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Company

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**JUL 07 1997**  
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U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

**VENDOR DOCUMENT STATUS  
SALEM GENERATING STATION UNIT NO. 2  
DOCKET NO. 50-311**

Gentlemen:

On June 26, 1997 and July 2, 1997, representatives of Public Service Electric and Gas (PSE&G) discussed the status of vendor documents applicable to Salem Unit No. 2, with members of the NRC Restart Assessment Team Inspection (RATI) team. Specifically, vendor documents were characterized according to their applicability to Salem Unit No. 2 systems determined to be risk-significant by our Maintenance Rule program. During our discussion on June 26, 1997, we focused on those vendor documents whose revision levels were checked against an industry database, and may have implied the database included all of our vendor documents. As clarified in our July 2, 1997 conversation, we did not intend to imply that all vendor documents applicable to Salem Unit No. 2 are contained in the industry database. The purpose of this letter is to clarify the overall status of vendor documents applicable to Salem Unit No. 2, as shown in Attachment 1, Figure 1.

Attachment 1 documents the results of actions to prioritize and review Salem Unit No. 2 vendor documents. These measures are an extension of actions resulting from our restart self assessment of the vendor document control process. While we recognize that continued focus on our vendor document control program is necessary, it is important to consider vendor document control in the broader context of the key actions taken to assure that Salem Unit No. 2 is operated consistent with its design and licensing bases, including:

- Final Safety Analysis Report (FSAR) project, which included validation of FSAR parameters and attributes against controlled configuration drawings and documents, and vertical slice inspections of selected safety-significant systems
- System Readiness Review Program (SRRP), a comprehensive and systematic review of selected plant systems to support safe and reliable operation by identifying and correcting discrepant conditions including operability and design basis issues

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- Startup and Power Ascension Test Program, which includes component-level, system-level and integrated functional testing to validate that equipment will perform as designed following the extensive maintenance and modification activities performed during the extended outage.

These initiatives, which are further described in our submittal of May 28, 1997, "Readiness for Restart - An Overview of Key Initiatives," augment our ongoing programs (e.g., routine post-modification testing, Maintenance Rule implementation), to collectively assure equipment reliability is maintained commensurate with its safety function.

PSE&G is now aggressively contacting vendors and reviewing documentation as part of our vendor document control program. This program has contributed to the confidence that Salem Unit No. 2 will be a safe and reliable performer; however, our overall confidence is founded on the design and licensing basis reviews and component, system and integrated testing to validate proper functionality before equipment is placed in service.

Attachment 2 to this letter discusses a specific vendor document-related issue involving a diesel generator maintenance instruction. This issue was also previously discussed with members of the RATI team.

Sincerely,

A handwritten signature in black ink, appearing to read "E. C. Simpson". The signature is written in a cursive, flowing style with a large initial "E" and "S".

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## ATTACHMENT 1

### VENDOR DOCUMENT STATUS FOR SALEM UNIT NO. 2

#### BACKGROUND

NRC Generic Letter (GL) 90-03, "Relaxation of Staff Position in Generic Letter 83-28, Item 2.2 Part 2 Vendor Interface for Safety-Related Components," dated March 20, 1990, includes the NRC position regarding a vendor interface program:

- "(a) A program with the [Nuclear Steam System Supply] NSSS vendor as described in the [Vendor Equipment Technical Information Program] VETIP, which covers all the safety-related components within the NSSS scope of supply. This program should include provisions for assuring receipt by the licensee/applicant of all technical information provided by the NSSS vendor; and
- (b) A program of periodic contact with the vendors of other key safety related components not included in (a) above."

PSE&G's response to GL 90-03, dated January 9, 1991, stated that our program already met item (a) of the letter. The GL response included a commitment to contact all category (b) vendors on an annual basis.

Table 1 presents a timeline of significant actions taken in the area of vendor document control. In March 1996, a self-assessment of the vendor document control process was performed as part of the Engineering restart action plans. Key programmatic areas for improvement identified by this assessment were:

1. Improvement Area: Establish a vendor document process owner.  
Action/Results: A Vendor Engineering Group was established in January 1997, to centralize responsibility for vendor document control.
2. Improvement Area: Establish a baseline for vendor document information.  
Action/Results: Vendor documents in PSE&G's system were cataloged at the individual vendor document level and compared to an industry database. The results of this baseline effort relative to Salem Unit No. 2 are summarized below in the section titled "Current Status of Salem Unit No. 2 Vendor Documents."
3. Improvement Area: Establish a more rigorous vendor re-contact program from non-NSSS vendors and change the re-contact cycle from one to three years. The annual re-contact program in place at the time of the self-assessment resulted in poor vendor response and did not meet expectations.

