

Public Service
Electric and Gas
Company

Steven E. Miltenberger

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Vice President and Chief Nuclear Officer

August 8, 1988

NLR-N88089

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Gentlemen:

REQUEST FOR AMENDMENT
SALEM GENERATING STATION
UNIT NOS. 1 AND 2
FACILITY OPERATING LICENSE NOS. DPR-70 AND DPR-75
DOCKET NOS. 50-272 AND 50-311

In accordance with the requirements of 10 CFR 50.90, Public Service Electric and Gas Company (PSE&G) hereby transmits a request for amendment of Facility Operating Licenses DPR-70 and DPR-75 for Salem Unit Nos. 1 and 2. In accordance with the requirements of 10 CFR 170.21, a check for \$150.00 is enclosed. A copy of this request has been sent to the State of New Jersey as indicated below.

Consistent with the guidance provided in Generic Letter 87-09, dated June 4, 1987, this amendment revises Technical Specifications 3.0.4, 4.0.3, and 4.0.4 and the Bases Section for 3/4.0. The Generic Letter encouraged licensees to request changes consistent with the guidance provided therein. Our amendment request is therefore, deemed to be a Category 2 amendment.

Attachment 1 includes a description, justification, and significant hazards analysis for the proposed changes. Attachment 2 contains the technical specification pages revised with pen and ink changes. Attachment 3 contains the technical specification pages with the changes incorporated. Attachment 4 encloses the revised Bases Section for 3/4.0.

This submittal includes one (1) signed original, including affidavit, and thirty-seven (37) copies pursuant to 10 CFR 50.4(b)(2)(ii).

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These changes will increase the clarity and flexibility of the Salem Technical Specifications, especially during mode changes. Therefore, PSE&G requests approval of these changes prior to the next Salem Unit 1 refueling outage, currently scheduled in April 1989. We are prepared to discuss any questions you may have in this regard. Please do not hesitate to contact us.

Sincerely,



Attachments

- C Mr. D. C. Fischer
USNRC Licensing Project Manager

- Mr. R. W. Borchardt
USNRC Senior Resident Inspector

- Mr. W. T. Russell, Administrator
USNRC Region I

- Mr. D. M. Scott, Chief
Bureau of Nuclear Engineering
Department of Environmental Protection
380 Scotch Road
Trenton, NJ 08628

Ref: LCR 88-06

STATE OF NEW JERSEY)
) SS.
COUNTY OF SALEM)

Steven E. Miltenberger, being duly sworn according to law deposes and says:

I am Vice President and Chief Nuclear Officer of Public Service Electric and Gas Company, and as such, I find the matters set forth in our letter dated August 8, 1988 , concerning Facility Operating Licenses DPR-70 and DPR-75 for Salem Generating Station, are true to the best of my knowledge, information and belief.



Subscribed and Sworn to before me
this 8th day of August, 1988


Notary Public of New Jersey

EILEEN M. OCHS
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires July 16, 1992

My Commission expires on _____

ATTACHMENT 1

I. DESCRIPTION OF CHANGE

In accordance with the guidance provided by NRC Generic Letter 87-09, this amendment would:

- Revise, as described below and as delineated on the attached pages, the general requirements on the applicability of Limiting Conditions for Operation and Surveillance Requirements in Sections 3.0.4, 4.0.3 and 4.0.4 of the Salem Generating Station Unit No.1 and Unit No. 2 Technical Specifications; and,
- Update the Bases Section to reflect the modifications made to the above sections and to incorporate, as well, NRC proposed improvements to the bases for unchanged portions of Sections 3.0 and 4.0.

Specification 3.0.4 should be revised to read as follows:

"3.0.4 Entry into an OPERATIONAL MODE of other specified condition shall not be made when the conditions of the Limiting Condition for Operation are not met and the associated ACTION requires a shutdown (entrance into a lower OPERATIONAL MODE) if they are not met within a specified time interval. Entry into an OPERATIONAL MODE or specified condition may be made in accordance with ACTION requirements when conformance to them permits continued operation of the facility for an unlimited period of time. This provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION requirements. Exceptions to these requirements are stated in the individual specifications."

Specification 4.0.3 should be revised to read as follows:

"4.0.3 Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.2, shall constitute a failure to meet the OPERABILITY requirements for a Limiting Condition for Operation. The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours. Surveillance Requirements do not have to be performed on inoperable equipment."

Specification 4.0.4 should be revised by the addition of the following statement at the end of the existing specification:

"This provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION requirements."

