

Public Service
Electric and Gas
Company

Corbin A. McNeill, Jr.
Vice President -
Nuclear

Public Service Electric and Gas Company P.O. Box 236, Hancocks Bridge, NJ 08038 609 339-4800

May 8, 1986

Director of Nuclear Reactor Regulation
United States Nuclear Regulatory Commission
7920 Norfolk Avenue
Bethesda, Maryland 20814

Attention: Ms. Elinor Adensam, Director
Project Directorate 3
Division of BWR Licensing

Dear Ms. Adensam:

PARTIAL FEEDWATER HEATING
HOPE CREEK GENERATING STATION
DOCKET NO. 50-354

Public Service Electric and Gas Company (PSE&G) requests that License Condition 2.C.12, "Partial Feedwater Heating", be modified. At present this license condition does not affect the ability of PSE&G to safely operate the facility under its low-power license and Technical Specifications. Thus, no amendment of the present low-power license is being sought. We request that this change be incorporated into the full-power license for the Hope Creek Generating Station. This license condition currently reads as follows:

"PSE&G shall not operate the facility (other than for normal start-up or shutdown) with the feedwater inlet temperature less than 424.5°F."

We request that this license condition read as follows in the full-power license:

"The facility shall not be operated with partial feedwater heating for the purpose of extending the normal fuel cycle without prior written consent of the staff."

This request is made because feedwater temperature varies with the operating power level. At a rated steam flow of 105%, the feedwater inlet design temperature is 424.5°F. At 100% rated steam flow, the feedwater inlet design temperature is 419.7°F (Process Flow Diagram Heat Balance & Legend, M-0900-0). Feedwater temperature continues to drop with decreasing power level while all feedwater heaters are in service. The effect of this license condition as written

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is to preclude operation at reduced power levels for extended periods. For example, if the reactor was continuously operating at 75% rated power, the process heat balance predicts an inlet feedwater temperature of 397.9°F (M-0900-0). To meet the license condition as stated, PSE&G would have to declare the plant to be in the normal start-up or shutdown mode, which is not a true statement. This does not meet the intent of the license condition, which is to prohibit fuel cycle extension by partial feedwater heating without written approval of the staff.

The requested modified license condition does not set any new precedents as it is already listed in the operating licenses of River Bend, Susquehanna 2, Grand Gulf I, and Limerick 1 power plants, among others.

If you have any questions in regard to this matter, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read 'D.H. Wagner', with a long horizontal flourish extending to the right.

C D.H. Wagner
USNRC Licensing Project Manager

R.W. Borchardt
USNRC Senior Resident Inspector