ATTACHMENT 1

VENDOR DOCUMENT STATUS FOR SALEM UNIT NO. 2

Action/Results: A full three year re-contact cycle completed by PRC Engineering Systems, Inc. (PRC), on behalf of several licensees, showed an average annual vendor technical document revision rate of less than 5%. This re-contact involved 850 vendors and achieved a response rate of 98%. Experience with a three year re-contact cycle at other nuclear facilities (e.g., Palo Verde) shows that vendor responsiveness and quality of the information provided is better than that associated with the less rigorous annual re-contact program previously in use at PSE&G. Independent of the vendor re-contact program, the OE program provides a means of identifying and evaluating safety-significant issues involving vendor information (e.g., via 10CFR Part 21 notifications of substantial safety hazards, and NRC Information Notices). Therefore, the three year re-contact cycle is reasonable for satisfying the NRC position in GL 90-03 (the GL does not prescribe a re-contact periodicity), and the revised program represents a net improvement in control of vendor documentation. The change from an annual to triennial re-contact cycle represents a change to our commitment to GL 90-03. This change is being processed in accordance with our commitment change process, and is scheduled for submittal in our next NRC update on July 31, 1997.

In addition to the programmatic improvements summarized above, two specific restart-required actions were identified in the self-assessment:

1. Perform a sample of vendor re-contacts to provide a basis for Salem restart affirmation. A random selection of sixty-nine vendor documents applicable to safety-related equipment were reviewed against an industry database maintained by PRC. Seventeen of these documents were determined to be at the incorrect revision level. These 17 documents were further evaluated and determined to involve no technical issues critical to the operation of the affected equipment.
2. Screen unreviewed vendor documents and evaluate for potential safety-significant issues prior to restart. There were 2,710 vendor documents which had been received by PSE&G but not fully processed for incorporation into the document control system. One hundred and fourteen (114) of these documents were determined to potentially contain updated technical data. These 114 documents were evaluated against the restart screening criteria.<sup>1</sup> No restart-required discrepancies were contained in the documents evaluated.

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<sup>1</sup> An activity is "restart-required" if it resolves an issue involving operability, licensing/design basis compliance or an equipment reliability issue that would result in a plant transient, power derate or plant shutdown.

## ATTACHMENT 1

### VENDOR DOCUMENT STATUS FOR SALEM UNIT NO. 2

#### CURRENT STATUS OF SALEM UNIT NO. 2 VENDOR DOCUMENTS

PSE&G has characterized the vendor documents in the document control system as shown in Figure 1. The PSE&G vendor documents were compared to those contained in a database of vendor documents and revision levels maintained by PRC. As shown in Figure 1, approximately 5% of the documents applicable to Salem Unit No. 2 safety-related equipment contained in the PRC database, were found to be a later revision than shown in the PSE&G document control system. These documents have either been screened to determine the impact of the later revision on plant equipment, or have been requested from the vendor. Those documents which have been screened to date do not involve any significant impact on Salem Unit No. 2 equipment.

The vendor documents which did not match those on the PRC database were sorted to identify those applicable to the Salem Unit No. 2 risk-significant systems as determined by the Maintenance Rule program, listed in Table 2. As shown in Figure 1, there are approximately 635 vendor documents applicable to the Maintenance Rule risk-significant systems which were not contained in the PRC database. For approximately 96 of these documents, the vendor has specified that either the documents are not updated, or the original documentation should be used. For the remaining 539 documents, PSE&G is re-contacting the vendors on an expedited basis, prioritized according to the number of documents provided by each vendor.

#### CONCLUSIONS

Evaluations of vendor documents performed as a result of our restart self assessment to date, included a screening of unreviewed vendor documents and a sample of documents subjected to the vendor re-contact program. In addition a comparison of PSE&G documents to those contained in an industry database was performed as shown in Figure 1. These evaluations indicate that the majority of vendor documents are maintained current in the document control system, and the technical significance of out-of-revision documents is low. Although continued focus on vendor document control improvement is warranted, actions taken to date provide reasonable assurance that there are no significant issues associated with the vendor documents applicable to Salem Unit No. 2.

