

May 23, 2000

Mr. Harold W. Keiser
Chief Nuclear Officer & President -
Nuclear Business Unit
Public Service Electric & Gas
Company
Post Office Box 236
Hancocks Bridge, NJ 08038

SUBJECT: CLOSEOUT OF RESPONSES TO GENERIC LETTER 96-06, HOPE CREEK
GENERATING STATION (TAC NO. M96821)

Dear Mr. Keiser:

The U.S. Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 96-06, entitled, "Assurance of Equipment Operability and Containment Integrity During Design-Basis Accident Conditions," on September 30, 1996. Supplement 1 to GL 96-06 was issued on November 13, 1997. The GL requested licensees to evaluate cooling water systems that serve containment air coolers to assure that they are not vulnerable to water hammer and two-phase flow conditions. The GL also requested licensees to evaluate if isolated water-filled piping sections in containment were vulnerable to thermally induced overpressurization.

Public Service Electric and Gas Company (PSE&G) provided a response to the GL in a letter dated January 27, 1997. On April 30, 1998, the NRC staff issued a request for additional information (RAI). PSE&G provided a response to the RAI in a letter dated July 7, 1998. The results of the NRC staff's review of PSE&G's responses to GL-96-06 are as follows:

Water Hammer and Two-Phase Flow

Based on the information provided in PSE&G's responses, it is the NRC staff's understanding that:

- (a) The drywell coolers are not required for accident mitigation; and
- (b) The Containment Control Emergency Operating Procedure has been revised to eliminate use of the drywell coolers during the event scenarios of interest, thereby eliminating the possibility of water hammer and two-phase flow issues during these event scenarios.

The staff is satisfied with PSE&G's responses and considers that the GL 96-06 issues concerning water hammer and two-phase flow are closed for Hope Creek.

Thermally Induced Overpressurization

In the submittal dated January 27, 1997, PSE&G identified five water-filled lines penetrating the containment that are potentially vulnerable to a water solid volume that may be subjected to an increase in pressure due to heating of the trapped fluid. PSE&G has performed an operability assessment for these potentially degraded penetrations using the criteria in Appendix F of Section III of the American Society of Mechanical Engineers Code and has determined that they will remain operable and capable of fulfilling their safety function. As a permanent corrective measure, PSE&G stated that pressure relief devices will be installed on these five penetrations (P10, P25, P26, P29, and P30) by the end of 7th refueling outage. The NRC staff confirmed that the associated design change has been incorporated by review of the Updated Final Safety Analysis Report (reference Table 6.2-16, pages 2 and 4; and Figure 6.2-27, sheets 8, 16, and 35). The staff finds that PSE&G's corrective actions provide an acceptable resolution and considers the GL 96-06 issue of thermally induced overpressurization to be closed for Hope Creek.

Conclusion

Based on the above, the staff concludes that PSE&G has adequately addressed the GL 96-06 issues. Therefore, this closes out the staff's efforts on GL 96-06 for Hope Creek and TAC No. M96821.

If you have any questions regarding this matter, please contact me at (301) 415-1420.

Sincerely,

/RA/

Richard B. Ennis, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-354

cc: See next page

Thermally Induced Overpressurization

In the submittal dated January 27, 1997, PSE&G identified five water-filled lines penetrating the containment that are potentially vulnerable to a water solid volume that may be subjected to an increase in pressure due to heating of the trapped fluid. PSE&G has performed an operability assessment for these potentially degraded penetrations using the criteria in Appendix F of Section III of the American Society of Mechanical Engineers Code and has determined that they will remain operable and capable of fulfilling their safety function. As a permanent corrective measure, PSE&G stated that pressure relief devices will be installed on these five penetrations (P10, P25, P26, P29, and P30) by the end of 7th refueling outage. The NRC staff confirmed that the associated design change has been incorporated by review of the Updated Final Safety Analysis Report (reference Table 6.2-16, pages 2 and 4; and Figure 6.2-27, sheets 8, 16, and 35). The staff finds that PSE&G's corrective actions provide an acceptable resolution and considers the GL 96-06 issue of thermally induced overpressurization to be closed for Hope Creek.

Conclusion

Based on the above, the staff concludes that PSE&G has adequately addressed the GL 96-06 issues. Therefore, this closes out the staff's efforts on GL 96-06 for Hope Creek and TAC No. M96821.

If you have any questions regarding this matter, please contact me at (301) 415-1420.

Sincerely,
/RA/
 Richard B. Ennis, Project Manager, Section 2
 Project Directorate I
 Division of Licensing Project Management
 Office of Nuclear Reactor Regulation

Docket No. 50-354

cc: See next page

DISTRIBUTION

BWetzel	JClifford	KManoly	OGC
PUBLIC	TClark	JTatum	ACRS
PDI-2 Reading	REnnis	GHubbard	
EAdensam (EGA1)	BJain	GMeyer, RGN-I	

OFFICE	PDI-2/PM	PDI-2/LA	EMEB/SC	SPLB/SC	PDI-2/SC
NAME	REnnis	TClark	KManoly	GHubbard	JClifford
DATE	5/8/00	5/5/00	5/11/00	5/12/00	5/15/00

OFFICIAL RECORD COPY
 DOCUMENT NAME: C:\ltr96821.wpd

Hope Creek Generating Station

cc:

Jeffrie J. Keenan, Esquire
Nuclear Business Unit - N21
P.O. Box 236
Hancocks Bridge, NJ 08038

Hope Creek Resident Inspector
U.S. Nuclear Regulatory Commission
Drawer 0509
Hancocks Bridge, NJ 08038

Mr. Louis Storz
Sr. Vice President - Nuclear Operations
Nuclear Department
P.O. Box 236
Hancocks Bridge, NJ 08038

General Manager - Hope Creek Operations
Hope Creek Generating Station
P.O. Box 236
Hancocks Bridge, NJ 08038

Director - Licensing Regulation & Fuels
Nuclear Business Unit - N21
P.O. Box 236
Hancocks Bridge, NJ 08038

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Dr. Jill Lipoti, Asst. Director
Radiation Protection Programs
NJ Department of Environmental
Protection and Energy
CN 415
Trenton, NJ 08625-0415

Manager - Joint Generation
Atlantic Energy
6801 Black Horse Pike
Egg Harbor Twp., NJ 08234-4130

Richard Hartung
Electric Service Evaluation
Board of Regulatory Commissioners
2 Gateway Center, Tenth Floor
Newark, NJ 07102

Lower Alloways Creek Township
c/o Mary O. Henderson, Clerk
Municipal Building, P.O. Box 157
Hancocks Bridge, NJ 08038

Mr. Elbert Simpson
Senior Vice President-
Nuclear Engineering
Nuclear Department
P.O. Box 236
Hancocks Bridge, NJ 08038