As of June 11, 2018, the CPS RPV has accumulated a total of 23.3 EFPY exposure. Looking at the expected future operating history, it is concluded that the proposed 6.5-month extension of the FPOL expiration date to April 17, 2027 will remain within the current 32 EFPY period of validity without reassessment for the ISP surveillance capsule scheduled to be withdrawn in 2025.

Based on the above discussion, there is reasonable assurance that the CPS RPV will continue to meet applicable Part 50 and CPS license requirements during the additional 6.5 months of plant operation sought by this low-power testing recapture request.

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3.2 Structures

As discussed in Section 3.8 of the USAR, the concrete and steel Category 1 structures at CPS were designed and constructed in accordance with the General Design Criteria of 10 CFR Part 50, Appendix A, "General Design Criteria for Nuclear Power Plants." The NRC reviewed the CPS design basis, fabrication, construction, and implementation of quality assurance (QA) criteria when the plant was licensed for low-power operation. The NRC's safety evaluations approving the programs and their implementation with respect to these structures are documented in the NRC's Safety Evaluation Report for CPS (NUREG-0853) and its eight supplements. Industry experience with concrete and steel structures confirms a service life in excess of 40 years. The recapture period requested by the proposed amendment represents less than 1.4% of the 40-year service life of the plant.

The major codes and specifications used in the design and construction of the Category 1 concrete and steel structures were ACI 318-71, "Building Code Requirements for Reinforced Concrete," and the American Institute of Steel Construction specification, "Specification for the Design, Fabrication, and Erection of Structural Steel for Building." The foundations of the seismic Category 1 structures are reinforced concrete designed to meet ACI 318-71 requirements. Sections 3.8.2 and 3.8.3 of NUREG-0853 state that the criteria that were used in the analysis, design, and construction of seismic Category 1 structures at CPS account for anticipated loading and postulated conditions that may be imposed on the structures during their service lifetime, which would include the requested 6.5 months of additional power operation.

As noted above, the NRC has approved EGC's use of the above referenced codes, standards, and specifications in the CPS design, analyses, and construction, as well as the CPS QA program required by 10 CFR Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants." Thus, there is reasonable assurance that the concrete and steel structures will continue to comply with applicable NRC regulations and CPS operating license requirements during the proposed 6.5 month license term extension requested by EGC.

3.3 Mechanical Equipment

Surveillance, maintenance, and testing requirements for mechanical equipment are in place to verify operability or to detect degradation and ensure that the equipment that does degrade is replaced or other corrective actions are taken. In addition, sub-components such as nonmetallics (e.g., gaskets and O-rings) are inspected and replaced as necessary, as part of routine maintenance to ensure the design life of equipment. Surveillance, inspection, and testing requirements at CPS, which apply during the plant's operating life, including the following:

- ASME Code Section XI: Equipment that is safety-related is ASME Code Class 1, 2, or 3 and is subject to the inservice inspection requirements of Section XI and 10 CFR 50.55a, except where the NRC has granted written relief from these requirements. These requirements apply throughout the operating life of a plant and provide reasonable assurance that mechanical components will be properly monitored throughout the plant lifetime.

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- **Technical Specifications (TS):** 10 CFR 50.36 requires the establishment of limiting conditions for operation (LCOs) for certain equipment. (LCOs are the lowest functional capability or performance levels of equipment required for safe operation of the facility.) This equipment is subject to the surveillance and testing requirements in the TS to assure systems are operable. These surveillance requirements include calibration and inspection of systems and components to ensure that operation of the plant will remain in accordance with the LCOs.
- **10 CFR Part 50, Appendix J:** Equipment and components associated with containment penetrations, including containment isolation valves, are subject to the leak testing requirements in 10 CFR Part 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors." This is for Type B and C testing of valves and penetrations, and Type A testing of the overall containment structure. These tests verify the integrity of the containment and associated components and confirm that the containment and associated components are capable of performing their designed safety function as assumed in the accident analyses for CPS.
- **Mechanical Equipment Qualification (MEQ):** Mechanical equipment that is environmentally qualified includes all safety-related active equipment located in harsh environmental zones. Components of the mechanical equipment in the MEQ program contain predominately metallic and some non-metallic materials. Since the effects of temperature, humidity, and radiation are relatively insignificant for metallic components, the environmental qualification is based only on their non-metallic materials. These lifetimes have been incorporated into plant equipment maintenance and replacement practices to ensure that all mechanical equipment important to safety remains qualified and available to perform its safety function regardless of the overall age of the plant. If a component has a qualified life of less than 40 years, then its replacement is scheduled through the maintenance program. Therefore, the MEQ program supports the proposed amendment.

