

LR-N03-0085
LCR H02-001
FEB 25 2003



U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Gentlemen:

**HOPE CREEK GENERATING STATION – REQUEST FOR ADDITIONAL
INFORMATION REGARDING RELAXATION OF CONTAINMENT OPERABILITY
REQUIREMENTS (TAC NO. MB5548)
FACILITY OPERATING LICENSE NPF-57
DOCKET NO. 50-354**

Reference: Letter LR-N02-0002, *Request for Change to Technical Specifications
Relaxation of Secondary Containment Operability Requirements and
Elimination of FRVS Recirculation Charcoal Filters*, dated June 28, 2002

On June 28, 2002, PSEG Nuclear LLC (PSEG) submitted the referenced request for a revision to the Technical Specifications (TS) to relax secondary containment operability requirements and eliminate the FRVS charcoal filters for the Hope Creek Generating Station.

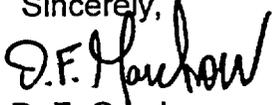
In a letter dated February 14, 2003, PSEG received a request from the NRC staff for additional information regarding the subject request. This request for additional information was discussed with Mr. George Wunder, NRC Hope Creek Project Manager and other members of the NRC staff on February 14, 2003. Attachment 1 contains PSEG's responses.

Commitments made in this response are outlined in Attachment 2.

If you have any questions or require additional information, please contact Mr. Michael Mosier at (856) 339-5434.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 2/25/03

Sincerely,

D. F. Garchow
Vice President-Projects and
Licensing

Attachments (2)

ADDL
#017

C: Mr. H. Miller, Administrator – Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. George Wunder, Project Manager – Hope Creek
U. S. Nuclear Regulatory Commission
Mail Stop 08B3
Washington, DC 20555-0001

USNRC Senior Resident Inspector – Hope Creek (X24)

Mr. K. Tosch, Manager IV
Bureau of Nuclear Engineering
PO Box 415
Trenton, New Jersey 08625

**HOPE CREEK GENERATING STATION – REQUEST FOR ADDITIONAL
INFORMATION REGARDING RELAXATION OF CONTAINMENT OPERABILITY
REQUIREMENTS (TAC NO. MB5548)**

NRC Question 1:

In your January 18, 2003, submittal you provided the Control Room, Exclusion Area Boundary, and Low Population Zone post-LOCA calculated doses via the containment leakage path. Please explain the effect of the elimination of credit for the Filtration, Recirculation, and Ventilation System recirculation charcoal filters on these calculated doses.

Response:

Tables 1 and 2 below provide the information requested for the containment leakage pathway. However, based upon further discussion with the NRC Technical staff, additional information regarding the other pathways was required and is also included in Tables 1 and 2.

**Table 1
Proposed License Amendment Without FRVS
Recirculation Charcoal Filters or FRVS Heaters**

Post-LOCA Activity Release Path	Post-LOCA Dose (Rem TEDE)		
	Receptor Location		
	Control Room	EAB	LPZ
Containment Leakage	1.01 (See Note)	0.44	0.17
ESF Leakage	1.17	0.18	0.09
MSIV Leakage	1.96	2.45	0.43
Total	4.14	3.07	0.69

Note: In our submittals of June 28, 2002 and January 18, 2003, the control room dose due to containment leakage was stated to be 1.00, however it should be 1.01. This error was due to incorrect roundoff.

Table 2
Proposed License Amendment Crediting FRVS
Recirculation Charcoal Filters and FRVS Heaters

Post-LOCA Activity Release Path	Post-LOCA Dose (Rem TEDE)		
	Receptor Location		
	Control Room	EAB	LPZ
Containment Leakage	0.44	0.38	0.12
ESF Leakage	0.03	0.00	0.00
MSIV Leakage	1.96	2.45	0.43
Total	2.43	2.83	0.55
COMPARISON			
Total Change	1.71	0.24	0.14
Change as Percentage Of Total Submittal Value	41%	8%	20%
Allowable TEDE Limit	5.00	25.00	25.00

NRC Question 2:

In your application you state that the reduction in ESF leakage from 10 gpm to 1 gpm is based on operating experience. Please explain why you are confident that this number is, and will remain, accurate.

Response:

The HCGS Tech Specs, Section 6, Administrative Controls, Subsection 6.8, Procedures and Programs, Subsection 6.8.4.a, states: "A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels" shall be established, implemented and maintained. The UFSAR Section 1.10, TMI Related Requirements for New Operating Licenses and Section 5.2.5, Detection of Leakage through the Reactor Coolant Pressure Boundary and from the Emergency Core Cooling System, relate to such a program.

This program for primary coolant sources outside containment is implemented by the HCGS Procedure **HC.RA-AP.ZZ-0051 (Q), Leakage Reduction Program**. This program includes the portions of the following systems that are located outside of the primary containment:

RCIC	Hydrogen/Oxygen Analyzer System
RHR	Post-Accident Sampling
Core Spray	Containment Hydrogen Recombination
HPCI	Control Rod Drive Hydraulic System (SCRAM discharge portion)

This program is implemented by maintaining an ongoing summation of all known leaks on the above systems. The leaks are documented, quantified, and added to the total ESF leakage value tracked by HC.RA-AP.ZZ-0051 (Q). Any leaks found will be evaluated and corrective action initiated when required. When the leaks are corrected the total leakage is updated to reduce the total leakage to the newly determined value. The total measured leakage is tracked and maintained less than 10 gpm. After the license amendment is approved, this will be changed to 1 gpm.

A leakage limit of 10 gpm is a relatively large number compared to limits used at other BWRs (e.g. Duane Arnold). Because plant history has been that leakage is less than 1 gpm, LCR H02-01 reduced this number to 1 gpm and the dose analysis was changed to use this new value (the ESF leakage is doubled in the analysis per Reg. Guide 1.183 and 2.0 gpm is used).

Commitments being made in this response

As part of the response to the request for additional information PSEG commits to the following:

Upon implementation of the license amendment PSEG will reduce the ESF leakage from 10 gpm to 1 gpm. This will reside in HCGS-Procedure HC.RA-AP.ZZ-0051 (Q), Leakage Reduction Program.