

From: Glenn Meyer *ET*  
To: A. Randolph Blough; Brian Holian; Cornelius Holden; Daniel Orr; David Vito; Diane Screnci; James Clifford; John Boska; John White; Mel Gray; Neil Sheehan; Robert Fretz; Ronald Nimitz; Scott Barber; Theodore Wingfield; Thomas Madden; Wayne Lanning  
Date: 10/22/03 2:52PM  
Subject: Salem Comm Team - Conference call Thurs 10 am

The preparations for the briefing of Sen. Carper's staffer will be discussed in a conference call on Thursday, 10 am. The conference call number is the MCI Conference Center at 888-456-0354 ~~passcode~~ *Lx 2*

I've attached a revised version of the Q&As, including contingency actions if the allegations are about to be publicized. I expect the slides for the briefing to be sent separately.

Region I participants should meet in the DRS Conference Room.

Glenn

Information in this record was deleted  
in accordance with the Freedom of Information  
Act, exemptions 2,5  
FOIA-2005-0194

*R-101*

## Talking Points Fuel Pool Leak

### What is the Issue and Significance :

Onsite groundwater contaminated with tritium was identified. An undetected leak in the Unit 1 spent fuel pool may have been the source of the tritium contamination. If left uncorrected the leak may have resulted in an unmonitored release to the Unrestricted Area.

### Health and Safety Consequences

*no off site release*  
The tritium contamination identified does not pose a hazard to the public or workers

- No regulatory release limits were violated.
- Spent fuel pool leaks have been identified and reviewed by the NRC at a number of other facilities such as Dresden, Hatch, and Indian Point 2

### Identification of Leakage

- The leakage was identified during follow-up of personnel contamination.
- The NRC was informed
- NRC coordinated activities with the State of New Jersey

### NRC Inspection Follow-up

- Several follow-up inspections were conducted
- Senior management viewed the area and focused NRC attention to the issue
- A Special Team Inspection was conducted
- Efforts were coordinated with the State of New Jersey

### Leak Control, Sampling, Characterization, and Reporting of leakage

- Action was taken to control the leakage
- Action was taken to sample, characterize, and identify the extent of contamination
- Prompt formal notifications were made when ground water contamination was identified

## Talking Points contd.

### Extent of Contamination

- Sampling was conducted to characterize the nature, range, and extent of contamination
- Expert consultants were used by PSEG to support its characterization and remediation efforts
- No release of tritium to the Unrestricted Area was identified

### Likely Cause of Contaminated Ground Water

- PSEG has not conclusively determined the source of the leak but evidence indicates it is from the spent fuel pool
- PSEG believes it has stopped the identified leakage from the spent fuel pool

### NRC Findings Associated with the Leak

- The corrective action process did not promptly detect and correct the issue in accordance with 10 CFR 50 Appendix B
- An up-to-date 10 CFR 50.75(g) spill/leak file was not maintained
- No adverse structural impact on the pool was identified but NRC will continue to follow-up engineering evaluation.
- The findings are in the cross-cutting area of problem identification and resolution, an area of numerous NRC inspection findings.

### Overall Licensee Performance

## **Salem Spent Fuel Pool Leak Radiological Summary**

### **Identification of Leakage and NRC Notification**

PSEG informed the NRC during its investigation:

- On September 18, 2002, PSEG identified low level shoe contamination of personnel exiting the Unit 1 Auxiliary Building, a radiologically controlled area.
- On September 25, 2002, PSEG initiated an investigation of the contamination, established a review team, and initiated sampling program development. PSEG subsequently identified other leaks in the area.
- PSEG informed the NRC project manager of the ongoing evaluation (October 1, 2002) and that the matter was in its corrective action program.
- On November 20, 2002, PSEG informed the NRC resident inspectors of the leak and indicated that the analysis results were indicative of Unit 1 spent fuel pool water.

