



NRC Oversight Status of Salem & Hope Creek

**Work Environment
and
Corrective Action Effectiveness**

June 29, 2004

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HISTORY

Extended S/D and Watch List - Late 1990's

Recovery Satisfactory but Performance Improvements Stalled in Early 2000's

- Poorly-conceived realignment to “3-Unit Site”
 - ▶ stretched mgt thin and created confusion, especially in engineering
- Equipment Reliability/Outages/Events stressed the organization
- Corrective Action issues and Work Management ineffectiveness evident
- ORG Changes and Management Turnover

PSEG PERFORMANCE AND NRC OVERSIGHT 2000-2003

- All three units have stayed in Licensee Response or Regulatory Response columns --a number of White indicators or findings, numerous other findings
- Strong crosscutting theme, PIR, highlighted in three Assessment letters; continues today
 - ▶ Numerous findings involving PIR
 - ▶ Involved S/HC EDGs, S/HC SW, S/HC grid UV protection, Salem water hammers, air systems, HC CRDMs, leaks, MOV's
 - ▶ Also lots of issues in BOP

PSEG PERFORMANCE AND NRC OVERSIGHT 2000-2003 (cont.)

- Increased NRC management attention and site visits
 - ▶ RA visits: 4/01, 10/01, 7/02, 4/03, 7/03, 12/03, 3/04, 5/04
 - ▶ Maintained separate inspection programs for Salem and Hope Creek (2 SRIs)
 - ▶ Special inspections (e.g., partial LOOP, fuel pool leak with Tritium migration, EDG turbo charger failure)
- Late 2003: Initiated Special Review based on crosscutting themes, events, and allegations
 - ▶ Disciplined, structured approach through allegation process – panels led by Region I DRP Director

NRC OVERSIGHT 2004

January 28: Interim Results of Special Review

- NRC concerns related to work environment and station capacity for:
 - ▶ Handling emergent issues and associated operational decision-making
 - ▶ Addressing potential safety issues
- These concerns included:
 - ▶ Openness of management to concerns and alternate views
 - ▶ Strength of communication
 - ▶ Effectiveness of corrective actions and feedback processes
- Concerns did not involve any serious safety violations
- Recognized some change under new management but need to understand and address lingering issues
- **NRC Requested PSEG to do their own Assessment**

NRC OVERSIGHT 2004 (cont.)

- NRC Letter to PSEG 1/28/04
- PSEG Letter to NRC 2/27/04
 - ▶ Provided interim assessment plant
- Public Meeting 3/18/04
 - ▶ Discussed assessment plans
- PSEG Letter to NRC 5/21/04
 - ▶ Submitted assessment results
- NRC Public Meeting 6/16/04
 - ▶ Discussed PSEG assessment results and action plan
- PSEG Commitment letter 6/25/04
 - ▶ Documented action plans in summary form

PSEG ASSESSMENTS SUBMITTED

5/21/04

- Synergy Cultural Assessment (Dec. 2003)
- USA Group Safety Culture Assessment (Mar. 2003)--DBLL SOER Review
- Independent Review by IAT (Feb.- May 2004)--interviews and overall review, included corporate
 - ▶ Results consistent with NRC inspections, assessments and special review
 - ▶ Very detailed results (≈ 200 pages docketed)
 - ▶ Includes stark, unvarnished verbiage
 - ▶ None found major safety issues but overall implications are negative about “organizational effectiveness” and SCWE

EXTERNAL STAKEHOLDER PERSPECTIVES

- Key Allegor -- revealed allegor status publicly in March; has ongoing civil suit against PSEG. Very frequent contact with NRC Region I. Allegor contends that extensive "records" and views of numerous station staff provide "irrefutable evidence" that corporate-driven production pressure has overshadowed safety; and plant should be shut down to fix equipment and other plant problems.
- UCS -- Increasing involvement over past several months -- advocates plant S/D, Order, or CAL. Considers problems to be the same as during extended shut down and watch list during 1990's.
- Unplug Salem -- small group consistently advocates S/D
- New Jersey -- very interested; supportive of NRC
- Congressional -- interest, but little direct involvement so far
- Financial -- recent strong interest including mtg attendance
- Media -- mostly local

PSEG ACTION PLANS

- PSEG letter recently submitted, summarizes plans. Licensee initiatives involve, in large measure, better execution of standard industry processes that PSEG has been trying to implement for several years.
- PSEG focus areas: SCWE, CAP, Work Management, Leadership Effectiveness, Facilities (detailed plans ECD July 31, 2004)
- PSEG intends to pursue action plans thru Business Plan
- Recent emphasis: conservative decisions and communications. Expanded outage scope to fix more equipment.
- Commitments:
 - ▶ Submit Key metrics (SCWE and SCWE drivers)
 - ▶ SCWE and Safety Culture Survey after the HC outage, submit and meet with NRC early 2005
 - ▶ Survey for five years
- Assessment of effectiveness to be part of normal line management processes

REGULATORY OVERSIGHT -- PRINCIPLES

- Provide appropriate safety perspective and attention
- Understand that these issues will take some time to address. Recognize that things could get worse before improving
 - Need to assure PSEG has long term focus
- Look for effectiveness of efforts vs. merely completing action items
- Capture commitments and performance measures while avoiding “over-constraining” licensee processes.
- Recognize that metrics can be helpful but cannot become the sole measure of effectiveness

REGULATORY OVERSIGHT -- PRINCIPLES (cont.)

- Recognize that “organization effectiveness” and equipment reliability problems are principal drivers of “soft” communications/SCWE issues
- Avoid open-ended process – have a clear exit strategy
- Needn’t satisfy all stakeholders, but NRC action should be logical and be clearly explained within context of ROP and other processes (SCWE policy and allegation process)

REGULATORY OPTIONS

ADDITIONAL PSEG COMMITMENT

Considering the need for additional PSEG commitments in several areas:

- Metrics submittal -- better coverage of equipment issues.
- Management meetings -- one this Fall, semiannually thereafter
- Additional effectiveness review -- without undercutting licensee management line processes, obtain agreement to repeat third-party assessment (e.g., USA review) covering more than work environment

REGULATORY OPTIONS -- MONITORING AND FOLLOW UP

- Continued overall strong inspection effort
 - ▶ Maintain resident staffing
 - ▶ Thorough special/supplemental inspections as needed
 - ▶ Management site visits
- Complete the allegations and investigations in progress
- Some combination of some of the following:
 - ▶ Site Visits (some with HQ assist)
 - ▶ Review PSEG assessment in more detail (probably not needed)
 - ▶ Review PSEG approach and method for future assessments (with HQ assist or lead)
 - ▶ Focused Inspection follow up of selected actions (with HQ assist)
 - ▶ Periodic management meetings (how often?)
 - ▶ SCWE x-cut in mid-cycle assessment (probably)
 - ▶ Deviation Memo (likely)
 - ▶ Oversight panel – to coordinate HQ and RI activities
 - ▶ Remove site from ROP due to corrective action weaknesses? (Not needed)

REGULATORY OPTIONS – REGULATORY “FOOTPRINT”

- Order
- CAL
- Letter Accepting Commitments
 - ▶ Possibly to include Oversight Panel and Deviation Memo