



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 30, 1999

LICENSEE: Public Service Electric and Gas Company

FACILITIES: Hope Creek Generating Station
Salem Nuclear Generating Station, Unit Nos. 1 and 2

SUBJECT: SUMMARY OF OCTOBER 14, 1999, MEETING REGARDING GENERIC
LETTER 99-02 AND LICENSING SUBMITTALS

This summary refers to the meeting with Public Service Electric and Gas Company (PSE&G) conducted on October 14, 1999, at the U.S. Nuclear Regulatory Commission's (NRC) office in Rockville, Maryland. The meeting was held at the request of PSE&G to discuss PSE&G's forthcoming response to Generic Letter (GL) 99-02, "Laboratory Testing of Nuclear-Grade Activated Charcoal" for the Hope Creek Generating Station (Hope Creek) and Salem Nuclear Generating Station, Unit Nos. 1 and 2 (Salem). In addition a discussion was held concerning the status and schedule of PSE&G licensing submittals to the NRC. A list of the attendees at the meeting and a copy of the slides presented by PSE&G are enclosed (Enclosures 1 and 2 respectively).

The PSE&G presentation concerning GL 99-02 closely followed the material in their slides provided at the meeting. There were no slides presented with respect to the discussion on licensing submittals. The following major topics were discussed:

GL 99-02 Response and Technical Specification Changes

PSE&G stated that their response to GL 99-02 for Hope Creek and Salem will be submitted to the NRC by November 29, 1999. The response will state that charcoal filter testing will conform to ASTM D3803-1989. PSE&G will submit Technical Specification (TS) changes to reflect the new testing requirements and to address changes in charcoal filter iodine removal efficiencies. In addition, several license change requests that are currently under review by the NRC will be supplemented by PSE&G as a result of changes associated with GL 99-02. These license change requests include the proposed Hope Creek TS amendment associated with the deletion of the main steam isolation valve sealing system and the proposed Salem TS Amendment associated with the fuel handling building ventilation system.

Charcoal Filter Efficiencies

PSE&G discussed the proposed TS changes to charcoal filter efficiencies associated with GL 99-02. PSE&G stated that differences in charcoal filter efficiencies between the various ventilation systems for Hope Creek and Salem are due in part to differences in charcoal bed thickness and whether the associated filter trains have heaters.

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PDR ADOCK-

Control Room Habitability

The NRC staff discussed the licensee's calculation of control room operator doses and the industry-wide issue regarding unfiltered air inleakage into the control room. The staff stated that unfiltered inleakage has been measured at plants that have performed tracer gas testing of their control room envelope. In all cases, this testing revealed that actual unfiltered inleakage exceeded the plants design basis assumptions and required repairs and/or reevaluation.

PSE&G stated that they were not intending to change their current license/design basis assumptions regarding unfiltered inleakage as part of the changes associated with GL 99-02. PSE&G currently assumes 10 cfm unfiltered inleakage (all due to ingress/egress) for the Hope Creek control room dose analysis and 60 cfm unfiltered inleakage (which includes 10 cfm for ingress/egress) for the Salem control room dose analysis. Based on the recent history of tracer gas testing at other plants, the staff questioned the validity of the Hope Creek inleakage assumption.

Dose Consequences

PSE&G discussed the dose consequences as a result of the proposed changes associated with GL 99-02. Calculations performed by PSE&G indicate that the thyroid dose to personnel in the Salem control room would be 48 rem which exceeds the 30 rem regulatory limit for a postulated design basis accident. The licensee indicated that they believed that such a dose was acceptable because it was below the 10 CFR 20 limits for organ dose. At the July 1998 NRC/NHUG/NEI Workshop on Control Room Habitability, the staff indicated that such an approach was under review.

Enforcement Discretion

PSE&G stated that in December 1999, the charcoal filters in one of the Hope Creek Filtration Recirculation and Ventilation System (FRVS) recirculation units will be tested in accordance with ASTM D3803-1989. Each recirculation unit contains approximately 8,000 pounds of charcoal and PSE&G stated that replacement of the charcoal could challenge the TS 7-day allowed outage time in the event that the existing charcoal did not pass the new laboratory testing methods. PSE&G questioned the NRC staff on the NRC's position regarding enforcement discretion as discussed in GL 99-02. The staff stated that the enforcement discretion discussed in GL 99-02 was that associated with allowing licensees to perform a surveillance test in a manner not described in their existing technical specifications (ASTM D3803-1989) and to allow an acceptance criteria which was also not part of the technical specification surveillance requirements (Safety Factor of 2 versus previous values of 5 or 7). The staff stated that enforcement discretion referred to in GL 99-02 was not for the allowable time to replace the charcoal. If the licensee could not replace the charcoal within the allowable outage time, then there are various relief remedies available from the staff, including requesting an enforcement discretion. However, further discussion with the licensee revealed that the licensee was really addressing the situation where the FRVS cannot meet the GL acceptance criteria for the laboratory test based upon the presently assumed removal efficiency for charcoal. Based upon the guidance in GL 99-02, failure to meet the acceptance criteria, would necessitate replacement of the charcoal. However, the licensee anticipates submitting to the staff for review and approval a revised dose analysis which assumes reduced adsorber

efficiency for the FRVS. The licensee indicated confidence that at this reduced adsorber efficiency with the guidance in GL 99-02, they would not have to replace the charcoal in the FRVS. Therefore, they might be seeking a notice of enforcement discretion if such a circumstance were to occur and it appeared that the staff would be approving this decrease in charcoal adsorber efficiency.