### **NRC Inspection Follow-up**

NRC conducted follow-up inspection when informed of the leak:

- A senior regional specialist was dispatched to the site in early December 2002 to evaluate the leak and potential consequences and provide support to NRC resident staff.
- NRC regional management viewed the area in December 2002.
- NRC conducted its baseline radiological environmental monitoring program inspection in February 2003 and further reviewed the issue.
- NRC established and performed a Special Team Inspection of the issue. (June - September 2003)
- NRC coordinated its activities with the State of New Jersey

## Leak Control

PSEG took action to control leakage:

- PSEG installed a leak collection device (November 2002) to capture the leakage from under the Unit 1 spent fuel pool cooling line.
- PSEG periodically pumped out the seismic space between the Unit 1 fuel handling building and Auxiliary Building to remove the water and check the rate of in leakage.
- PSEG identified clogging of the Unit 1 spent fuel pool tell-tales and initiated efforts (January - February 2003) to unclog the drains. PSEG cleaned the drains sufficiently to stop identified leakage through walls.

## **Sampling, Characterization, and Reporting of leakage**

PSEG took actions to sample, characterize and report the leak:

- During the period October 2002 - February 2003, PSEG implemented various sampling measures to identify the source of the contamination and its spread.
- PSEG identified contaminated water (January 2003) in the seismic gap between the Unit 1 fuel handling building and the Unit 1 auxiliary building. This provided evidence of a potential pathway to the environment.
- PSEG identified and formally reported (February 6, 2003) to the State of New Jersey that it had identified tritium (H-3) in two test locations near exterior of the Unit 1 FHB. This was the first identification of tritium above the State's reporting requirement of 1000 pCi/l. The report prompted a 10 CFR 50.72 report to the NRC.
- An additional 10 CFR 50.72 report was provided to the NRC when PSEG provided a written update (July 25, 2003) report to the State on sample results.
- PSEG subsequently developed and implemented additional extensive sampling programs to further characterize the spread of tritium.

Note: PSEG developed, with support by consultants, a detailed environmental sampling plan. The plan was reviewed by the NRC. Both NRC and the State of New Jersey monitored PSEG's collection and analysis of samples. This sampling plan was implemented in a phased approach to initially look for potential releases to the Unrestricted Area. None were identified.

---

## **Extent of Contamination**

PSEG sampled to determine extent of contamination:

- PSEG's evaluations and sampling programs identified, as of September 2003, an area of ground water contamination south of, and abutting the Unit 1 FHB. The sample results indicated a general area of about 250 feet by 250 feet of ground water contamination. The contamination is at about a 20 foot depth from the ground surface (100 foot ground level elevation).
- The sampling and analysis results did not identify any offsite release of tritium contamination associated with the leak.



## Leak Duration and Likely Cause

PSEG is continuing to review:

- PSEG has not yet determined the source of the leak or its start. However, a likely source is the spent fuel pool.
- PSEG is continuing with its efforts to identify the source and duration.

## Health and Safety Consequences

The tritium contamination identified does not pose a hazard to the public or workers.

- Tritium is a low energy beta emitter. It is found naturally in the environment, it is associated with weapons testing fallout, and is produced in a nuclear reactor. It is routinely released, in accordance with NRC limits, from power reactor facilities in both gaseous and liquid effluents. Licensees are to control the radioactive materials on their sites and NRC inspects licensee compliance with these regulations.
- Tritium is not considered a generally hazardous radionuclide from a dose per unit activity perspective. It has a radioactive half-life of 12 years and a biological half-life (i.e., eliminated from the body) of about 10 days.
- No tritium, associated with this leak has been identified outside the stations' radiological Restricted Area. There are no local public drinking water sources.
- Although onsite groundwater is contaminated, no onsite drinking water pathway is present. Consequently there is no risk to workers.
- The NRC established 10 CFR 50.75 to provide requirements for licensees dealing with onsite spills or leaks. The regulation allows residual contamination in accordance with the guidance therein.

