CP&L
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April 24, 1992

FILE: B09-13520

10CFR21

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT UNITS 1 AND 2
DOCKET NO. 50-325 AND 50-324
LICENSE NO. DPR-71 AND DPR-62
INITIAL NOTIFICATION OF A 10CFR21 REPORTABLE OCCURRENCE

On April 4, 1992, an inspection of the Emergency Diesel Generator (EDG) Building masonry block walls found ~ 40 bolts for the wall's seismic supports had not been installed per plant drawings. A preliminary evaluation determined that this condition did not make the walls inoperable. The scope of the inspections was expanded due to these findings. On April 7, 1992, the condition of the bolting of a masonry block wall (#8) between EDG #4 and its associated 480 volt Emergency Bus resulted in EDG #4 being declared inoperable.

The types of bolting deficiencies identified to this point included:

- Bolt bodies cut off and welded either to inside or outside of angle support with no hole drilled in concrete.
- Complete bolts installed, but welded to inside of angle support with no anchor sleeve in concrete hole.
- Anchor bolt installed in angle support and sleeve, but sleeve rotated in hole.
- Bolt bodies cut and set in a partial hole with no sleeve, tack welded to angle support.
- Washer plate welded on one or both sides with no bolt installed through the wall in between.
- Bolt holes with no bolts installed.

The significant number of bolts that had been defectively installed during initial building construction on the interior masonry block wall invalidated the seismic integrity of the wall. The wall was restored on April 12, 1992. At 0210 on April 21, 1992, with Unit 1 operating at 100% reactor power and Unit 2 at 78% reactor power, a poured concrete wall (9D-1) between the #1 Emergency Diesel Generator (EDG) and the 480 volt Emergency Bus E3 was declared inoperable due to the wall's seismic support bolting. The continuing evaluation determined at 0420 on April 21, 1992, that the condition of wall 0D-1 also affected the redundant Emergency Bus E2. With both emergency buses considered inoperable, both Units were required to be placed in HOT SHUTDOWN within 6 hours and COLD SHUTDOWN within the following 30 hours by Technical Specification 3.0.3. Due to the extent and location of the defective bolting this is a 10CFR21 reportable issue. The investigation into extent of this issue is still in progress. Brown and Root was the overall constructor of the Brunswick plant during the early to mid-1970's when the anchor bolt installation is believed to have occurred. CP&L is still investigating to determine who did this particular work (anchor bolt installation) on the EDG Building. Repairs to re-establish seismic qualification of the walls are continuing as problems are found. The safety significance is such that both Units have been placed in COLD SHUTDOWN per Technical Specifications and the Emergency Buses were declared inoperable based on the conservative assumption that until the walls have been verified operable a seismic event could damage redundant Emergency Buses/EDGs.

Very truly yours,

R. B. Richey, Vice President
Brunswick Nuclear Project