EGC concludes that compliance with the codes, standards, and regulatory requirements to which the mechanical equipment were analyzed, constructed, tested, and inspected provide reasonable assurance that the structural integrity of equipment important to safety will be maintained during the operating life of the plant, including the additional 6.5 months of operating life requested in this amendment. Such compliance further ensures that any significant degradation of mechanical equipment is discovered and the equipment is restored to an acceptable and operable condition.

3.4 Electrical Equipment

Aging analysis has been performed for all safety-related electrical equipment in accordance with 10 CFR 50.49, "Environmental qualification of electric equipment important to safety for nuclear power plants" (Reference 6.8), and has identified qualified lifetimes for this equipment. These lifetimes have been incorporated into plant equipment maintenance and replacement practices to ensure that all electrical equipment important to safety remains qualified and available to perform its safety function regardless of the overall age of the plant. If a component has a qualified life of less than 40 years, then its replacement is scheduled through the maintenance program. Therefore, the EQ program supports the proposed amendment.

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3.5 Quality Assurance and Maintenance Programs

In licensing CPS, the NRC reviewed the QA program and the conduct of operations, including the maintenance procedures. The QA program for plant operations assesses how the plant organization is following procedures and meeting requirements for plant operation. This includes the plant maintenance program that assures the equipment is operable. In NUREG-0853, the NRC concluded that the QA program and maintenance procedures were acceptable.

NRC inspections of the QA and maintenance programs at CPS since the plant was licensed show that these programs remain acceptable. The QA program meets the requirements of 10 CFR Part 50, Appendix B.

Therefore, EGC's implementation and use of the QA and maintenance programs at CPS provide reasonable assurance that, for the proposed license term extension, equipment important to safety will satisfy applicable NRC requirements and the CPS operating license.

3.6 Conclusion

Based on the above discussion, EGC concludes that there are no safety issues that would preclude an additional 6.5 months of operation beyond the current FPOL expiration date. This time period is insignificant from an aging effects perspective, particularly when considered in conjunction with the surveillance, inspection, and maintenance programs implemented to provide early indication of degradation in plant safety-related equipment. Ongoing maintenance and testing provides for continued safe operation of the unit throughout the duration of the facility operating license, and would continue to do so during the additional 6.5 months of operation requested by this proposed amendment.

4.0 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

The following regulations apply to the proposed license amendment:

- 10 CFR 51.22, "Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review" (Reference 6.9).
- 10 CFR 50.90, "Application for amendment of license or construction permit" (Reference 6.1).
- 10 CFR 50.92, "Issuance of amendment" (Reference 6.10)

The following NRC documents are relevant to the proposed amendment:

- SECY-98-296, "Agency Policy Regarding Licensee Recapture of Low-Power Testing or Shutdown Time for Nuclear Power Plants," dated December 21, 1998 (Reference 6.11).
- Staff Requirements Memorandum (SRM) Regarding SECY-98-296, "Staff Requirements - SECY-98-296 - Agency Policy Regarding Licensee Recapture of Low-Power Testing or Shutdown Time for Nuclear Power Plants," dated March 30, 1999 (Reference 6.2).

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- Commission Voting Record for SECY-98-296 dated March 30, 1999.

In SRM-SECY-98-296, "Staff Requirements – SECY-98-296 - Agency Policy Regarding Licensee Recapture of Low-Power Testing or Shutdown Time for Nuclear Power Plants," dated March 30, 1999, the Commission established NRC policy regarding recapture of low-power testing time for nuclear power plants. Specifically, the Commission approved the NRC staff's plan to grant a licensee request to amend the GGNS FPOL to extend the license expiration date to recover time spent in low-power testing before FPOL issuance. The Commission also approved the practice of granting similar license amendment requests to amend the expiration dates of certain licenses to recover time spent in low-power testing before FPOL issuance. The subject license amendment request falls within the scope of that policy.