## Health and Safety Consequences contd.

- The maximum concentration seen in ground water was  $3.5 \text{ E-3 uCi/ml}$ . The majority of samples have been at much lower values. This value is about 3.5 times the NRC limit for releases of liquid to the Unrestricted Area.
- Assuming this water is directly used as a drinking water source for a year, the individual would receive a dose of about 150 millirem. However, this water is not available to be consumed. This is compared to about an annual dose of about 300 millirem normally received by individual members of the population from all sources.
- PSEG is developing a ground water monitoring program to sample and monitor the status of the ground water tritium. PSEG has submitted a Remedial Investigation Work Plan to the State of New Jersey which describes its plans for monitoring the ground water tritium. This plan has been reviewed by regional specialists.

## **Specific NRC Findings Associated with the Leak**

The NRC's Special Inspection of the issue identified that PSEG's corrective action process did not promptly detect and correct unsatisfactory conditions which lead to accumulation of water behind the Unit 1 FHB walls nor did it detect the actual accumulation of water behind the walls, a condition adverse to quality. Specifically:

- long term fuel pool liner leakage had continued without a full understanding of possible consequences
- operational surveillance procedures did not detect and prompt an evaluation of unexplained reduction in identified leakage
- quality controls did not detect blockage of tell-tale pipes during modifications, and
- through wall leakage, indicative of accumulation of water behind the Unit 1 FHB walls, was not evaluated.

The NRC identified a self-revealing violation associated with the above matters.

## Salem Allegation Q's and A's

*We have heard that there is an allegation where production pressures took precedence over nuclear safety at Salem and HC? We also have heard that personnel at the station do not feel free to raise nuclear safety concerns?*

NRC policy is not to comment on whether an allegation exists or to reveal any details about an allegation that could reveal an alleged's identity.

The NRC has regulations that preclude a licensee from taking discriminatory actions against an individual for raising nuclear safety concerns. Our desire is for licensee management to create and maintain an environment where individuals feel free to raise safety concerns to management without fear of retribution. We characterize this environment as a Safety Conscious Work Environment (SCWE), and it is a major cross cutting element of the reactor oversight program. The NRC encourages a healthy SCWE at all facilities and takes action when discriminatory actions have occurred.

*What is NRC's assessment of performance at Salem and HC?*

The NRC has noted inconsistencies in performance at Salem and Hope Creek for some time. As a result, we have provided heightened attention to site activities, including a much higher than a normal amount of inspection. In our last annual and mid-cycle assessments of overall site performance, we have identified substantive cross-cutting issues in problem identification and resolution at both Salem and Hope Creek. This means that due to weaknesses noted in PSEG's identification and effective resolution of problems, and the NRC will focus more closely on these areas.

*What is NRC's oversight at Salem and HC?*

Because of the noted inconsistencies Salem and Hope Creek performance, we have heightened oversight at the facilities, as evidenced by high inspection expenditures at Salem; through September the resources expended at Salem have exceeded the resources at any of the other 15 operating sites in Region I. We have maintained four full-time resident inspectors, treating the plants as two sites, even though PSEG had previously merged operations for Salem and Hope Creek. Additionally, senior Region I managers have made a number of extensive site reviews over the past year involving direct interaction with senior site and plant management.

Within the NRC's Reactor Oversight Program, Salem Unit 1 is within the Regulatory Response Column of the Action Matrix, based on a diesel generator failure in September 2002, while Unit 2 and Hope Creek remain in the Licensee Response Column.

*Can NRC shut down Salem and HC if you like?*

NRC has regulatory authority to order licensees to shut down reactors. Nonetheless, there is a high threshold to ensure that such an action is merited. Currently, inspection of events and day-to-day activities over the last 12 months has shown that the proper actions have been taken to assure reactor safety and that an acceptable margin of safety exists.

