

**PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE** PNO-II-05-004

This preliminary notification constitutes EARLY notice of events of possible safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by Region II staff (Atlanta, Georgia) on this date.

<b><u>Facility</u></b>	<b><u>Licensee Emergency Classification</u></b>
Brunswick Steam Electric Plant	Notification of Unusual Event
Units 1 & 2	Alert
Southport, NC	Site Area Emergency
Dockets/License: 50-324, 50-325	General Emergency
	X Not Applicable

Subject: TS Required Shutdown Due to Inoperability of all Emergency Diesel Generators

Carolina Power & Light's (CP&L) Brunswick Steam Electric Plant Units 1 and 2 entered a Technical Specification required shutdown due to a potential common cause degraded condition of all four emergency diesel generators (EDGs) related to the setpoint of the differential current protective relays. Unit 2 entered mode 3 (hot shutdown) at 0446 on August 6, 2005 and Unit 1 entered mode 3 at 0531 the same day. Brunswick made an event notification (EN 41895) for this condition at 2124 on August 5, 2005 and updated the notification at 1038 on August 6, 2005.

On July 28, 2005, Brunswick EDG no. 4 experienced a lockout on generator differential overcurrent during monthly surveillance testing. The lockout occurred on initial startup following field flashing. The initial failure analysis determined that the cause of the failure was due to excessive carbon buildup on the exciter collector rings. Following successful post-maintenance testing, the EDG was declared operable. Subsequently, the licensee identified other possible causes for the failure. The additional potential causes included proximity of EDG no-load operating current to the generator differential current relay setpoint and degradation of voltage regulator components. During data gathering activities on August 5, EDG no. 2 experienced the same lockout that EDG no. 4 had experienced on July 28. Based on this apparent common cause failure mode, and the potential that this condition could exist on all four EDGs, the licensee declared all site EDGs inoperable and shutdown Units 1 and 2, in accordance with Technical Specification requirements.

As of 1100 on August 9, 2005, both units remained in mode 4 (cold shutdown) and the licensee continues to evaluate the causes of EDG inoperability. Region II has initiated a special inspection to assess the circumstances surrounding the inoperability of the EDGs.

Region II received initial notification of this occurrence at 1840 on August 5, 2005 when licensee management informed the Resident Inspector. Region II management was informed by the Resident Inspector at 1900 on August 5, 2005. The information presented herein has been discussed with the licensee, and is current as of 1423 pm on August 9, 2005.

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