II. REASON FOR CHANGE

NRC Generic Letter 87-09 provides resolution of several specific problems that have been encountered with the applicability of Limiting Conditions for Operation and Surveillance Requirements in Standard Technical Specifications Sections 3.0. and 4.0. In the Generic Letter, the NRC encourages licensees and applicants to propose changes to their Technical Specifications (TS) consistent with the guidance provided in the letter. The suggested modifications have been reviewed by PSE&G and are an improvement to the Salem Generating Station TS. The requested changes are consistent with the guidance provided in the Generic Letter.

III. SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS

Specification 3.0.4

In 10 CFR 50.36, the definition of a Limiting Condition for Operation (LCO) is given as the lowest functional capability or performance level of equipment required for safe operation of the facility. Additionally, it is stated that when an LCO is not met, the licensee shall shut down the reactor or follow any remedial ACTION permitted by the Technical Specification (TS) until the LCO can be met.

The TS include two basic types of ACTION Requirements that are applicable when an LCO is not met. The first specifies remedial actions that will permit continued operation of the facility for an unlimited period of time. Conformance to this type of ACTION Requirement provides an acceptable level of safety as long as the remedial ACTION Requirements are met. The second ACTION Requirement specifies a period of time during which operation may continue while an inoperable component or system is restored to operable status or a parameter is restored to within acceptable limits. In this case, the LCO must be met in the specified time limit or action must be taken to shut down the facility by placing it in a condition in which the LCO does not apply.

Specification 3.0.4 states that entry into an OPERATIONAL MODE shall not be made unless the LCO is met without reliance on the provisions of the ACTION Requirements, even when the ACTION Requirements, if met, would permit continued operation of the facility in a higher MODE for an unlimited time.

As stated in Generic Letter 87-09, many of the individual specifications that have ACTION requirements that allow continued operation also note that Specification 3.0.4 does not apply. However, the exceptions to Specification 3.0.4 have been inconsistently applied and their bases are not well documented.

Since conformance to these types of ACTION Requirements establishes an acceptable level of safety for unlimited continued operation of the units, there is no significant increase in the probability or consequences of any previously evaluated accident or malfunction of equipment important to safety for the proposed change to TS 3.0.4

Specification 4.0.3

Since the vast majority of surveillances demonstrate that systems or components are OPERABLE, it is overly conservative to assume that a system or component is inoperable solely because a surveillance requirement has not been performed. When a surveillance is missed, it is primarily a question of unverified operability which can be demonstrated by performance of the specified surveillance whereas the present TS 4.0.3 assumes immediate equipment inoperability. Since the allowable outage time limits of some Action Requirements do not provide an appropriate time limit for performing a missed surveillance before shutdown requirements may apply, a time limit which includes a delay of 24 hours is proposed as an acceptable period in which to complete a missed surveillance.

The 24 hour period, provided in the guidance in Generic Letter 87-09, balances the risks associated with allowing continued operation during the completion of the missed surveillance against the risks associated with the potential for a plant upset and challenge to safety systems when the alternative is a plant shutdown to comply with Action Requirements before the surveillance can be completed. There is no significant increase in the probability or consequences of any previously evaluated accident or malfunction of equipment important to safety due to this proposed change.

Specification 4.0.4

The present specification prohibits entry into a MODE when Surveillance Requirements have not been met for that MODE. Conformance with this TS can conflict with Action Requirements that require a change in MODES when Surveillance Requirements that were not applicable in the previous MODE become applicable and have not been performed in the required time interval. The potential for a plant upset and challenge of safety systems is heightened when surveillances are performed during a plant shutdown solely to comply with Action Requirements. Allowing passage through or to a MODE required by an Action Requirement as proposed in this change will not significantly increase the probability or consequences of any previously evaluated accident or malfunction of equipment important to safety.

The proposed changes to TS 3.0.4, 4.0.3 and 4.0.4 do not create the possibility of a new or different kind of accident from any previously evaluated because there is no change to existing plant equipment, procedures, or operating parameters caused by these changes.

These proposed changes do not involve a significant reduction in any margin of safety. Conversely, they:

1. Provide for a consistent application of exceptions to Specification 3.0.4,
2. Clarify the applicability of Action Requirements wherein the present Specification 4.0.3 would cause unnecessary plant shutdowns when surveillance intervals are inadvertently exceeded, specify a time limit concluded by the NRC staff to be acceptable for completing a missed surveillance under certain circumstances, and clarify when a missed surveillance constitutes a violation of the Operability Requirements of an LCO, and,
3. Eliminate potential conflict between Technical Specifications 4.0.3 and 4.0.4.

Therefore, the potential for unnecessary shutdowns, delayed startups, plant upsets and challenges to safety systems will be reduced by implementation of the proposed changes.

Based on the above, these proposed changes do not involve a Significant Hazards Consideration.

IV. DIFFERENCES FROM GENERIC LETTER GUIDANCE

Generic Letter 87-09 and its enclosures provided guidance and model specifications of 3/4.0 and its Bases. While still clearly meeting the intent of the letter, these requested changes differ from the Generic Letter (GL) in four instances. These instances are described and justified in the following.