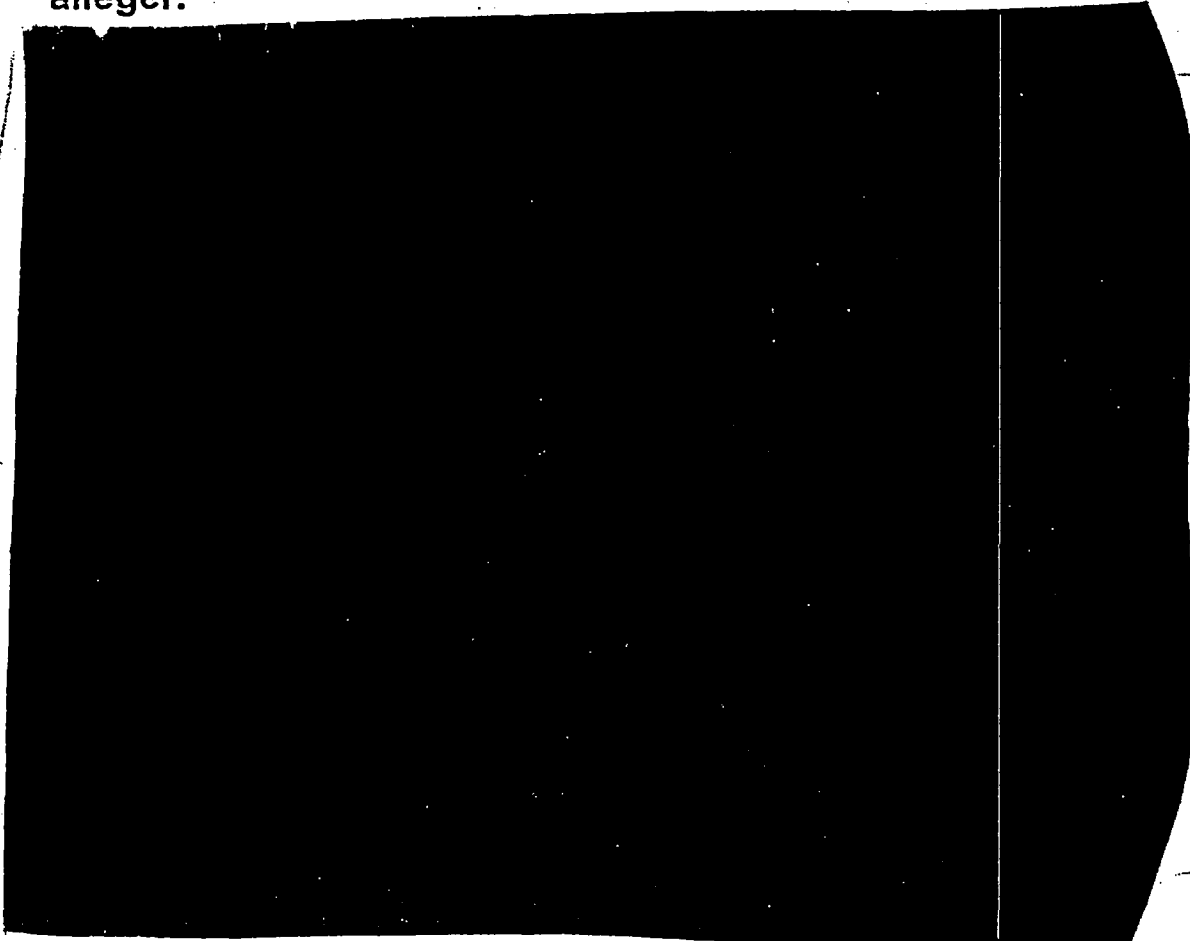
*I heard that a lawsuit was filed in which an individual was fired for raising safety concerns at the facility. Is this true? If so, what is the NRC doing about it?*

In September a civil lawsuit was filed in New Jersey, which claims that the affected person was discriminated against for raising safety concerns at Salem and Hope Creek. NRC is aware of the lawsuit and is reviewing the specifics in light of the existing performance concerns at these facilities.