TABLE 1

CHRONOLOGY OF RECENT VENDOR DOCUMENT PROGRAM ACTIONS

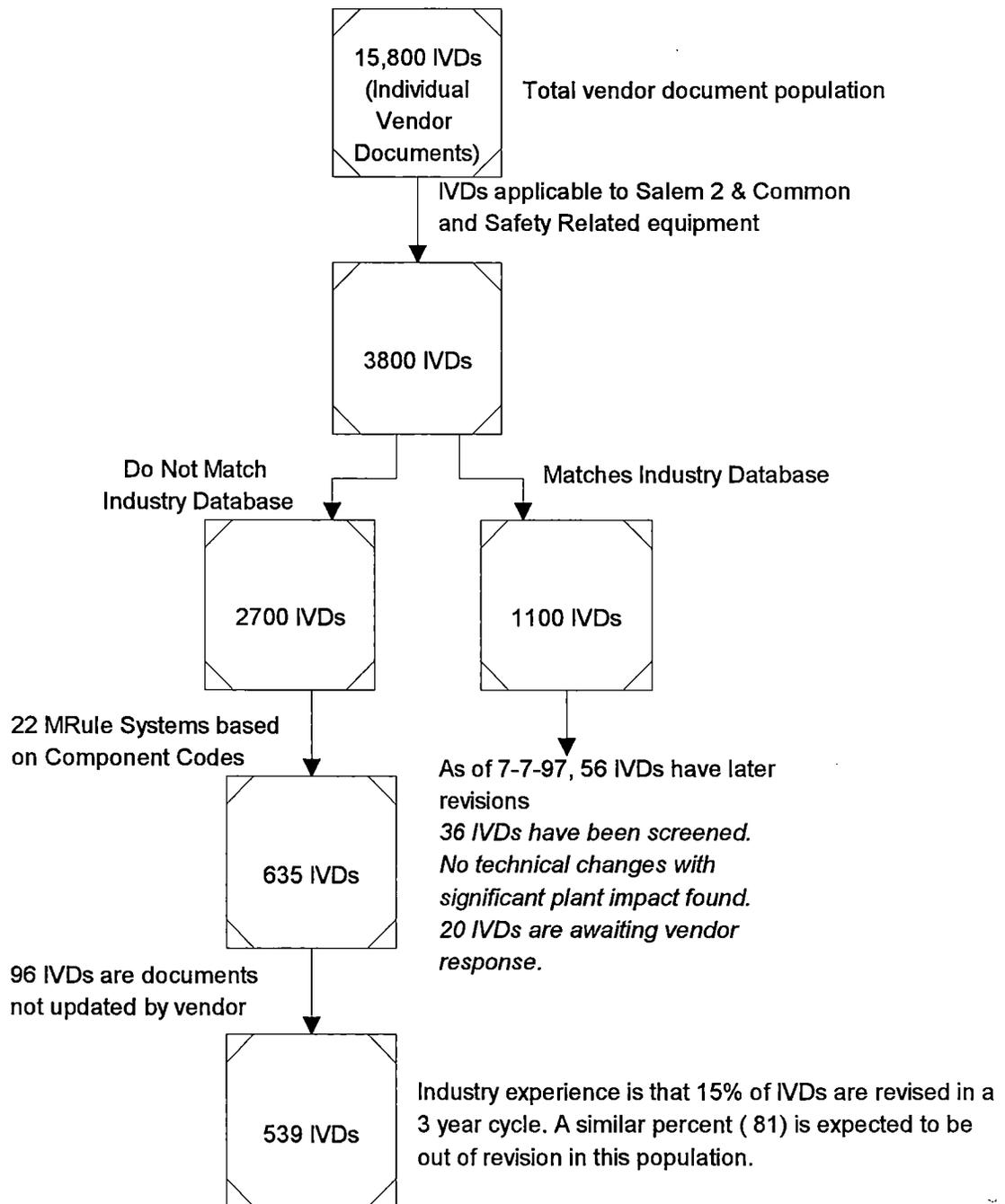
DATE	ACTIVITY
4/95	1. 254 letters sent to vendors requesting updated copies of technical documents. List of 254 vendors generated as part of PSE&G's commitment to GL 90-03.
1/96	2. Vendor Manual Program Assessment - Identifies areas required to strengthen the Vendor Contact and Document program. Recommendations rolled into Engineering Departmental Assessment (see item 3).
2/96	3. Hope Creek Tiger Team Screening - Reviewed unapproved HC vendor manuals for safety significant issues prior to end of sixth refueling outage. No issues found.
3/96	4. Engineering Departmental Assessment - Two restart-required activities associated with vendor document process identified, 1) perform sampling of vendor contacts, 2) perform review of unreviewed Salem vendor documents.
6/96-9/96	5. Baseline Project - Cataloging of vendor manuals to identify document revision levels in support of more rigorous vendor information program.
6/96	6. Sample Vendor Contacts - Small sample of vendor contacts performed based on comparison of initial baseline data with industry database. No critical changes to vendor information found. Supports changing GL 90-03 commitment to 3-year cycle.
8/96	7. Salem Backlog Screening - Review of unreviewed vendor manuals for possible safety significant issues. No critical changes to vendor information found.
8/96	8. Commitment change evaluation summary form developed in accordance with commitment change process. Current due date to NRC is 07/31/97.
11/96	9. Re-contact Program - Begins with comparison of baseline data to database of vendor documents common to the nuclear industry. Vendor contacts contracted to PRC Inc., demonstrated best in industry process utilized by multiple plants. (PRC Inc. Centralized Vendor Manual Service procedure - <i>Vendor Re-contact Program</i> , PTP-CVMS-1)
1/97 to present	10. Vendor Engineering Group Established 3 year re-contact process in place. Status shown in Figure 1.

