Public Service
Electric and Gas
Company

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United States Nuclear Regulatcry Commission
Document Control Desk
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Gentlemen:

RESPONSE TO NOTICE OF VIOLATION
NRC INSPECTION REPORT NOS. 50-272 & 311/93-08 AND 50-354/93-06
SALEM AND HOPE CREEK GENERATING STATIONS
DOCKET NOS. 50-272, 50-311 AND 50-354

Public Service Electric and Gas Company (PSE&G) received the identified Inspection Report on May 6, 1993. This inspection transmitted a Notice of Violation citing failure to properly implement the requirements of 10CFR50.59 (b) (1).

Pursuant to the provisions of 10CFR2.201, PSE&G hereby submits its response to the Notice of Violation.

Should you have any questions on this transmittal, please contact us.

Sincerely,

Attachment

JE01 1/1

C Mr. T. T. Martin, Administrator - Region I
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ATTACHMENT

10CFR50.59 (B) (1) states, in part, that records of changes to the facility as described in the Updated Final Safety Analysis Report (UFSAR)"...must include a written safety evaluation which provides the basis for the determination that the change, test, or experiment does not involve an unreviewed safety question."

Contrary to the above, the licensee made the following changes to the facility as described in the UFSAR and did not provide written safety evaluations providing the basis for a determination that an unreviewed safety question was not involved.

1. Hope Creek Deficiency Report HTE 92-230 documented a use-as-is disposition for unqualified gauges in the gland seal portion of the High Pressure Coolant Injection (HPCI) system, including changing the normal position of the isolation valves for these gauges from open to closed, which changed the facility as described in UFSAR Figure 6.3.2 because it shows the gauges within the safety-related boundary and the isolation valves as being normally open.

2. Salem Unit 1 Temporary Modification TMR 92-031 provided temporary power from the 1C vital bus (normal power is from the 1B vital bus) to the Salem 1 No.12 Auxiliary Building Fan, which changed the facility as described in Tables 8.3-2, 8.3-3, and Figure 8.3-4A in the UFSAR.

3. Salem Unit 2 Temporary Modification TMR 92-043 installed a temporary blank flange in the Service Water system upstream of manual isolation valve 22SW414, which changed the facility as shown on Figure 9.2-1B in the UFSAR.

PUBLIC SERVICE ELECTRIC AND GAS COMPANY (PSE&G) DOES NOT DISPUTE THAT A VIOLATION OCCURRED. T-MOD TMR 92-031 does not comply with 10CFR50.59 requirements. PSE&G has concluded that the other two examples cited are in compliance with industry guidance, plant specific guidance, and 10CFR50.59 requirements.

As discussed during the inspection, we are in the process of revising our Administrative Procedure (NAP-59) on 10CFR50.59. We plan to review all of the inspector comments contained in the inspection report, to determine if additional clarification/guidance is appropriate. Any identified enhancements will be incorporated prior to procedure issuance.

We provide the following clarification and explanation for the three examples cited.

1. The originally installed pressure gauges needed replacement. PSE&G's Managed Maintenance Information System (MMIS) listed the subject pressure gauges as safety related, although the part number indicated non-safety related. The vendor (GE) was contacted in an attempt to procure safety related gauges. They stated that they do not make safety related gauges for that application. Non-safety related pressure gauges were installed to support system testing during the 4th refueling outage, and were left in-place. Hope Creek Deficiency Report (DR) 92-230 was written to address this issue. The DR was dispositioned use-as-is. The accompanying 10CFR50.59 applicability review determined that the gauges did not change the facility as described in the SAR.

   The violation indicates that these pressure gauges are safety related with normally open root valves, because they are physically shown within the safety related system boundary and the root valves utilize an open valve symbol. The Figure does not specifically state that the pressure gauges are safety related with normally open root valves. Figure 6.3-2 also indicates that these gauges are skid mounted components supplied by GE. In a letter from GE to PSE&G dated 8/12/92, GE confirmed that the entire gland seal assembly (including the pressure gauges) is classified non-safety related for the HPCI and RCIC systems.

   UFSAR Table 3.2-1 provides the Hope Creek classification of structures, systems and components. Section V.C.10 (note 10) describes the root valve/instrument sampling lines quality classification. The instrument lines for these gauges are not part of, or connected to, the Reactor Coolant Pressure Boundary (RCPB), and do not perform any safety system actuation functions. Thus, part 4c of note 10 applies, and instrumentation beyond the root valve is Quality Group D. Therefore, the UFSAR contains confusing information regarding the quality classification of these valves.

   The engineer who processed the 10CFR50.59 attempted to determine the original design intent for this portion of the system. Since GE specified non-safety related gauges for the original design of the system, the installed gauges supported the original system design. As discussed above, GE previously confirmed that the entire gland seal assembly is classified non-safety related.

   UFSAR Figure 6.3-2 contains Note 8 that states: "Root valves for non-Q pressure gage impulse lines connected to ASME Section III, Class 2 or Class 3 pipe on this P&ID shall remain in the open position only while being read by an operator. Otherwise, these valves shall remain in the closed position." Figure 6.3-2 does not indicate that this Note applies to the valve/gauge combinations in-question,

because the gauges were not identified on the Figure as non-Q. However, these valve/gauge combinations fit the description and intent of this Note and it should apply to them. A UFSAR change notice has been initiated to correct Figure 6.3.2.