*I heard that NRC investigators are working on the same case that the lawsuit against PSEG addresses. Can you confirm that for us?*

NRC policy is not to comment on whether an investigation exists or to reveal any details or status about any investigation.

**The following is for NRC internal use / background only.  
These questions should not be discussed with the public  
or the media as they have the potential to identify an  
allegor.**



Ex. 5

**Contingency Actions if allegations are being publicized:**

1. Reconvene Communications Team to review available options. Inform Regional management. If practical, revise Qs & As.
2. Consult with allegations staff to determine if a threshold has been reached such that publicly discussing the allegations is appropriate. Allegations staff to reach alleged first if such an action is being pursued.
3. Inform all applicable NRC internal stakeholders, including EDO and commissioners. If residents have not been involved, inform residents.
4. Inform OCA to inform applicable Congressional stakeholders:
  - DE senators (Carper & Biden)
  - NJ senators (Corzine & Lautenberg)
  - Rep. LoBiondo
5. Inform PAO to handle media inquiries.

G:\Br.3\Allegation SCWE\Qs & As.wpd

RT  
**From:** Tracy Walker  
**To:** A. Randolph Blough; Brian Holian; Cornelius Holden; David Vito; Diane Screnci; Glenn Meyer; James Clifford; John Boska; John Jolicoeur; John White; Robert Fretz; Scott Barber; Thomas Madden; Wayne Lanning  
**Date:** 10/21/03 9:48AM  
**Subject:** Re: Fwd: Previous Carper Answers on Salem Tritium Issue

Attached are the Q&As that DRS prepared for the Salem tritium issue. They were last updated in late April.

>>> Glenn Meyer 10/21/03 09:34AM >>>

Bob Fretz's attached file has answers to Sen. Carper in February. The two questions related to:

1. Timeliness of public notification on tritium leak
2. Responsibility of licensee to find the problem and address it.

**CC:** Daniel Orr; Mel Gray; Ronald Nimitz; Theodore Wingfield



**Salem Unit 1- Spent Fuel Pool Leak Issues**  
**Status as of April 25, 2003**  
**Q and As**

**1) When did the licensee become aware of this situation:**

On September 18, 2002, PSEG documented the discovery of water leakage through the Unit 1 78-foot Mechanical Penetration Room wall and noted that workers' shoes were contaminated with nuisance (low levels) levels of contamination coming from the room. Salem ground level elevation is 100 feet. On September 25, 2002, PSEG launched an investigation to resolve the water leakage. Subsequently, PSEG identified a second leak at a spent fuel pool cooling piping penetration (between the Unit 1 spent fuel building and the auxiliary building) located within the Unit 1 78-foot mechanical penetration room at about 92 foot. Work on the investigation and corrective action began on November 8, 2002 (Order 70027139).

**2) When did the licensee inform the NRC**

PSEG informed the Salem resident inspectors about the situation on or about November 20, 2002, and indicated that the leak may be associated with the fuel pool.

**3) What has the NRC done to inspect this issue ?**

Since becoming aware of this issue, the NRC resident and regional specialists have been closely following PSEG's actions on and evaluation of this matter. NRC regional management has been closely following NRC inspection activities.

On November 22, 2002, the NRC attended a PSEG engineering presentation that discussed the problem and actions needed including monitoring the environment for contamination. At this presentation, the NRC was informed that sampling of the environment (catch basin, accessible building areas) showed no contamination.

On November 29, 2002, PSEG began installation of a collection device to capture the leakage from under the spent fuel pool cooling line and direct this water to the radioactive liquid waste system. The NRC reviewed this work activity

December 6, 2002, the residents attended a SORC meeting that reviewed the potential outstanding safety issues associated with the SFP leak. Little progress had been made since November 20, 2002. SORC identified that a dedicated team and action plan were needed to address the problem.

On December 9-10, 2002, a senior health physicist was dispatched to the site to review the licensee plans and actions to evaluate the potential for leakage to the environment, the licensee's actions to mitigate and investigate the problem, and evaluate any potential leakage to the environment.

