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 FACIL: 50-261 H. B. Robinson Plant, Unit 2, Carolina Power and Light 05000261
 AUTH. NAME: AUTHOR AFFILIATION
 UTLEY, E. E. Carolina Power & Light Co.
 RECIP. NAME: RECIPIENT AFFILIATION
 VARGA, S. A. Operating Reactors Branch 1

SUBJECT: Discusses revisions to actions to be taken re steam generators after return to power operation.

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 TITLE: General Distribution for after Issuance of Operating License

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Carolina Power & Light Company

August 28, 1981



FILE: NG-3514(R)

SERIAL No.: NO-81-1417

Office of Nuclear Reactor Regulation
Attention: Mr. Steven A. Varga, Chief
Operating Reactors Branch No. 1
United States Nuclear Regulatory Commission
Washington, D.C. 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261
LICENSE NO. DPR-23
STEAM GENERATOR RECOVERY PROGRAM

Dear Mr. Varga:

In our letter of August 21, 1981, Carolina Power & Light Company (CP&L) discussed actions to be taken concerning the steam generators prior and subsequent to return to power operation from the present outage. Discussions with members of your staff on August 24, 25, and 26 have indicated the need for some revisions to the actions to be taken after return to power operation. Specifically, the following actions will be in effect from return of Unit 2 to power operation until the completion of the current fuel cycle and are reflected in the attached proposed license condition. Items c, d, and e below, remain the same as specified in our August 21 letter (NO-81-1378).

- a. A primary to secondary pressure test at approximately 1900 psi differential will be performed after operation at power levels such that estimated corrosion is equivalent to or less than that of 24 effective full power days operation as shown in figure 4.3.3 in Attachment B of CP&L's letter of August 21, 1981. A period of seven additional calendar days is permitted for flexibility in scheduling the test (e.g. if the unit operated at a constant power level of 100% (2300 MWt), then the pressure test would be required prior to 24 + 7 calendar days, if the unit operated at 50% power level constantly, then the pressure test would be required prior to 112 + 7 calendar days. For operation at power levels between 50% and 100%, the calendar days equivalency is determined from Figure 4.3.3. Thus, at a power level of 75%, the amount of calendar days between pressure tests would be: [Corrosion Allowance factor at 100% ÷ Corrosion Allowance Factor at 75%] X 24 = 45 + 7 calendar days.

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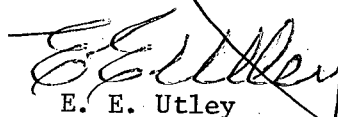
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- b. At the end of core life (approximately 120 EFPD) of the present cycle, an eddy current examination will be performed. The scope of this inspection will be submitted to the NRC for approval at least 45 calendar days prior to this end of core life inspection.
- c. During the remainder of the cycle 8 operations, the following steam generator tube leakage criteria will be in effect. Specifically, the plant will be shutdown if the verified primary to secondary leakage in one steam generator exceeds any of the following:
 - 1. A sudden increase of 0.1 gallon per minute (gpm) if the the total leakage rate in that steam generator exceeds 0.2 gpm.
 - 2. If the leakage rate in that steam generator exceeds 0.2 gpm and an upward trend in leakage rate in excess of 0.02 gpm per day is verified. This trend will be established using at least five valid consecutive daily samples.
- d. Should the plant be required to shut down to repair a steam generator tube leak as indicated in item (c) above, an inspection will be performed as mutually agreed upon by the NRC Staff and CP&L.
- e. The NRC Staff will be provided with a summary of the results of the eddy current examination performed under item (d) above.

The actions and operating restrictions described above, and supported by the Safety Evaluation attached to our August 21, 1981 letter are such that H. B. Robinson Unit 2 can be safely returned to an operational status for the remainder of cycle 8. Please contact my staff if you have any questions regarding this matter.

Yours very truly,


E. E. Utley

Executive Vice President
Power Supply and
Engineering & Construction

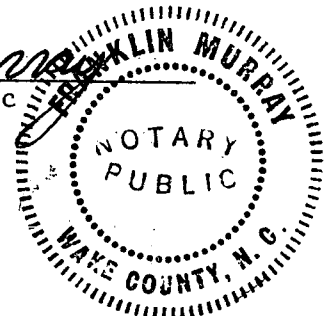
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cc: W. J. Ross (NRC)

Sworn to and subscribed before me this 28th day of August, 1981.

My commission expires: Oct. 4, 1981


Notary Public



Carolina Power & Light Company (CP&L) proposes the following operating license condition be effective from the time H. B. Robinson Unit 2 returns to power operations subsequent to the August, 1981 shutdown until the unit is shutdown for refueling:

- a. A primary to secondary pressure test at approximately 1900 psi differential will be performed after operation at power levels such that estimated corrosion is equivalent to that of 24 effective full power days operation ($\pm 25\%$ calendar days) as shown in figure 4.3.3 in Attachment B of CP&L's letter of August 21, 1981. (e.g. if the unit operated at a constant power level of 100% (2300 MWt), then the pressure test would be required at 24 calendar days, $\pm 25\%$; if the unit operated at 50% power level constantly, then the pressure test would be required at 112 calendar days $\pm 25\%$. For operation at power levels between 50% and 100%, the calendar days equivalency is determined from Figure 4.3.3. Thus, at a power level of 75%, the amount of calendar days between pressure tests would be: $[\text{Corrosion Allowance Factor at 100\%} \div \text{Corrosion Allowance Factor at 75\%}] \times 24 = 45$ calendar days $\pm 25\%$.
- b. At the end of core life (approximately 120 EFPD) of the present cycle, an eddy current examination shall be performed. The scope of this inspection will be submitted to the NRC for approval at least 45 calendar days prior to this end of core life inspection.
- c. During the remainder of the cycle 8 operations, the following steam generator tube leakage criteria shall be in effect. Specifically, the plant shall be shutdown if the verified primary to secondary leakage in one steam generator exceeds any of the following:
 1. A sudden increase of 0.1 gallon per minute (gpm) if the the total leakage rate in that steam generator exceeds 0.2 gpm.
 2. If the leakage rate in that steam generator exceeds 0.2 gpm and an upward trend in leakage rate in excess of 0.02 gpm per day is verified. This trend will be established using at least five valid consecutive daily samples.
- d. Should the plant be required to shut down to repair a steam generator tube leak as indicated in item (c) above, an inspection shall be performed as mutually agreed upon by the NRC Staff and CP&L.
- e. The NRC Staff shall be provided with a summary of the results of the eddy current examination performed under item (d) above.