

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

November 13, 2012

U.S. Nuclear Regulatory Commission
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VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
ADDITIONAL ACTIONS FOR SURRY EMERGENCY
DIESEL GENERATORS 1 AND 3

On November 1, 2012, the NRC held a conference call with Virginia Electric and Power Company (Dominion) to discuss future actions to be taken on Surry's EDG 1 and 3 based on an evaluation of EDG 2 wrist pin bearing failure. During the conference call Dominion stated that the following actions would be taken:

1. If the confirmed analysis of lube oil samples on EDG 1 or 3 indicate that the silver concentration is ≥ 0.1 ppm, the affected EDG will be declared inoperable and its power packs replaced. The industry recommended action level for silver in the EDG lube oil is ≥ 0.3 ppm. In light of the unanticipated nature of the EDG 2 wrist pin damage, the lowering of this action level to ≥ 0.1 ppm is considered to be a conservative and prudent measure.
2. Based upon the results of the root cause evaluation, the EDG 3 power packs will be replaced in January 2013 and the EDG 1 power packs will be replaced in February 2013. The twelve (12) year EDG power pack replacement preventive maintenance frequency previously established the target date for EDG 1 and EDG 3 power pack replacement as September 2013 and July 2014, respectively.

Also discussed during the conference call was consideration of an additional action to remove EDG 1 and 3 from service, drain the lube oil, and inspect the sump for silver material that might be indicative of bearing degradation. Dominion noted that they had evaluated inspecting the sumps and concluded that these inspections would be of limited benefit. The last inspection on EDG 1 sump was in June 2010 and in November 2011 for EDG 3. Both inspections found the sumps in satisfactory condition. Re-performing the sump inspections would result in additional out of service time with attendant increased plant risk. In addition, all of the oil (~500 gallons) would need to be drained to inspect the sump. When the oil is returned to the EDG, it is either replaced with new oil or the used oil is filtered prior to returning it to the EDG. If excessive bearing wear has started, but the silver concentration is below detectable limits,

replacing or filtering the used oil would re-baseline oil monitoring and may mask a possible degraded condition. These actions were discussed with the Electromotive Diesel (EMD) Owners Group who considered the oil analysis appropriate to monitor for wrist pin bearing wear and that the sump inspections would not provide additional insight.

In summary, monitoring the lube oil for silver continues to be the vendor recommended method for detection of wrist pin bearing degradation. Lowering the action level for silver content is an acceptable measure to ensure diesel reliability. Replacement of the EDG power packs in a controlled manner through the work management process is the best method to safely address the present concerns regarding the diesels.

These actions are temporary and apply only until the EDG 1 and 3 power packs have been replaced. If you have any questions, please contact Mr. Barry Garber at 757-365-2725.

Sincerely,

A handwritten signature in black ink, appearing to read 'N L Lane', with a stylized, flowing script.

N. L. Lane
Site Vice President
Surry Power Station

Commitments made by this letter:

1. When confirmed silver content in EDG 1 or 3 lube oil is ≥ 0.1 ppm, the EDG with the silver in the oil will be declared inoperable and its power packs replaced.
2. EDG 3 power packs will be replaced in January 2013 and the EDG 1 power packs will be replaced in February 2013.

cc: U. S. Nuclear Regulatory Commission, Region II
Attn.: Regional Administrator
Marquis One Tower
245 Peachtree Center Ave., NE - Suite 1200
Atlanta, GA 30303-1257

Ms. K. R. Cotton
NRC Project Manager Surry
U. S. Nuclear Regulatory Commission
Mail Stop O8 G9A
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

Dr. V. Sreenivas
NRC Project Manager North Anna
U. S. Nuclear Regulatory Commission
Mail Stop O8 G9A
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

NRC Senior Resident Inspector
Surry Power Station