

November 17, 2006

Mr. Christopher M. Crane
President and Chief Executive Officer
AmerGen Energy Company, LLC
Clinton Power Station
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: CLINTON POWER STATION, UNIT 1 - ISSUANCE OF AMENDMENT
RE: SECONDARY CONTAINMENT SURVEILLANCE REQUIREMENTS
(TAC NO. MD0294)

Dear Mr. Crane:

The Nuclear Regulatory Commission (NRC, the Commission) has issued the enclosed Amendment No. 175 to Facility Operating License No. NPF-62 for the Clinton Power Station, Unit 1. The amendment is in response to your application dated December 1, 2005, regarding Technical Specification 3.6.4.1, "Secondary Containment".

The amendment modifies surveillance requirements (SRs) 3.6.4.1.4 and 3.6.4.1.5 to clarify the intent of these SRs with respect to secondary containment boundary integrity.

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/

Stephen P. Sands, Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-461

Enclosures:

1. Amendment No. 175 to NPF-62
2. Safety Evaluation

cc w/encls: See next page

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Package: ML062420183
Amendment: ML062420174
Tech Spec Pages: ML063250458

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OFFICIAL RECORD COPY

Clinton Power Station, Unit 1

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AMERGEN ENERGY COMPANY, LLC

DOCKET NO. 50-461

CLINTON POWER STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 175
License No. NPF-62

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by AmerGen Energy Company, LLC (the licensee), dated December 1, 2005, 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. 175, are hereby incorporated into this license. AmerGen Energy Company, LLC 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 60 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Daniel S. Collins, Chief
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications and Facility Operating License

Date of Issuance: November 17, 2006

ATTACHMENT TO LICENSE AMENDMENT NO. 175

FACILITY OPERATING LICENSE NO. NPF-62

DOCKET NO. 50-461

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

Remove

License Page 3
3.6-45

Insert

License Page 3
3.6-45

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 175 TO FACILITY OPERATING LICENSE NO. NPF-62

AMERGEN ENERGY COMPANY, LLC

CLINTON POWER STATION, UNIT 1

DOCKET NO. 50-461

1.0 INTRODUCTION

By letter to the Nuclear Regulatory Commission (NRC, the Commission) dated December 1, 2005 (Agencywide Documents Access and Management System Accession Number ML053360412), AmerGen Energy Company, LLC (the licensee) requested changes to the technical specification (TS) 3.6.4.1, "Secondary Containment". Specifically, the changes would modify surveillance requirements (SRs) 3.6.4.1.4 and 3.6.4.1.5 for Clinton Power Station, Unit 1 (Clinton). The proposed changes would clarify the intent of these SRs with respect to secondary containment boundary integrity.

These changes are being submitted in accordance with TS Task Force (TSTF) traveler, TSTF 322-A, "Secondary Containment and Shield Building Boundary Integrity SRs", Revision 2. The TSTF was approved by the NRC on February 16, 2000.

2.0 REGULATORY EVALUATION

The licensee provided the following analysis in Section 5.2, "Applicable Regulatory Requirements/Criteria," in its December 1, 2005, submittal:

[Title 10 of the Code of Federal Regulations (10 CFR)] 10 CFR 50.36, "Technical specifications," provides the regulatory requirements for the content required by a licensee's TS. USAR [Updated Safety Analysis Report] Sections 6.5.1, "Engineered Safety Feature (ESF) Filter Systems," and 6.2.3 "Secondary Containment Design Function," describe the design basis of the SGT [standby gas treatment] system and the secondary containment as mitigating a design basis accident that challenges the integrity of containment. This basis is consistent with Criterion 3 of 10 CFR 50.36(c)(2)(ii) for mitigating accidents or transients that assume a failure of or present a challenge to a fission product barrier. 10 CFR 50.36(c)(3) requires that the TS include SRs. The SRs assure the quality of systems and components is maintained, facility operation will be within safety limits, and limiting conditions for operation (LCOs) will be met.

The licensee stated that the proposed changes to SR 3.6.4.1.4 and SR 3.6.4.1.5 are consistent with TSTF-322-A. The intent of this TSTF is to clarify the SRs to ensure consistent application and prevent misinterpretation. TSTF-322-A was approved generally for licensee use by the NRC on February 16, 2000.