Licensing Submittals

A discussion was held regarding the status and schedule of forthcoming licensing submittals from PSE&G to the NRC for Hope Creek and Salem. PSE&G stated that they plan to submit the following items for NRC review in the near-term:

Hope Creek

- 1) Charcoal filter testing TS change
- 2) Residual heat removal system flow rate TS change
- 3) Mechanical vacuum pump operation unreviewed safety question
- 4) Battery temperature allowed outage time TS change
- 5) Feedwater nozzle inner radii inspection commitment change

Salem

- 1) One-time reduction in number of operable in-core thimbles TS change (Unit 2 only)
- 2) Auxiliary feedwater pump performance acceptance criteria TS change
- 3) Containment air temperature limit increase TS change
- 4) Radiological Effluent TS relocation
- 5) Containment isolation valve TS change regarding containment pressure relief - vacuum breaker isolation valves
- 6) Control room personnel dose limit TS change

In addition, the status of PSE&G licensing submittals currently under NRC review was discussed.

A handwritten signature in black ink, appearing to read "R B Ennis". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

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

Enclosures:

1. Attendance List
2. PSE&G Slides

Docket Nos. 50-272, 50-311, and 50-354

cc w/enclosures: See next page

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Units 1 and 2, and
Hope Creek Generating Station
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MEETING ATTENDANCE LIST

Licensee: Public Service Electric and Gas Company
Plant(s): Hope Creek; Salem, Units 1 and 2
Subject: Generic Letter 99-02 and License Change Requests

Date: October 14, 1999 Time: 10:00 a.m.

Location: NRC Offices, OWFN Room 1-F-5

<u>NAME</u>	<u>TITLE</u>	<u>ORGANIZATION</u>
<u>NRC STAFF</u>		
J. Clifford	Section Chief	NRR/DLPM/PDI-2
R. Ennis	Project Manager	NRR/DLPM/PDI-2
P. Milano	Senior Project Manager	NRR/DLPM/PDI-2
J. Hayes	Senior Nuclear Engineer	NRR/DSSA/SPSB
J. Segala	Reactor Systems Engineer	NRR/DSSA/SPLB
H. Walker	Senior System Engineer	NRR/DSSA/SPLB
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<u>PSE&G</u>		
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J. Priest	Licensing Engineer	PSE&G
B. Thomas	Licensing Engineer	PSE&G
R. DeNight	Design Analysis Supervisor	PSE&G
J. Duffy	Senior Staff Engineer	PSE&G

GENERIC LETTER 99-02

MEETING WITH NRC

October 14, 1999

GENERIC LETTER 99-02

- Salem and Hope Creek Response Due 11/29/99
 - Filter testing will conform to ASTM D3803-1989.
 - Technical Specification Changes will be submitted to reflect the new testing requirements.
- Charcoal filter iodine removal efficiency revisions will be addressed in the Technical Specification Changes
 - Impact on proposed MSIV Sealing System deletion changes needed for upcoming refueling outage (RFO9) in April 2000.
 - Changes required for Salem dose analyses to accommodate ESF leakage rates.

Charcoal Filter Efficiencies

● Analysis Assumptions	Current Limit	Proposed Analysis Eff	Proposed TS Eff
● HCGS FRVS Recirc Unit	92.5	50.0	75.0
● HCGS FRVS Vent Unit	99.0	90.0/95.0	97.5
● HCGS CREF	99.825	99.0	99.5
● SNGS ABV	90.0	60.0	80.0
● SNGS FHV	90.0	80.0	90.0
● SNGS CREACS	99.0	90.0	95.0

Salem and Hope Creek Doses

<u>Area/Dose</u>	<u>Hope Creek</u>			<u>Salem</u>	
	<u>Current</u>	<u>Prior Submittal</u>	<u>KP Sys RAI</u>	<u>Proposed</u>	<u>Current</u>
Site Boundary					
Whole-body gamma	~1.30	2.6	2.6	0.6	0.8
Thyroid	~175	121	125	29	23
LPZ					
Whole-body gamma	~0.20	0.6	0.6	0.2	0.2
Thyroid	~18	36	40	14	8.6
Hope Creek Control Room					
Whole-body gamma	0.04	0.1	0.1	Not addressed	Not addressed
Beta skin	0.9	1.6	1.6	Not addressed	Not addressed
Thyroid	0.3	5	5.2	Not addressed	Not addressed
Salem Control Room					
Whole-body gamma	Bounded by Salem LOCA	Not addressed	0.1	0.5	1.7
Beta skin	Bounded by Salem LOCA	Not addressed	2.3	8.4	12
Thyroid	Bounded by Salem LOCA	Not addressed	17	48	28

Salem Fuel Handling Accident Dose Consequences

<u>Area/Dose</u>	<u>Salem</u>			
	<u>Proposed</u>		<u>Current</u>	
	FHB	Containment	FHB	Containment
Site Boundary				
Whole-body gamma	0.13	0.15	0.15	0.15
Thyroid	11.5	28.7	10.4	28.7
Salem Control Room				
Whole-body gamma	0.02	0.06	0.21	0.06
Beta skin	2.20	3.18	2.67	3.18
Thyroid	17.7	31.1	8.24	25.3

In addition, the status of PSE&G licensing submittals currently under NRC review was discussed.

ORIGINAL SIGNED BY:

Richard B. Ennis, Project Manager, Section 2
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Office of Nuclear Reactor Regulation

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cc w/enclosures: See next page

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* See previous concurrence

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