1. Specification 3.0.4 was modified to allow entry into a mode while relying on an Action Statement with no shutdown requirements. Consequently, GL 87-09 states that Action Statements permitting continued operation no longer need exemptions from 3.0.4. Therefore these exemptions should be removed from individual specifications to avoid confusion. However, most "open ended" Action Statements with 3.0.4 exemptions still require that some definitive action be taken in a specified time. Prior to this action being completed, an operator may change modes based on the reasonable assumption that the action would be completed on time. But

if the action was not completed on time after a MODE change, then a violation of 3.0.4 occurred since neither the LCO nor Action Statement was satisfied. This violation of 3.0.4 is in addition to the violation of the given Action Statement.

An example will clarify this point. Salem Unit 2 Specification 3.3.3.9 (Radioactive Gaseous Effluent Monitoring Instrumentation) states that 3.0.4 is not applicable. Action Statement 33 is open ended in that it allows continuous operation with an inoperable noble gas activity monitor if a grab sample is taken at least once per 8 hours. This LCO is applicable at all times. If a MODE change is made while in this Action Statement, and subsequently the grab sample is not taken in 8 hours, then a violation of 3.0.4 and Action Statement 33 has taken place. However, if the exemption to 3.0.4 is left in Specification 3.3.3.9, then 3.0.4 has not been violated since it is not applicable. To negate the potential for violating 3.0.4 where an exemption is already given, the exemptions from 3.0.4 are not being removed. This is consistent with the intent of GL 87-09 as the letter specifically states that "it is not the staff's intent that the revision of Specification 3.0.4 should result in more restrictive requirements for individual specifications."

2. GL 87-09 provided a model Bases in Enclosure 3. The Bases for Specification 4.0.3 states that the 24 hour allowance provides an adequate time limit to complete Surveillance Requirements that have not been performed. The Bases further states on page B 3/4.0-5 that "This provision also provides a time limit for the completion of Surveillance Requirements that become applicable as a consequence of MODE changes imposed by ACTION requirements and for completing Surveillance Requirements that are applicable when an exception to the requirements of 4.0.4 is allowed." The underlined portion of this sentence has been deleted from our Bases section submittal because it imposes an additional time restraint on certain specifications where 4.0.4 is exempted. The exemption from 4.0.4 allows surveillances to be performed after entry into a MODE where the LCO is applicable. This sentence interprets the 24 hour delay of 4.0.3 to be the time limit to perform surveillances that become applicable after entry into a MODE where 4.0.4 is exempted. In a number of specifications, certain surveillances cannot be performed until a given condition is attained. During normal plant startup this condition is not always reached within a 24 hour time limit. Since the underlined statement would categorically impose this 24 hour time limit, it has been deleted.

An example of this situation for the Salem Unit 2 Technical Specifications follows. Surveillance Requirement 4.7.1.2.a.2 requires that the turbine driven auxiliary feedwater pump be demonstrated operable by verifying a discharge pressure of 1500 psig on recirculation flow when the secondary steam supply pressure is greater than 750 psig. The provisions of

4.0.4 are stated to be not applicable. Upon entry into MODE 3 the above Bases sentence would interpret the 24 hour delay as being a time limit to perform this surveillance. However, the secondary steam supply pressure may not reach 750 psig in 24 hours because of other testing, such as main steam line isolation valve testing in MODE 3. The situation also could exist for Surveillances 4.3.4.2 (Turbine Overspeed Protection) and 4.2.3.2 (RCS Flow Rate).

One reason GL 87-09 added the 24 hour time limit was to prohibit 4.0.4 from delaying a shutdown required by ACTION requirements. Its intent was not to impose a new requirement that all surveillances exempted from 4.0.4 be performed within 24 hours. This modification is therefore consistent with the guidance given in GL 87-09.

3. Specification 3.0.4 states that "Entry into an OPERATIONAL MODE or other specified condition shall not be made when the conditions of the LCO are not met and the associated ACTION requires a shutdown if they are not met within a specified time interval." Our submittal adds the phrase "entrance into a lower OPERATIONAL MODE" in parenthesis after the word "shutdown". This statement provides clarification to ensure that the word "shutdown" is not associated only with modes containing this word.
4. Page B 3/4.0-6 of the Bases section states that "When a shutdown is required to comply with ACTION requirements, the provisions of specification 4.0.4 do not apply because this would delay placing the facility in a lower MODE of operation." The word "because" has been replaced with the word "when" since not all ACTION requirements would delay placing the facility in a lower MODE. Many surveillances can be performed without delaying a shutdown. This change is also simply a clarification.

ATTACHMENT 2