The proposed amendment would revise the expiration date of the operating license to recapture CPS low-power testing time. Specifically, the CPS FPOL would be amended to reflect an expiration date that is 40 years from the date of issuance of the FPOL (April 17, 2027), as opposed to 40 years from the date of issuance of the low-power testing license (September 29, 2026).

The requested amendment involves no physical changes to the design features or operation of the facility. The proposed amendment will not impact the design functions, or methods of performing or controlling design functions of structures, systems, and components. Nor will it affect the conduct of CPS programs. As a result, the proposed amendment will not change accident analysis assumptions, or change, degrade, or prevent actions described or assumed in accidents evaluated and described in the CPS USAR. Therefore, the proposed amendment does not adversely affect public health and safety or result in an increase in the radiological consequences of any accident described in the CPS USAR.

4.2 Precedent

Consistent with the policy established by the Commission in the March 30, 1999 SRM for SECY-98-296, the NRC staff has approved numerous requests to amend the expiration dates of reactor operating licenses issued under AEA Section 103.c to allow recapture of the time spent by the plants in low-power testing before issuance of their FPOLs:

1. Grand Gulf Nuclear Station, Unit 1 – Issuance of Amendment Re: Extension of Expiration Date of Operating License (TAC NO. M92993), April 26, 1999 (ML021490195)
2. San Onofre Nuclear Generating Station, Units 2 and 3 - Issuance of Amendments Re: Extend License Expiration Date (TAC NOS. MA7348 and MA7349), March 9, 2000 (ML003690021)
3. Dresden – Issuance of Amendment (TAC NO. MA5414), August 24, 2000 (ML003744786)
4. Palisades Plant – Issuance of Amendment Re: Revision to Operating License Expiration Date (TAC NO. MA8753), December 14, 2000 (ML003777442)

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5. Palo Verde Nuclear Generating Station, Units 1, 2, and 3 – Issuance of Amendments Re: Recapture Low-Power Testing Time (TAC NOS. MB6261, MB6262, MB6263), July 15, 2003 (ML031990086)
6. Seabrook Station, Unit No. 1 – Issuance of Amendment Re: Recapture of Zero-Power and Low-Power Testing Time (TAC NO. MC6548), December 28, 2005 (ML052210002)
7. Diablo Canyon Power Plant, Unit Nos. 1 and 2 – Issuance of Amendments Re: Request for Recovery of Low-Power Testing Time – Impact on the Reactor Vessel Integrity Assessment (TAC NOS. MC8206 and MC8207), July 17, 2006 (ML061660220)

4.3 No Significant Hazards Consideration

Overview

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.

The proposed amendment would revise the expiration date of the operating license to recapture low-power testing time. Specifically, the full-power operating license (FPOL) for the Clinton Power Station (CPS) would be amended to reflect an expiration date that is 40 years from the date of issuance of the FPOL, as opposed to 40 years from the date of issuance of the low-power testing license, as permitted by 10 CFR 50.51. If this amendment is approved, the FPOL would be extended by approximately 6.5 months and would expire on April 17, 2027 instead of September 29, 2026.

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 using the criteria in 10 CFR 50.92(c), 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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Criteria

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

Response: No

The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated because it does not involve a change to the design configuration or operation of the facility. The proposed change does not affect the source term, containment isolation or radiological release assumptions used in evaluating the radiological consequences of an accident previously analyzed in the CPS Updated Safety Analysis Report (USAR).

CPS was designed and constructed to ensure at least a 40-year service life. Design features provide for inspection of structures, systems, and components during this service life. Surveillance, inspection, and maintenance practices, which have been implemented in accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code and the CPS Technical Specifications, provide assurance that any degradation in plant safety-related equipment will be identified and corrected to ensure continued safe operation of the unit throughout the duration of the facility operating license.