The resident inspectors and the senior health physicist toured the Unit 1 78-foot Mechanical Penetration Room and questioned the adequacy of the leak catch device under the spent fuel pool cooling water return pipe. The inspectors also toured Unit 1 64-foot Switch-gear Room and

noted that there was evidence of five (5) water leaks along the wall in the room. The leaks appeared to be old with the except one (Sample No. 7). PSEG took five samples and measured for boron, tritium, and gamma analyses. The analytical results of the Sample No. 7 indicated that the source of water was apparently from a radioactive system. Analytical result of the other four (4) samples suggested that there was ground water intrusion.

As a result of these observations, the NRC organized conference calls with the licensee and the State of New Jersey to discuss and evaluate PSEG's plans and actions to monitor the environment. The discussions specifically included sampling of the environment.

#### **4) What additional inspections has the NRC been conducting ?**

Since becoming aware of this issue, the NRC residents and regional specialist conducted on-going reviews of the adequacy and effectiveness of licensee actions.

On January 2-3, 2003, the NRC conducted an onsite inspection of this matter and reviewed analytical data, including seven (7) on-site environmental wells water samples. The analytical results of these well water samples looked for for tritium, fission, and activated gamma emitters. The results were well below the required lower limits of detection (LLDs) listed in the Offsite Dose Calculation Manual (ODCM).

On January 2 and 3, 2003, the inspectors also attended PSEG's meetings to observe their discussions of (1) soil and water samples, (2) drilling of permanent deep wells, (3) spent fuel pool water make-up rate, (4) integrity of the fuel transfer canal, (5) water sample at the bottom of spent fuel pool to track iodine-131, and (6) monitoring spent fuel pool water leaks.

No findings of significance were identified at the time of this inspection. However, at the conclusion of the inspection, the inspectors were unable to determine whether PSEG met all Offsite Dose Calculation Manual (ODCM) and 10 CFR 20 effluent release requirements since the environmental sampling activities had not been completed. This matter was left as an unresolved item with more assessment of the planned environmental monitoring activities. These inspection results were documented in NRC Inspection 50-272/02-09;50-311/02-09 dated February 6, 2003.

On January 14, 2003, NRC Region I and State of New Jersey representatives participated in a telephone conference with PSEG to discuss the history, time line, and status of investigative and corrective actions for the SFP leak.

On February 3, and 4, 2003, the NRC also conducted an onsite review of PSEG activities accompanied by State of New Jersey representatives.

On February 10, 2003, a regional specialist initiated a baseline site environmental inspection including review of the fuel pool leak issue. The senior NRC specialist inspection reviewed the site's environmental monitoring program and data including the status and actions by PSEG on the spent fuel pool leak issue. No significant findings were identified. Independent offsite dose calculations performed by the inspector did not identify any immediate onsite or offsite radiological impact on workers or members of the public associated with the tritium.

The NRC followed the snaking of the fuel pool tell tale drain system for the Unit 1 spent fuel

pool. The drains were found to be clogged with boron crystals and apparent sealant from a 1995 design change. When unclogged, about 150-300 gallons of water came out of the drains. This created a noticeable decrease of liquid leakage from the location where the water was leaking into the auxiliary building, at about the 92 foot elevation.

The NRC has been reviewing periodic sample results and has been reviewing on-going PSEG actions relative to the issue. The NRC has periodically discussed the issue with State of New Jersey representatives.

On March 11, 2003, the NRC Senior resident inspector, a senior specialist from Region I and the Region I acting Chief, Radiation Safety and Safeguards Branch attended a presentation by the licensee to State of New Jersey, Bureau of Environmental Protection representatives, at the site, regarding PSEG plans associated with additional review, evaluation, and actions associated with the identification of tritium in onsite ground water.

The NRC has scheduled a Special Inspection to review the circumstances surrounding the spent fuel pool leak including corrective actions and environmental impact. The inspection is scheduled to occur the week of June 2, 2003. The inspection will review possible generic implications.