The 10CFR50.59 applicability review for DR HTE 92-230 did not reference UFSAR Table 3.2-1 and its notes indicating that the subject gauges are Quality Group D (i.e., non-safety related). This omission may have hindered the stand alone capability of the 10CFR50.59 applicability review. The original 10CFR50.59 applicability review was revised to include a reference to UFSAR Table 3.2-1, and a statement indicating that Figure 6.3-2, Note 8 applies to these gauge root valves.

In conclusion, the correct UFSAR description (Table 3.2-1) indicates that these valves are non-safety related. This classification has been confirmed with the vendor. PSE&G's MMIS has been revised to indicate that these pressure gauges are non-safety related. Note 8 of UFSAR Figure 6.3-2 applies to these valve/gauge combinations. Thus, the normal position of the gauge root valves is closed except when taking readings. PSE&G concludes that the 10CFR50.59 applicability review correctly categorized the use of non-safety related gauges as no change to the facility as described in the SAR.

2. Salem Unit 1 Temporary Modification (T-Mod) TMR 92-031 provided temporary power from the 1C Vital Bus to 12 Auxiliary Building Supply Fan (normal power is from 1B Vital Bus). This T-Mod was similar to a previous T-Mod, TMR 92-005, which provided temporary power from the 1C Vital Bus to 12 Fuel Handling Building Exhaust Fan, No.1 Battery Room Exhaust Fan, and No.1 Radiation Monitor Sample Pump (normal power is from 1B Vital Bus).

   The same engineer processed both T-Mods. TMR 92-005 was evaluated as a change to the facility as described in the SAR; it received SORC review and approval. The author believed that TMR 92-031 involved the same issues and referenced the previous T-Mod (TMR 92-005) for a discussion of cable separation concerns. A copy of TMR 92-005 was attached to TMR 92-031. Since TMR 92-005 was SORC approved with no USQ identified, the author surmised that he could reference the previous T-Mod and disposition TMR 92-031 as no change to the facility as described in the SAR.

   This conclusion is clearly incorrect. Each 50.59 review must be independently completed.

3. Salem Unit 2 T-MOD TMR 92-043 installed a temporary blank flange in the Service Water (SW) system upstream of manual isolation valve 22SW414. The blank flange was used to support maintenance on the 22 SW return header from the Chiller Condensers.

21 SW header normally supplies 23 Chiller Condenser, with 22 SW header normally supplying 21 and 22 Chiller Condensers. To support maintenance on 22 SW return header, all three Chiller Condensers were supplied from 21 SW header. Manual isolation valve 22SW414 was closed to isolate the operating SW return header (21) from the maintenance SW return header (22). Maintenance personnel detected slight leakage through 22SW414 when work began on 22 return header. A blank was installed between existing break flanges, in series with 22SW414, to provide complete isolation.

No explicit NRC guidance presently exists regarding the implementation of 10CFR50.59. In the absence of specific NRC guidance on how to meet the requirements of 10CFR50.59, NUMARC and EPRI (through the Nuclear Safety Analysis Center) developed NSAC-125 "Guides for 10CFR50.59 Safety Evaluations," to provide guidance regarding the implementation of 10CFR50.59, the question of the nature of the "changes" to undergo a 10CFR50.59 safety evaluation (USQ determination) was addressed. That guidance was reviewed and commented upon by the NRC.

Our Administrative Procedure (NAP-59) associated with 10CFR50.59, was written to fully incorporate the guidance found in NSAC-125 and to more clearly define the detailed review required for both the 10CFR50.59 applicability review and safety evaluation. NSAC-125 states that "An important consideration is the necessity to distinguish changes from maintenance activities. Maintenance activities are not required to be reviewed under 10CFR50.59 except for those activities that require deviation from a SAR procedure, put the plant in a condition where it functions differently than described in the SAR, or might violate a Technical Specification."

As stated previously, the blank was added in support of 22 SW header maintenance. The blank did not change the function or operation of the SW system, it merely supplemented the closed isolation valve (22SW414) for SW header separation. The plant entered the Technical Specification Action Statement for the inoperable SW header. The Action Statement time limitation also applied to the duration of blank usage. The work order specified blank removal upon completion of maintenance. The SW system prior to the maintenance activity and after the maintenance activity remained unchanged.

PSE&G concludes that the 10CFR50.59 applicability review correctly categorized the blank as no change to the facility as described in the SAR. If the blank had been installed to the operating plant independent of maintenance, or if the blank had remained in the system after completing the maintenance activity, it would have changed the facility as described in the SAR and required a 10CFR50.59 safety evaluation.

Corrective Action Taken

T-MOD TMR-031 - The appropriate department manager counseled the author on the 50.59 process and stressed why his action was unacceptable. We conducted a review of previously completed 50.59s to identify any similar instances. The review concluded that this example was not safety significant and was an isolated incident involving one plant engineer. This incident will be discussed with all department engineers, to ensure they are aware of the requirements and management expectations.

Corrective Actions to Prevent Recurrence

The corrective actions taken above will prevent recurrence.

Status of Compliance

PSE&G is in full compliance. The discussion with department engineers will be completed by 6/30/93.