

July 17, 2001

Mr. Ronald DeGregorio  
Vice President Oyster Creek  
AmerGen Energy Company, LLC  
P.O. Box 388  
Forked River, NJ 08731

SUBJECT: OYSTER CREEK NUCLEAR GENERATING STATION - ISSUANCE OF  
AMENDMENT RE: MAIN STEAM ISOLATION VALVES CLOSURE TIME  
TESTING FREQUENCY (TAC NO. MB1289)

Dear Mr. DeGregorio:

The Commission has issued the enclosed Amendment No. 221 to Facility Operating License No. DPR-16 for the Oyster Creek Nuclear Generating Station, in response to your application dated March 1, 2001, as supplemented on June 27, 2001.

The amendment revises the Technical Specification (TS) on page 4.5-3 to change the frequency of closure time testing of the main steam isolation valves (MSIVs). Changing the MSIV full-stroke quarterly test to every cold shutdown (where the time between cold shutdown and the last test is greater than 92 days) allows Oyster Creek to avoid a significant reduction in power necessary to perform the test and the potential of causing a transient while performing the test at power.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

/RA/

Helen N. Pastis, Senior Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-219

Enclosures: 1. Amendment No. 221 to DPR-16  
2. Safety Evaluation

cc w/encls: See next page

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PD1-1 R/F	SLittle	WBeckner	GHatchett
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Accession No. ML011510275

\*SE input dated May 25, 2001, was provided and no major changes were made. \*\*See previous concurrence

OFFICE	PM:PD1-1	LA:PD1-1	OGC**	ASC:PDI-1	SPLB *
NAME	HPastis	SLittle	ACoggins	RCorreia	GHubbard
DATE	7/16/01	7/17/01	6/11/01	7/17/01	5/25/01

OFFICIAL RECORD COPY

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AMERGEN ENERGY COMPANY, LLC

DOCKET NO. 50-219

OYSTER CREEK NUCLEAR GENERATING STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 221  
License No. DPR-16

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by AmerGen Energy Company, LLC (the licensee), dated March 1, 2001, as supplemented on June 27, 2001, 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. DPR-16 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 221, are hereby incorporated in the license. AmerGen Energy Company, LLC, shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Richard P. Correia, Acting Chief, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: July 17, 2001

ATTACHMENT TO LICENSE AMENDMENT NO. 221

FACILITY OPERATING LICENSE NO. DPR-16

DOCKET NO. 50-219

Replace the following pages of the Appendix A, Technical Specifications, with the attached revised pages as indicated. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

4.5-3

4.5-11

Insert

4.5-3

4.5-11

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 221

TO FACILITY OPERATING LICENSE NO. DPR-16

AMERGEN ENERGY COMPANY, LCC

OYSTER CREEK NUCLEAR GENERATING STATION

DOCKET NO. 50-219

1.0 INTRODUCTION

By letter dated March 1, 2001, as supplemented on June 27, 2001, the AmerGen Energy Company, LLC, (AmerGen or the licensee) submitted a request for changes to the Oyster Creek Nuclear Generating Station (Oyster Creek) Technical Specifications (TSs). The requested changes would revise the TS on page 4.5-3 to change the frequency of closure time testing of the main steam isolation valves (MSIVs). These tests would be conducted during each cold shutdown unless this test has been performed within the past 92 days. The June 27, 2001, letter provided "camera-ready" TS pages and did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

By letter dated March 1, 2001, AmerGen requested certain revisions to the TS for Oyster Creek to remove the full-stroke testing of the MSIVs during power operation and modify the TS wording for clarity.

The MSIVs are containment isolation valves designed to minimize coolant loss from the vessel and thus offsite doses in the event of a main steamline break accident. The valves are designed to close within 3 to 10 seconds. The minimum closing time is chosen to minimize pressure buildup in the reactor vessel due to quick cutoff of steam flow from the vessel. A 3-second valve closure limits vessel pressure to 1138 psia at the core midplane. The 10-second maximum closing time is based upon the steamline break accident, the resulting loss-of-coolant, and the resulting offsite dose rate.