**5) Was the licensee required to report this matter to the State of New Jersey or the NRC?**

Prior to February 6, 2003, the licensee had not identified direct evidence that contaminated liquid had made its way outside structures to the environment. PSEG was aware that contaminated water was in a six inch expansion joint between the Unit 1 spent fuel building and the auxiliary building but there was no clear evidence that the contamination had made its way to the environment. Consequently no reporting was required either to the NRC or the State.

The licensee did provide courtesy calls and information to the State and NRC during on-going inspection activities. When the licensee received sample results on February 6, 2003, that the water was apparently contaminated with tritium, PSEG was required to inform the State of New Jersey that waters of the State were contaminated ( $>1000$  pCi/l). This notification of the State prompted a notification to the NRC in accordance with 10 CFR 50.72.

For offsite contamination issues, PSEG has a specific reporting requirement in its ODCM to notify the NRC when groundwater shows contamination in an unrestricted area of 30,000 pCi/liter. No such sample results were obtained in an unrestricted area which showed any activity. When such activity is identified, the licensee is required to inform the NRC in a 30 day report identifying the causes of the event and the actions to ensure annual dose limits are met.

**6) Where was the contamination identified and what were the levels of contamination identified?**

The sample results to date outside the buildings indicate only the presence of tritium. Tritium is a low energy beta emitter with a 12.3 year radiological half-life but only a 10 day biological half-life.

PSEG identified isolated locations of low level contamination in the Unit 1 78' Auxiliary Building attributable to through wall leaks. This was how the licensee became aware of the problem. Subsequent sampling identified contamination within the six inch annulus space between the auxiliary building and fuel handling building. The isotopic analysis is similar to spent fuel pool water. This has been pumped out.

The licensee drilled test locations outside (near field and far field) the Unit 1 spent fuel pool building to look for ground water contamination. There are five sample test locations exhibiting tritium. These are the K, M, N, O and R locations. Four (M,N,O,R) are located near field (within the cofferdams) essentially abutting and surrounding the Unit 1 spent fuel building. Tritium has been identified at the 20 foot depth below ground level (grade of 100 feet) at these test locations. Levels have varied with generally average concentrations less than 10,000 pCi/l. One test location (N) indicated a concentration (58,000 pCi/l) above the EPA 20,000 pCi/l drinking water limit. This test location was showing sample results of about 3500 pCi/l (as of April 4, 2003). The fifth is well K located north of the Unit 2 containment at 80 feet depth (below grade of 100 feet). It showed tritium levels about 1000 pCi/l but is now showing levels below 1000 pCi/l. No other onsite or offsite locations were showing detectable tritium including onsite water sources.

PSEG was developing a Phase IV sampling plan to be used to collect additional samples as necessary with additional sample locations under consideration. A team of technical experts was hired by PSEG to help them develop this program and analyze the results.

#### **7) What are the limits for liquid releases to the environment at Salem?**

Liquid discharges from the Salem station are not to result in a dose to the whole body in excess of 3 millirem/year/unit or 10 millirem/year/unit to any organ. These values are contained in PSEG's Offsite Dose Calculation manual (ODCM). PSEG reports on its conformance with these limits on an annual bases. PSEG dose projections have been well with these limits. These dose limits can be compared to the approximately 300 millirem/year received by the average person due to natural radiation.

#### **8) What doses to the public could occur if this activity got offsite ?**

PSEG's highest re-test analysis result for any test location R (58,410 pCi/liter) would result in a estimated dose of about 2.3 millirem/year if a person used this water as the normal source of water. This result is based on the guidance in NRC Regulatory Guide 1.109 and assumes an adult consumes about 370 liters of water in an year. The State of New Jersey's analysis result for this same sample (split sample ) was 51,200 pCi/liter

(Note that EPA does have a drinking water standard. The drinking water standard of 20,000 pCi/l is conservatively assumed to result in a maximum dose of 4 millirem/year to the total body. For this case a maximum dose of 11.6 millirem would be sustained. This is conservative.)

