Luminant Pre-Application Meeting

Agenda

Tim Hope, Mgr, Nuclear Licensing	Introductions
Rob Slough, Consulting Licensing Analyst	Current TS 3.8.1 and Proposed SR Changes
Jim Andrachek, Westinghouse	Evaluation Methodology
NRC Staff	Questions/Feedback
Tim Hope, Mgr, Nuclear Licensing	Closing remarks/summary

Need for the Proposed Changes

- During several Component Design Basis Inspections (CDBIs), NRC Inspectors have questioned whether the impacts of the allowable tolerances in DG frequency and voltage have been evaluated with respect to ECCS performance.

- Issue raised at Comanche Peak during CDBIs in 2010 and 2013, documented in Inspection Reports 2010-006 and 2013-007.

- The PWROG developed a methodology to generically address the issue and requested that the NRC recognize that a licensee awaiting NRC approval of the methodology is taking timely corrective action. NRC stated that they do not agree, and that licensees should not wait for approval to take corrective action.

Summary of Proposed Changes

1. The proposed changes would revise Technical Specifications (TS) 3.8.1, "AC Sources - Operating," Surveillance Requirements (SRs) related to Diesel Generator (DG) voltage (V), and frequency (Hz) to:
   - Specify a nominal voltage and frequency in SR 3.8.1.2
   - Increase the steady state lower voltage limit and narrow (i.e., reduce) the steady state frequency range specified in SRs:

3.8.1.7	3.8.1.15
3.8.1.11	3.8.1.19
3.8.1.12	3.8.1.20

2. The note in SR 3.8.1.13 will be deleted as it contains out-of-date information for Unit 2 that no longer applies to the SR.

Proposed SR Changes

	Current Limits	Proposed Limits
Voltage	≥ 6480 – ≤ 7150 V	≥ 6555 – ≤ 7150 V
Frequency	≥ 58.8 – ≤ 61.2 Hz	≥ 59.4 – ≤ 60.6 Hz

Benefit of Proposed Changes

The proposed changes will ensure that the effect of variations in EDG steady state voltage and frequency, associated with the EDG voltage regulator and governor, on the equipment powered by the EDGs has been evaluated to ensure that the equipment will continue to perform their specified safety functions.

Precedents

- On April 11, 2013, the NRC issued Amendment No. 224, Docket No. 50-361, to Wolf Creek Generating Station Unit No. 1. The amendment revised the TS 3.8.1, "AC Sources -Operating, Surveillance Requirements related to diesel generator test loads, voltage, and frequency. (ML13077A147)

- On October 21, 2014, the NRC issued Amendment No. 307, Docket Nos. 50-317 and 50-318, to Calvert Cliffs Nuclear Power Plant Unit Nos. 1 and 2. The amendment revised the TS 3.8.1, "AC Sources - Operating, Surveillance Requirement (SR) 3.8.1.17 and modified SRS 3.8.1.8, 3.8.1.11, and 3.8.2.1. The revisions were related to diesel generator (DG) testing duration, loading requirements, and frequency of DG sequencer testing. (ML14280A522)

Schedule

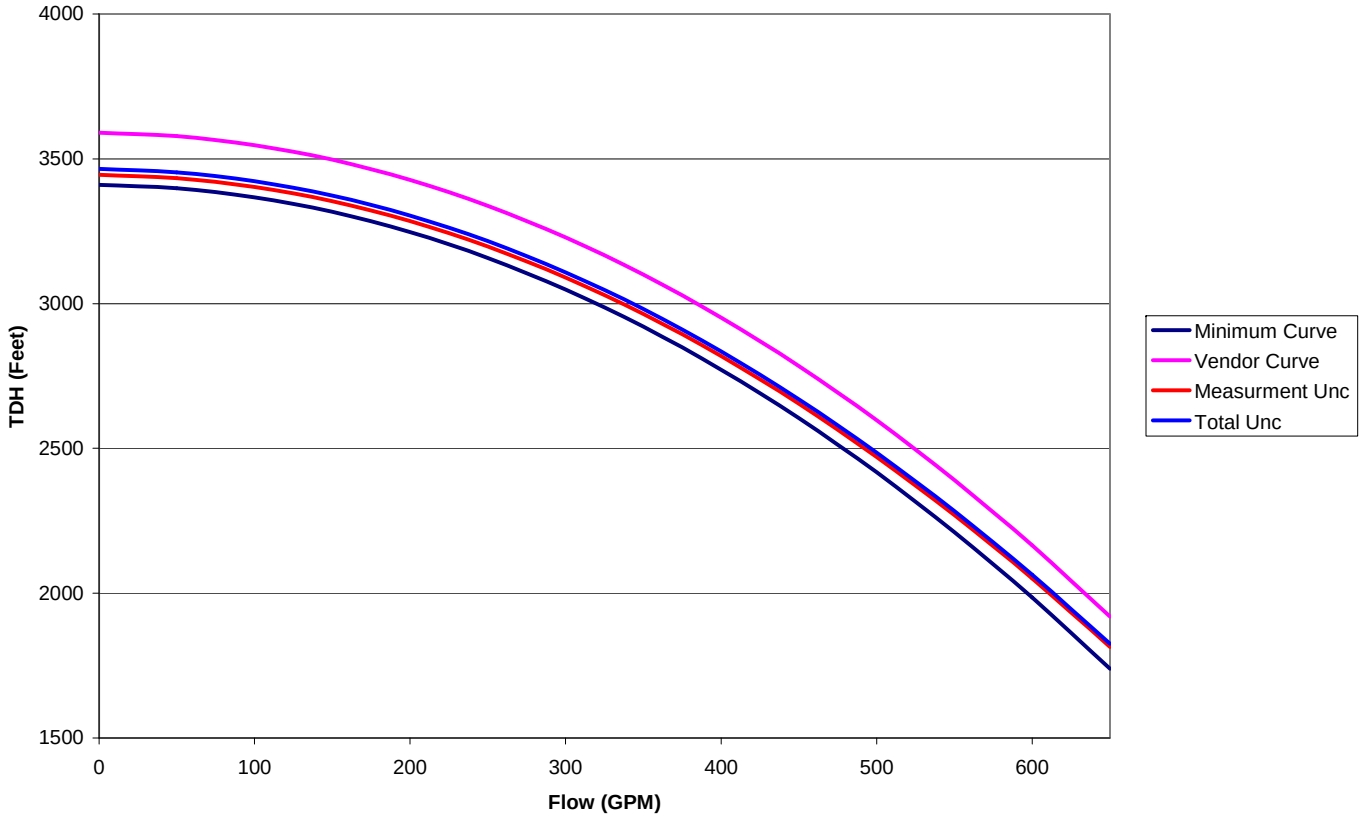
Luminant Power expects to submit LAR 15-001 for Staff review by August 31, 2015, to be implemented no later than 120 days after issuance of the License Amendment.

Description of Methodology

1. Determine the affect of EDG steady-state frequency and voltage tolerances associated with the governor and voltage regulator on:
   - Essential motor loads such as:
     - Emergency Core Cooling System (ECCS) pumps,
     - Motor-operated valves (MOVs),
     - Fans and blowers credited in the dose consequence analyses, consistent with the Ventilation Filter Testing Program.
   - EDG loading calculations
   - EDG fuel oil consumption calculations
2. Combine the frequency and voltage tolerances with other uncertainties to revise the pump inservice test (IST) curves to account for these tolerances.
3. Revise the affected SRs to include the frequency and voltage tolerances and ensure that the EDG operates within the specified tolerance bands.

Example of the Methodology to Adjust the Pump IST Curves

Figure 5



Questions? Feedback?