The NRC staff finds that the licensee has identified the applicable regulatory requirements. The following regulatory requirements are used by the NRC staff for its acceptance review.

The regulations in 10 CFR 50.36 require a licensee's TSs to establish LCOs and SRs for equipment that are required for safe operation of the facility. Specifically, 10 CFR 50.36(c)(3) requires the TSs to include SRs relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the LCOs will be met. In its submittal, the licensee stated that the TS SRs will continue to provide this assurance with the proposed adoption of the NRC-approved TSTF changes.

3.0 TECHNICAL EVALUATION

The licensee's December 1, 2005, submittal proposed to modify SRs 3.6.4.1.4 and 3.6.4.1.5 for the secondary containment boundary integrity by the adoption of the NRC-approved TSTF-322-A.

TSTF-322-A was approved on February 16, 2000, and subsequently incorporated into Revision 2 of the standard technical specifications (STs). For the BWR [boiling-water reactor]/6 STs, the secondary containment boundary integrity SRs were modified to clarify their intent and prevent a possible misinterpretation of the interplay between SGT operability and secondary containment operability surveillances. The secondary containment boundary integrity SRs ensure that the secondary containment is operable and that the leak tightness of the boundary is within the assumptions of the accident analyses. However, before TSTF-322-A was approved, the SRs were written in a manner that implied that if a SGT subsystem was inoperable, then secondary containment would always fail its SR. To ensure this misinterpretation does not occur, TSTF-322-A rephrased several SRs, including SRs 3.6.4.1.4 and 3.6.4.1.5.

The licensee stated, "Presently, TS SRs 3.6.4.1.4 and 3.6.4.1.5 may be interpreted to require both SGT subsystems be capable of meeting the SR performance measures in order for SRs 3.6.4.1.4 and 3.6.4.1.5 to be satisfied. Under this interpretation, the inoperability of one SGT subsystem would render the secondary containment inoperable even though the redundant SGT subsystem is operable and able to meet the SR performance measures. The proposed TS changes clarify the intent of SR 3.6.4.1.4 and SR 3.6.4.1.5 to ensure consistent and accurate interpretation."

The current SR 3.6.4.1.4 states, "Verify each standby gas treatment (SGT) subsystem will draw down the secondary containment to ≥ 0.25 inch of vacuum water gauge within the time required."

Revised SR 3.6.4.1.4 states, "Verify the secondary containment can be drawn down to ≥ 0.25 inch of vacuum water gauge within the time required using one standby gas treatment (SGT) subsystem."

The current SR 3.6.4.1.5 states, "Verify each SGT subsystem can maintain ≥ 0.25 inch of vacuum water gauge in the secondary containment for 1 hour at a flow rate ≤ 4400 cfm."

Revised SR 3.6.4.1.5 states, "Verify the secondary containment can be maintained ≥ 0.25 inch of vacuum water gauge for 1 hour using one SGT subsystem at a flow rate ≤ 4400 cfm."

In addition, the frequency of the SRs was modified to add "for each SGT subsystem" after the present statement of "24 months on a STAGGERED TEST BASIS."

The NRC staff has reviewed the licensee's regulatory and technical analyses. Based on its review, the NRC staff finds that the licensee's application is consistent with TSTF-322-A. The changes are only clarifications, and they do not alter the original intent of the TS requirements. In addition, the changes do not adversely impact the health and safety of the public. Accordingly, the NRC staff finds that the proposed changes to the SRs are acceptable.

4.0 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.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes requirements with respect to installation or use of a facility's components located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. 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 no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (71 FR 15481; March 28, 2006). Accordingly, the amendment meet 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.

6.0 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) 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 Contributor: K. Jabbour

Date: November 17, 2006

- (4) AmerGen Energy Company, LLC, 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) AmerGen Energy Company, LLC, 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; and
- (6) AmerGen Energy Company, LLC, 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.

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

AmerGen Energy Company, LLC 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. 175, are hereby incorporated into this license. AmerGen Energy Company, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.