The low-power testing recapture period requested by this amendment is for 6.5 months. This time period is insignificant from an aging effects perspective, particularly when considered in conjunction with the surveillance, inspection, and maintenance programs described above.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No

The proposed amendment would revise the expiration date of the facility operating license to base it upon the issuance date of the FPOL and not the issuance date of the low-power testing license. The proposed change does not involve physical alteration of plant systems, structures, or components, or changes in parameters governing the manner in which the plant is operated and maintained.

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

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

Response: No

The proposed amendment would revise the expiration date of the facility operating license to base it upon the issuance date of the FPOL and not the issuance date of the low-power testing license. No physical changes are being made to the design features or operation of the facility.

Margin of safety is associated with confidence in the ability of the fission produce barriers (i.e., fuel cladding, reactor coolant system pressure boundary, and containment structure) to limit the radiological dose to the public and control room operators in the event of an accident. The proposed amendment to the facility operating license has no impact on the margin of safety and robustness provided in the design and construction of the facility. In addition, the proposed amendment will not relax any of the criteria used to establish safety limits, nor will the proposed amendment relax safety system settings or limiting conditions for operation as defined in the Technical Specifications.

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

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

4.4 Conclusion

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

5.0 ENVIRONMENTAL CONSIDERATION

EGC has determined that the proposed amendment does not involve: (1) a significant hazards consideration, (2) a significant change in the types or a significant increase in the amounts of any effluent that may be released offsite, or (3) a significant increase in individual or cumulative occupational radiation exposure.

Accordingly, the proposed amendment meets the eligibility criteria for categorical exclusion as set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment needs to be prepared in connection with the proposed amendment.

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6.0 REFERENCES

- 6.1. 10 CFR 50.90, " Application for amendment of license, construction permit, or early site permit"
- 6.2. 10 CFR 50.51, "Continuation of license"
- 6.3. SRM Regarding SECY-98-296, "Staff Requirements - SECY-98-296 - Agency Policy Regarding Licensee Recapture of Low-Power Testing or Shutdown Time for Nuclear Power Plants," dated March 30, 1999 (<https://www.nrc.gov/reading-rm/doc-collections/commission/srm/1998/1998-296srm.pdf>)
- 6.4. Letter from D.V. Pickett (US NRC) to P.J. Telthorst (CPS), re: "Issuance of Amendment 109 to Operating License No. NPF-62 – Clinton Power Station, Unit 1 (TAC No. M94887)," dated October 23, 1996 (9610290069 and ML020990512)
- 6.5. GE-NE-B13-02084-00-01, Rev. 0, "Pressure-Temperature Curves for AmerGen, Clinton Power Station Using the K_{IC} Methodology," dated August 2000 (Att. 5 to ML003745306)
- 6.6. Letter from J.B. Hopkins (US NRC) to M. Reandeau (CPS), "Clinton Power Station, Unit 1 – Issuance of Amendment (TAC No. MA9862)", dated October 31, 2000 (ML003765368)
- 6.7. BWRVIP-86, Revision 1-A, "BWR Vessel and Internals Project – Updated BWR Integrated Surveillance Program (ISP) Implementation Plan," dated October 2012
- 6.8. 10 CFR 50.49, "Environmental qualification of electric equipment important to safety for nuclear power plants"
- 6.9. 10 CFR 51.22, "Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review"
- 6.10. 10 CFR 50.92, "Issuance of amendment"
- 6.11. SECY-98-296, "Agency Policy Regarding Licensee Recapture of Low-Power Testing or Shutdown Time for Nuclear Power Plants," dated December 21, 1998 (ML992870025)

ATTACHMENT 2

**CLINTON POWER STATION
UNIT 1**

Docket No. 50-461

Facility Operating License No. NPF-62

MARK-UP OF PROPOSED CHANGE TO OPERATING LICENSE

- H. Exelon Generation Company shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims. +
- I. This license is effective as of the date of issuance and shall expire at midnight on ~~September 29, 2026~~ April 17, 2027.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

Thomas E. Murley, Director
Office of Nuclear Reactor Regulation

Enclosures:

1. Attachments 1 (Deleted) and 2
2. Appendix A – Technical Specifications (NUREG-1235)
3. Appendix B – Environmental Protection Plan
4. Appendix C – Deleted

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