Consequently based on the above models, estimated doses would range from about 2 to about 11 millirem/year based on model used. This is as compared to an average dose to a person of 300 millirem/ year due to natural radiation and radioactivity.

These levels are well below the 10 CFR 20 unrestricted release limits  $1\text{E-3 uCi/ml}$  ( $1\text{E6 pCi/l}$ ). No information to date indicates that tritium is outside the owner controlled area

**9) What did NRC do after receiving the results.**

PSEG made a formal report to the State of New Jersey within 30 minutes of the identification of the licensee elevated results. NRC Regional Senior Specialists discussed the sample results with licensee staff and reviewed PSEG plans in regards to these sample results. The NRC contacted the State of New Jersey Bureau of Radiation Protection Programs and discussed the results at length including future inspection plans. The State split samples of these water samples and analyzed samples. The NRC reviewed the results of these split samples including PSEG's need for additional samples at the location of these samples. PSEG prioritized collection of samples between the unit and the river.

**10) What are the NRC and licensee doing to address the leak?**

Region I resident inspectors have been following the issue since November 20, 2002. As a result of information from the residents, Region I promptly dispatched a senior environmental inspector, to Salem to review the issue in early December 2002 (Dec. 9-11). At that time there was no identified leak to the environment. The NRC staff has essentially been continuously monitoring the licensee's action on this leak.

The physical condition was observed during a December 17 & 18, 2002, management site visit by the Deputy Regional Administrator (DRA). The region continues to follow PSEG's actions on this issue.

PSEG has been evaluating the appropriate actions to address the problem, including techniques for quantifying the leakage and drilling of additional test locations for monitoring purposes. The NRC has been reviewing on-going sample analysis results and reviewing on-going PSEG actions.

The NRC will be conducting a special team inspection June 2-6, 2003, to review the issue including potential generic implications.

**11) What are the limits for spent fuel pool leakage?**

There are no direct regulatory requirements on spent fuel pool leakage, although the regulations which addressed radioactive releases to the environment cover the consequences of the SFP leak.

**12) Is the licensee currently violating any regulation with the leakage?**

There is currently no evidence that any NRC regulations are being violated. The State of New Jersey is continuing to review the matter.

**13) What is the status of the leak ?**

PSEG has cleaned out the tell tales for the Unit 1 spent fuel pool back to the channel collection system. Portions of the channel collection system continue to be clogged. PSEG reviews

identified about a 100 gallon/day leakage rate from the tell tales which is being collected in the waste collection system. This resulted in a cessation of leakage from wall penetrations. PSEG believes it has terminated the leak into the 6 inch seismic space between the fuel pool and the auxiliary building. Inspections of the fuel pool to locate an apparent leak has not located any detectable leak. PSEG is focusing on development of a method of cleaning the channels and improved leak detection in the pool. Lessons learned will be applied to Unit 2.

PSEG sent a notice out as an Operational Experience item to the industry

**14) What is the responsibility of the plant's owner, PSEG in cases like this ?**

The licensee has the responsibility to identify and correct problems at their facilities, and implements a problem identification and resolution program that provides for: 1) identification of problems; 2) determination of risk significance, 3) establishment and implementation of corrective actions commensurate with that risk significance, 4) reporting of the problem in accordance with reporting criteria (e.g., NRC, State, or internal); 5) evaluation and determination of causes, 6) implementation of mitigating actions as necessary; and 7) evaluation of any consequences of the problem, (e.g., effect on workers, public, or the environment). The basic requirements for these activities are outlined in 10 CFR 50, Appendix B. Specifically in this case, when the problem was identified, the licensee documented it in its corrective action program, initiated a review of the issue consistent with its understanding of the safety significance of the problem, implemented various mitigation activities to reduce or eliminate potential effects, and also reported the issue to the State and the NRC when reporting criteria were met.