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Nuclear Business Unit

OCT 27 1995

LR-N95178

LCR 95-23

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

Gentlemen:

SUPPLEMENT TO LICENSE CHANGE REQUEST 95-23
REVISION OF SURVEILLANCE 4.8.1.1.2
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NPF-57
DOCKET NO. 50-354

This letter transmits revised Technical Specification pages for Public Service Electric & Gas Company's (PSE&G) License Change Request (LCR) 95-23 (ref. LR-N95173 dated October 7, 1995).

The original submittal proposed a change to the Hope Creek Technical Specifications (TSS) associated with Emergency Diesel Generators (EDGs) to eliminate the voltage and frequency bands currently specified to be met for the unloaded start time testing and replaces these with minimum values. These revised pages are being submitted to provide further clarification on any need to ensure stabilization of voltage and frequency within ten seconds, as discussed with the NRC staff.

The proposed change submitted October 7, 1995, to surveillance requirements 4.8.1.1.2.a.4, 4.8.1.1.2.h.5, 4.8.1.1.2.k.1 and 4.8.1.1.2.k.2 contained a testing requirement that read:

"The generator voltage and frequency shall attain \geq 3950 volts and \geq 58.8 Hz within 10 seconds after receipt of the start signal"

Because the General Electric Standard Technical Specifications (NUREG 1433, Rev 1) has wording that could be misinterpreted to mean that timing must include stabilizing in the band within 10 seconds for unloaded starts, PSE&G elected not to use the wording of the NUREG. Pursuant to conversations with the NRC Staff, PSE&G was informed that the present wording is to be changed in Revision 2 of NUREG 1433 and that the new wording is intended to address this generic interpretive concern. The revised wording is consistent with proposed changes to NUREG 1433.

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The power is in your hands.

The proposed surveillances should be changed as follows:

For 4.8.1.1.2.a.4; Monthly Surveillance (Insert A)

"Verify each diesel generator starts from standby conditions and achieves ≥ 3950 volts and ≥ 58.8 Hz in ≤ 10 seconds after receipt of the start signal, and subsequently achieves steady state voltage of 4160 ± 420 volts and frequency of 60 ± 1.2 Hz."

For 4.8.1.1.2.h.5; ECCS with Offsite Power Available and 4.8.1.1.2.k.1; 24 Hour Endurance Run (Insert B)

"The diesel generator shall achieve ≥ 3950 volts and ≥ 58.8 Hz in ≤ 10 seconds following receipt of the start signal and subsequently achieve steady state voltage of 4160 ± 420 volts and frequency of 60 ± 1.2 Hz."

For 4.8.1.1.2.k.2; Hot Restart After 24 Hour Run (Insert C)

"Verify each diesel generator starts and achieves ≥ 3950 volts and ≥ 58.8 Hz in ≤ 10 seconds after receipt of the start signal, and subsequently achieves steady state voltage of 4160 ± 420 volts and frequency of 60 ± 1.2 Hz."

For Bases 3/4.8.1, 3/4.8.2 and 3/4.8.3; A.C Sources, D.C. Sources and Onsite Distribution Systems (Insert D)

Add the following:

"The minimum voltage and frequency stated in the Surveillance Requirements (SRs) are those necessary to ensure the EDG can accept Design Basis Accident loading while maintaining acceptable voltage and frequency levels. Stable operation at the nominal voltage and frequency values is also essential to establishing EDG OPERABILITY, but a time constraint is not imposed. This is because a typical EDG will experience a period of voltage and frequency oscillations prior to reaching steady state operation if these oscillations are not dampened out by load application. This period may extend beyond the 10 second acceptance criteria and could be a cause for failing the SR (for example if a significant negative trend develops). In lieu of a time constraint in the SR, PSE&G will monitor and trend the actual time to reach steady state operation as a means of ensuring there is no voltage regulator or governor degradation which could cause an EDG to become inoperable."

By adopting the NUREG wording, it should be noted that there are three differences between the originally proposed TS change and our currently proposed TS (that have been discussed with the NRC staff). The acceptability of these differences is discussed as follows:

- In TS 4.8.1.1.2.a.4, the timing to 514 rpm is being deleted. This is consistent with NUREG 1433, Rev 1 and is consistent with Hope Creek's UFSAR. Section 8.3 of the UFSAR describes the diesel generator as "reaching rated voltage and frequency in 10 seconds"; with no mention of engine speed. Since engine speed and generator frequency are directly proportional, it can be concluded that it is only necessary to monitor one of these parameters, in addition to voltage, to ensure a successful EDG start.
- The word "ambient" is no longer used to describe the pre-test configuration of the EDG. The word "standby" is used to avoid confusion with the intent of the pre-test configuration of the EDG. In addition, the reference to "ambient start" and the word "other" has been deleted from the (*) footnote such that all planned starts may be preceded by a pre-lube. This is consistent with NUREG 1433, Rev 1.

There is no evidence that the engine start (for accident mitigation) would be unsuccessful without pre-lube as long as the periodic testing has been successful (albeit with pre-lube). In addition, by deleting the "dry starts", engine longevity, reliability and performance are enhanced.

- For the # footnote on pages 3/4 8-6 and 3/4 8-9 the word "must" is being replaced with "may". The intent of this footnote is to allow loading in accordance with the manufacturer's recommendations; not to require loading each time the engine is started.

The intent of our original submittal was to ensure TS wording was such that operability of the EDGs would be adequately demonstrated by performance of the required surveillances. The revised wording is consistent with the intent of the original submittal and does not change the conclusion reached in the previously submitted significant safety hazard analysis.

Marked up TS pages denoting these changes are included in Attachment 1.

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Should you have any questions regarding this request, we will be pleased to discuss them with you.

Sincerely,

A handwritten signature in cursive script, appearing to read "J. A. Benjamin".

J. A. Benjamin
Director -
QA/Nuclear Safety Review

Attachment

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