

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.8.1.6 Verify the fuel oil transfer system operates to transfer fuel oil from storage tank to the day tank.	31 days
SR 3.8.1.7 -----NOTE----- All DG starts may be preceded by an engine prelube period. ----- Verify each DG starts from standby condition and achieves, in ≤ 10 seconds, voltage $\geq 3744V$ and $\leq 4576V$ and frequency $\geq 59.5Hz$ and $\leq 60.5Hz$.	184 days
SR 3.8.1.8 -----NOTE----- This Surveillance shall not be performed in MODE 1 or 2. However, credit may be taken for unplanned events that satisfy this SR. ----- Verify automatic slow transfer of AC power supply from the Startup Transformer to the Standby Transformer.	24 months

(continued)

- a. in ≤ 10 seconds, voltage $\geq 3744V$ and frequency $\geq 59.5 Hz$; and
- b. steady state voltage $\geq 3744V$ and $\leq 4576 V$ and frequency $\geq 59.5Hz$ and $\leq 60.5Hz$.

BASES

SURVEILLANCE
REQUIREMENTS

SR 3.8.1.2 and SR 3.8.1.7 (continued)

After completion of the SR, the fuel racks to the DG are disabled to allow purging of any residual fuel oil from the cylinders. This also renders the DG inoperable. The two hours allowed by the Note minimizes the amount of time a DG is inoperable while providing enough time to perform the required Conditional Surveillance and avoids entering the shutdown actions of Condition E or F unnecessarily.

For the purposes of this testing, the DGs are manually started from standby conditions. Standby conditions for a DG mean that the diesel engine coolant and oil are being continuously circulated and temperature is being maintained consistent with manufacturer recommendations.

In order to reduce stress and wear on diesel engines during testing, the manufacturer of the DGs installed at the DAEC recommends a modified start in which the starting speed of the DG is limited, warmup is limited to this lower speed, and the DGs are gradually accelerated to synchronous speed prior to loading. These start procedures are the intent of Note 2 (SR 3.8.1.2).

and achieves steady state voltage $\geq 3744V$ and $\leq 4576V$ and frequency $\geq 59.5 Hz$ and $\leq 60.5 Hz$.

SR 3.8.1.7 requires that, at a 184 day Frequency, the DG starts from standby conditions and achieves required voltage and frequency (i.e. - voltage $\geq 3744 V$ and $\leq 4576 V$ and frequency $\geq 59.5 Hz$ and $\leq 60.5 Hz$) within 10 seconds; The 10 second start requirement supports the assumptions in the design basis LOCA analysis of UFSAR, Section 6.3 (Ref. 12) and DAEC SAFER/GESTR LOCA Analysis, NEDC-31310P (Ref. 15). The 10 second start requirement is not applicable to SR 3.8.1.2 (see Note 3 of SR 3.8.1.2), when a modified start procedure as described above is used. If a modified start is not used, the 10 second start requirement of SR 3.8.1.7 applies. ↑

The normal 31 day Frequency for SR 3.8.1.2 is consistent with Safety Guide 9. The 184 day Frequency for SR 3.8.1.7 is a reduction in cold testing consistent with Generic Letter 84-15 (Ref. 7). These Frequencies provide adequate assurance of DG OPERABILITY, while minimizing degradation resulting from testing.

In addition to the SR requirements, the time for the DG to reach steady state operation, unless the modified DG start method is employed, is periodically monitored and the trend evaluated to identify degradation of governor and voltage regulator performance.

(continued)

SAFETY ASSESSMENT

By letter dated January 22, 1999, IES Utilities Inc. submitted a request for revision of the Technical Specifications for the Duane Arnold Energy Center (DAEC). The proposed change is consistent with NRC-approved Revision 2 to Traveler TSTF-163 for the Improved Standard Technical Specifications for General Electric BWR/4 plants (NUREG-1433).

Evaluation:

This proposed change revises surveillance requirement SR 3.8.1.7 to better match plant conditions during testing. This surveillance test is performed with the DG unloaded, so that the DG initially over-shoots its target nominal voltage and frequency during testing. In an actual event, the DG would be almost immediately loaded once minimum voltage and frequency requirements are met, thereby limiting the over-shoot. The revision changes the SR 3.8.1.7 criteria to clarify which voltage and frequency limits are applicable during the transient and steady state portions of the DG start.

The revised test criteria are a better match for the tested condition (unloaded). The Loss of Offsite Power - Loss of Coolant Accident (LOOP-LOCA) test will still be performed to demonstrate DG operability in conditions which are more representative of accident conditions (loaded in the actual time sequence for loading).

This change does not affect the DG's ability to supply the minimum voltage and frequency required within 10 seconds or the steady state voltage and frequency required by the UFSAR analysis. The DGs will continue to perform their intended safety function, in accordance with the DAEC accident analysis.

Therefore, we have concluded that the proposed revision to the DAEC Technical Specifications is acceptable.

ENVIRONMENTAL CONSIDERATION

10 CFR Section 51.22(c)(9) identifies certain licensing and regulatory actions which are eligible for categorical exclusion from the requirement to perform an environmental assessment. A proposed amendment to an operating license for a facility requires no environmental assessment if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant hazards consideration; (2) result in a significant change in the types or significant increase in the amounts of any effluents that may be released offsite; and (3) result in a significant increase in individual or cumulative occupational radiation exposure. IES Utilities Inc. has reviewed this request and determined that the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(9). Pursuant to 10 CFR Section 51.22(b), no environmental impact statement or environmental assessment needs to be prepared in connection with the issuance of the amendment. The basis for this determination follows:

Basis

The change meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(9) for the following reasons:

1. As demonstrated in Attachment 1 to this letter, the proposed amendment does not involve a significant hazards consideration.
2. There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite. The proposed change is consistent with NRC-approved Revision 2 to Traveler TSTF-163 for the Improved Standard Technical Specifications for General Electric BWR/4 plants (NUREG-1433). This change affects DG testing criteria only and will not affect either the amount or type of effluents normally released from the plant.
3. There is no significant increase in individual or cumulative occupational radiation exposure. The proposed change is consistent with NRC-approved Revision 2 to Traveler TSTF-163 for the Improved Standard Technical Specifications for General Electric BWR/4 plants (NUREG-1433). This change affects DG testing criteria only and will not significantly affect either individual or cumulative occupational radiation exposure.