



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 23, 1996

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

SUBJECT: NRC STAFF'S EVALUATION OF THE INDIVIDUAL PLANT EXAMINATION (IPE)  
SUBMITTAL (NLR-N94070) HOPE CREEK GENERATING STATION (TAC NO.  
M74421)

Dear Mr. Eliason:

By letter dated May 31, 1994, and supplemented November 6, 1995, you responded to Generic Letter (GL) 88-20, "Individual Plant Examinations for Severe Accident Vulnerabilities," and Supplements 1, 2 and 3, thereto. With the assistance of our contractors, we have completed our review of the IPE submittal for internal events and internal flooding. The evaluation package consists of:

- The Staff Evaluation (SE) (Enclosure 1)
- The contractor's Technical Evaluation Reports (TERs) for the front-end, back-end, and human reliability analysis reviews (Enclosures 2, 3, and 4)

The Hope Creek IPE submittal did not identify any severe accident vulnerabilities associated with either core damage or poor containment performance. We noted that as a result of the IPE, you implemented a number of procedural enhancements and hardware modifications which were reflected in your core damage frequency (CDF) estimate of 4.6 E-5 per reactor year from internally initiated events, including internal flooding. You subsequently advised us that you had upgraded the PRA model, which reduced the estimated CDF to 1.29 E-5 per reactor year. While we commend your reassessment of the capability of the plant to cope with postulated severe accidents, our evaluation was based on your May 31, 1994 submittal.

During the performance of the IPE, transients involving heating, ventilation and air conditioning (HVAC) failures were determined to contribute inordinately to the CDF. It is not clear from the submittal if the Hope Creek analysis considered such items as availability of portable fans, ability to power fans during any and all applicable sequences, indication of switchgear room heatup and available versus needed time, operator training (since new procedure, unfamiliarity exists). It is recommended that the analysis be re-examined to verify these calculated CDFs. We do not consider this finding to have an effect on the overall validity of the IPE.

250053

9604250348 960423  
PDR ADOCK 05000354  
P PDR

*JFOI*  
11

Based on our review of the Hope Creek IPE submittal and associated documentation, we conclude that you have fully met the intent of Generic Letter 88-20.

Generic Letter 88-20 proposed that licensees use their IPE submittal to address, among other safety issues, Unresolved Safety Issue (USI) A-45, "Shutdown Decay Heat Removal Requirements." As discussed in the SE and the Front-End TER, this issue is adequately resolved for the Hope Creek Generating Station. You had also proposed to resolve Generic Safety Issue (GSI) 105, "Intersystem LOCA Outside Containment." You estimated the CDF from interfacing systems loss of coolant accidents was only 1.7E-9 per reactor year. This generic issue is also adequately resolved for the Hope Creek Generating Station.

Sincerely,

/s/

David H. Jaffe, Senior Project Manager  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-354

- Enclosures:
1. Staff Evaluation
  2. TER (Front-End)
  3. TER (Back-End)
  4. TER (Human Reliability Analysis)

cc w/encl 1: See next page

DISTRIBUTION w/encls. 1, 2, 3, & 4  
 Docket File  
 PUBLIC  
 D. Jaffe  
 R. Summers, SRI  
 ACRS

DISTRIBUTION w/ encl. 1 only  
 S. Varga                    E. Butcher  
 J. Zwolinski                N. Su, RES  
 M. O'Brien                M. Drouin, RES  
 J. Stolz                     R. Conte, RI  
 PDI-2 Reading              E. Kelly, RI  
 R. Clark                     OGC  
 R. Hernan

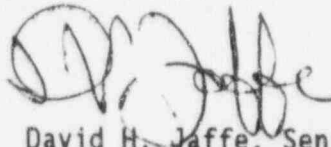
\*See previous concurrence

OFFICE	PDI-2/LA <i>[Signature]</i>	DRPE/PM*	PDI-2/PM <i>[Signature]</i>	PDI-2/D <i>[Signature]</i>	
NAME	MO'Brien <i>[Signature]</i>	RClark	DJaffe <i>[Signature]</i>	JStolz <i>[Signature]</i>	
DATE	4/22/96	04/18/96	4/17/96	4/23/96	

Based on our review of the Hope Creek IPE submittal and associated documentation, we conclude that you have fully met the intent of Generic Letter 88-20.

Generic Letter 88-20 proposed that licensees use their IPE submittal to address, among other safety issues, Unresolved Safety Issue (USI) A-45, "Shutdown Decay Heat Removal Requirements." As discussed in the SE and the Front-End TER, this issue is adequately resolved for the Hope Creek Generating Station. You had also proposed to resolve Generic Safety Issue (GSI) 105, "Intersystem LOCA Outside Containment." You estimated the CDF from interfacing systems loss of coolant accidents was only  $1.7E-9$  per reactor year. This generic issue is also adequately resolved for the Hope Creek Generating Station.

Sincerely,



David H. Jaffe, Senior Project Manager  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-354

Enclosures: 1. Staff Evaluation  
2. TER (Front-End)  
3. TER (Back-End)  
4. TER (Human Reliability Analysis)

cc w/encl 1: See next page

Mr. Leon R. Eliason  
Public Service Electric & Gas  
Company

Hope Creek Generating Station

cc:

M. J. Wetterhahn, Esquire  
Winston & Strawn  
1400 L Street, N.W.  
Washington, DC 20005-3502

Ms. P. J. Curham  
MGR. Joint Generation Department  
Atlantic Electric Company  
Post Office Box 1500  
6801 Black Horse Pike  
Pleasantville, New Jersey 08232

R. Fryling, Jr., Esquire  
Law Department - Tower 5E  
80 Park Place  
Newark, New Jersey 07101

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

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

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

Mr. L. F. Storz  
Sr. V.P. - Nuclear Operations  
Nuclear Department  
P.O. Box 236  
Hancocks Bridge, New Jersey 08038

Mr. E. C. Simpson  
Sr. V.P. - Nuclear Engineering  
Nuclear Department  
P.O. Box 236  
Hancocks Bridge, New Jersey 08038

Mr. M. E. Reddemann  
General Manager - Hope Creek Operations  
Hope Creek Generating Station  
P.O. Box 236  
Hancocks Bridge, New Jersey 08038

Mr. D. R. Powell, Manager  
Licensing and Regulation  
Nuclear Business Unit  
P.O. Box 236  
Hancocks Bridge, New Jersey 08038

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

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