



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

April 8, 1996

EA 96-014

Mr. Leon R. Eliason
Chief Nuclear Officer and President
Nuclear Business Unit
Public Service Electric and Gas Company
Post Office Box 236
Hancocks Bridge, New Jersey 08038

SUBJECT: NOTICE OF VIOLATION
(NRC Inspection Report No. 50-354/95-19)

Dear Mr. Eliason:

This refers to the inspection conducted between November 9, 1995 and December 21, 1995, at the Hope Creek Nuclear Generating Station (HCGS) facility. The purpose of the inspection was to conduct a routine resident safety inspection; assess outage controls; and perform three separate specialist inspector reviews of the inservice inspection program, the outage radiation protection program, and follow-up on the issues of pressure locking and thermal binding of motor operated gate valves. At the conclusion of the inspection, the findings were discussed with Mr. Reddemann of your staff.

The inspector identified three apparent violations of NRC requirements, which were described in the NRC inspection report transmitted with our letter, dated January 30, 1996. Our letter also scheduled a predecisional enforcement conference to be held on March 14, 1996, to discuss the apparent violations associated with inadequate or ineffective corrective actions regarding the operation of safety related equipment, specifically, the safety auxiliaries cooling system and the shutdown cooling system. The NRC also expressed concern regarding previously identified equipment degradation in which corrective actions were not implemented to prevent recurrence, and that these examples of prior ineffective corrective actions may indicate that other previously identified significant problems remain uncorrected.

Mr. Reddemann, Plant Manager, and Mr. Bert Simpson, Vice President, Engineering, responded to our January 30, 1996, letter in a telephone conversation with Mr. Larry Nicholson on February 15, 1996, stating that a predecisional enforcement conference was not warranted. In addition, they stated: (1) that they will complete an evaluation, by February 21, 1996, to determine if any other issues were addressed by engineering for which recommendations were produced, but were not implemented; and (2) they will complete an engineering evaluation of the cyclical fatigue effects of the water hammer on the piping, and that (3) an updated Licensee Event Report (LER) would be sent to NRC by March 8, 1996.

Based on the subject inspection report findings, Licensee Event Report (LER) 95-038-01 - Failure to comply with required action statement upon removal of failed snubber on RHR Shutdown Cooling Line, LER 95-016-01 - Shutdown Cooling Bypass Event on System B Loop Flow Bypass, LER 95-037-00 - Both Loops of Safety Auxiliary Cooling System (SACS) Inoperable, provided to NRC inspectors during the inspection, in a revised LER 95-038-01, submitted to the NRC in a letter of January 29, 1996, and in a revised LER 95-038-02, submitted to NRC in a letter of March 14, 1996, the NRC determined that violations of NRC requirements occurred. The violations cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding each violation are described in detail in the subject inspection report.

The first violation involved the failure to establish measures to assure that conditions adverse to quality are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition. Specifically, over a period of three cycles, you experienced a series of snubber failures as a result of failing to take appropriate corrective action to ameliorate the high forces on the residual heat removal (RHR) piping system that damaged the piping support system. This occurred during the 1992 and 1994 refueling outages. Although corrective actions had been recommended, the corrective actions were not implemented. As a result, overload conditions and additional snubber failures were discovered during the 1995 refueling outage.

A system designed to prevent or mitigate a serious safety event being degraded to the extent that a detailed evaluation would be required to determine its operability is categorized at a Severity Level III. Therefore, this violation has been categorized in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600; at Severity Level III.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has been the subject of escalated enforcement actions within the last two years, the NRC considered whether credit was warranted for *Identification and Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit for identification and corrective actions taken is warranted because you identified the violations and your corrective actions were both prompt and comprehensive. These corrective actions, that were noted in the revised LER 95-038-02, included the following: (1) implementing an enhanced Corrective Action Program (CAP) to communicate management expectations on timely problem identification and resolution with clear definition of roles and responsibilities, (2) fostering a questioning attitude, with training of engineers, including continuation of courses in human error reduction and root cause analysis augmented with a section on water hammer analysis, (3) identifying, evaluating, and tracking under the new CAP, including procedural changes expected to preclude recurrence of void-related water hammer events, and (4) taking actions to evaluate the potential for similar long-standing unresolved performance or reliability issues on safety significant systems at Hope Creek.

LER 95-038-02 also provided a (1) description of the occurrence, and its relationship to similar events, (2) actions taken to investigate and evaluate recent snubber failures, (3) analysis of technical specification noncompliance, (4) analysis of repeat failures, and (5) root cause and safety significance of snubber failures.

Therefore, to encourage prompt identification and comprehensive correction of violations in the future, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty in this case. However, similar violations in the future could result in further escalated enforcement action.

The second violation involved your frequent operation of the safety auxiliary cooling system during the past nine years at temperatures less than the prescribed minimum reflected in the FSAR. The safety auxiliary cooling system was originally designed for a low heat exchanger outlet temperature of 65 degrees F. This was recognized and the effect of this operation was evaluated during startup in 1986 and again in 1991 and found to be acceptable by HCGS engineering. However, you failed to make the appropriate changes to the final safety analysis report. This violation has been classified at Severity Level IV.

You are required to respond to this letter and should follow the instructions specified in the Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,



Thomas T. Martin
Regional Administrator

Docket No. 50-354
License No. NPF-57

Enclosure: Notice of Violation

Public Service Electric and Gas
Company

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cc w/encl:

L. Storz, Senior Vice President - Nuclear Operations
E. Simpson, Senior Vice President - Nuclear Engineering
C. Schaefer, External Operations - Nuclear, Delmarva Power & Light Co.
P. MacFarland Goetz, Manager, Joint Generation Atlantic Electric
E. Salowitz, Director - Nuclear Business Support
M. Reddemann, General Manager - Hope Creek Operations
J. Benjamin, Director - Quality Assurance & Nuclear Safety Review
D. Powell, Manager - Licensing and Regulation
R. Kankus, Joint Owner Affairs
A. Tapert, Program Administrator
R. Fryling, Jr., Esquire
M. Wetterhahn, Esquire
Consumer Advocate, Office of Consumer Advocate
W. Conklin, Public Safety Consultant, Lower Alloways Creek Township
State of New Jersey
State of Delaware

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