**TABLE 2**

**MAINTENANCE RULE RISK-SIGNIFICANT SYSTEMS  
SALEM UNIT NO. 2**

115V AC  
125V DC  
230V AC  
460V AC  
4160V AC  
Auxiliary Building Ventilation  
Auxiliary Feedwater  
Control Air  
Control Area Air Conditioning and Ventilation  
Containment Building Ventilation  
Component Cooling Water  
Containment Spray  
Chemical and Volume Control System  
Diesel Generator  
Diesel Generator Ventilation  
Reactor Coolant  
Reactor Control and Protection  
Rod Control  
Residual Heat Removal  
Safeguard Equipment Control  
Safety Injection  
Service Water

# Vendor Document Characterization Process Flowchart (Approximate Values)



**FIGURE 1**

## ATTACHMENT 2

### INCOMPLETE PROCESSING OF DIESEL GENERATOR MAINTENANCE INSTRUCTION

PSE&G Public Service Blueprint (PSBP) 301103 contains the vendor documents for the ALCO diesel generators used at Salem Generating Station. A maintenance instruction (MI) revised by the ALCO owner's group by letter dated April 16, 1997, was added to PSBP 301103 without a complete review of the document for impact on Salem Generating Station. This condition has been documented in accordance with our corrective action program. Initial review of the revised MI indicates there is no adverse impact on prior performance of diesel generator maintenance.

In order to determine the extent of this condition, the following actions were performed.

1. A report was generated reflecting revisions to vendor documents received by Engineering Document Control from January 1, 1997 to June 24, 1997. This report reflected 101 manuals, including PSBP 301103. This time frame was chosen because it is considered to be a reasonable sample period and size, and it coincides with the establishment of the current Vendor Engineering Group and revised vendor document process. Use of this time frame provides an opportunity to assess the effectiveness of the new group and process.
2. Each vendor document in this report was researched to determine procedural compliance with NC.DE-AP.ZZ-0006 (Q), *Vendor Technical Document Control Program*, revision 9. Section 5.3 of this procedure directs the evaluator to perform a check for technical deviations between the existing and new revisions, focusing on the sections applicable to equipment specifications and maintenance.

### CONCLUSION

The review performed showed that 100 of the 101 Vendor documents received in 1997 were properly dispositioned. Based on the sample size and the fact that only one improperly addressed issue was identified, reasonable assurance is established that this condition is an isolated case. The process and the new vendor document group are deemed effective at this time.