Technical Specification Section 4.5.F.3 requires quarterly full-stroke closure testing of the MSIVs during periods of sustained power operation. The closure time of these valves are also verified to be within 3 and 10 seconds, which meets the requirements of TS 4.5.F.1. The provision for full-stroke testing and closure verification of the MSIVs within the TSs ensures the requirements of 10 CFR Part 50, Appendix A, General Design Criteria 54, are met. NUREG-1482, "Guidelines for Inservice Testing at Nuclear Power Plants," dated April 1995, provides

guidance on testing of the MSIVs. AmerGen has proposed revising the TS to conduct full-stroke MSIV testing during cold shutdown.

In a license amendment, dated October 19, 2000, we approved a similar request by Millstone Nuclear Power Station, Unit 3, to modify its surveillance requirements for testing MSIVs during sustained power operations (ADAMS Accession ML003761278).

This evaluation addresses the acceptability of AmerGen's proposal to amend its TSs to relax the frequency of its full-stroke MSIV surveillance testing. Specifically, this evaluation addresses the proposed amendment to modify the full-stroke testing from quarterly to cold shutdown with partial-stroke testing at sustained power operations.

The licensee proposes to revise TS 4.5.F.3 to change the frequency of the quarterly full-stroke MSIV closure test. Relaxing the MSIV full-stroke quarterly test to every cold shutdown (where the time between cold shutdowns is greater than 92 days) allows the licensee to avoid the significant reduction in power necessary to perform the test and the potential of causing a transient while performing the test at power. In addition, the licensee will conduct partial-stroke testing at power. The licensee stated:

The change to the frequency of full-stroke testing the MSIVs conforms to ASME [American Society of Mechanical Engineers], Section XI, Paragraph IWV-3412(a) requirements and will be revised from quarterly to cold shutdowns provided that the last test occurred more than 92 days before. The 92-day provision also ensures that valve full-stroke testing does not occur too frequently.

Part-stroke testing will be performed on a quarterly basis for reactor protection system instrumentation testing. This part-stroke testing will provide the appropriate indication of valve disk movement to assure valve operability during exercising as identified in ASME Section XI, Paragraph IWV-3412(b).

Verifying that the isolation time of each MSIV is within the specified limits is required to demonstrate operability. The isolation time test ensures that the MSIV will isolate in accordance with the Oyster Creek TS 4.5.F.1 (between 3 and 10 seconds) and remain within the design-basis accident (DBA) analyses. This ensures that the calculated radiological consequences of the limiting DBA (main steamline break) event remains within 10 CFR Part 100 limits.

NUREG-1482 noted that a number of plants performed a partial-stroke exercise quarterly during power operations. The revised standard TSs bases for MSIV surveillance requirements state that MSIVs should not be tested at power to the exclusion of partial-stroke testing due to potential increase risk of MSIV closure.

However, the licensee's MSIV surveillance requirements also conform to the Inservice Testing (IST) requirements of the 1986 Edition of ASME Code, Section XI, which is the Oyster Creek current code of record for IST. The modification of TS 4.5.F.3 for MSIV full-stroke testing from quarterly to every cold shutdown with partial-stroke testing during power operations is consistent with the 1986 Edition of ASME Code, Section XI. The Code allows the licensee to relax the frequency of full-stroke testing to every cold shutdown while ensuring MSIV operability is maintained. The standard TSs bases for MSIVs agrees with relaxing the frequency of testing



and states that "the frequency is acceptable from a reliability standpoint." In addition, operating experience has shown that these components usually pass the surveillance when performed at the cold shutdown frequency.

The change only modifies the frequency of the full-stroke closure test. The valves will still meet the plant's DBA analysis as other interfacing systems such as the reactor protection system, containment isolation system, and electrical and pneumatic power to the MSIVs will not be affected.

The NRC staff has reviewed the proposed amendment to the Oyster Creek TSs regarding the reduced full-stroke surveillance requirements for the MSIVs from quarterly to cold shutdown with quarterly partial-stroke valve testing at power. Based on our review of the information in AmerGen's submittal, and the fact that the proposed changes are consistent with improvements in the ASME Section XI valve operability testing requirements and the improved Standard Technical Specifications, we find the relaxation of the MSIV surveillance requirement acceptable.

### 3.0 STATE CONSULTATION

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

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component 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 (66 FR 19999). 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.

### 5.0 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: G. Hatchett

Date: July 17, 2001