

June 4, 1986

Docket Nos: 50-387  
and 50-388

Mr. Harold W. Keiser  
Vice President - Nuclear Operations  
Pennsylvania Power and Light Company  
2 North Ninth Street  
Allentown, Pennsylvania 18101

Dear Mr. Keiser:

Subject: Single Loop Operation Amendment

DISTRIBUTION:  
Docket Nos. 50-387/388  
NRC PDR  
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This letter is to clarify the staff's Safety Evaluation Report issued on April 11, 1986, with amendments 56 and 26 (Single Loop Operation (SLO)) for Units 1 and 2, respectively. On page 7 of the SER under "Surveillance Requirements", Item 8.a is too restrictive. The staff intends that the licensee meet the requirements of surveillance 4.4.1.1.2.9.c and nothing more, as the SER suggests. Please also be cognizant that the staff is aware that surveillance 4.4.1.1.2.9 may be difficult to meet. If you become aware of any operational problems pertaining to PP&L's ability to meet the intent of 4.4.1.1.2.9, please let us know.

Additionally, on page 7 of the SER Item 8.b mischaracterizes the staff's intent in that the staff requires that PP&L implement procedures to measure core plate delta P noise once per 24 hours (not once per shift as originally indicated in the staff April 11, 1986, SER). This was not intended to be included in the Technical Specifications. Prior to issuance of the SLO amendments, the staff agreed with PP&L that the core plate delta P measurements could be administratively controlled, and, if so, need not be incorporated in the Technical Specifications. The licensee committed to the staff that procedures and administrative controls would be put in place and carried out as appropriate. In order to clarify the record the appropriately amended page 7 to the aforementioned SER is contained in Enclosure 1 and is being reissued. Please replace the previous page 7 with Enclosure 1. We apologize for the ambiguities and hope that your concerns have been adequately addressed.

Sincerely,

Original Signed by

Anthony Bournia for

Elinor G. Adensam, Director  
BWR Project Directorate No. 3  
Division of BWR Licensing

cc: See next page

BWD-3:DRL  
MCampagnone/hmc  
6/4/86

LA: BWD-3:DRL  
EHylton  
6/4/86

OB/En  
D: BWD-3:DRL  
EAdensam  
6/3/86

MURK  
BC: RSB:DBL  
W. Hodges  
6/3/86

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PDR ADOCK 05000387  
P PDR

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Susquehanna Steam Electric Station  
Units 1 & 2

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2. Minimum Critical Power Ratio (MCPR) Safety Limit will be Increased by 0.01 to 1.07

The MCPR Safety Limit will be increased by 0.01 to account for increased uncertainties in TIP readings. The licensee has determined that the change conservatively bounds the uncertainties introduced by single loop operation.

3. Minimum Critical Power Ratio (MCPR) Limiting Condition for Operation (LCO)

The staff requires that the operating limit MCPR be multiplied by the appropriate two loop  $K_f$  factors that are in the SSES TS. This will preclude an inadvertent flow increase from causing the MCPR to drop below the safety limit MCPR.

4. The Maximum Average Planar Linear Heat Generation Rate (MAPLHGR) Limits will be Reduced by Appropriate Multipliers

The licensee proposed reducing the TS MAPLHGR by 0.81 for Single Loop Operation. These reductions were based on an analysis method proposed by General Electric in NEDE-20566-2.

5. The APRM Scram and Rod Block Setpoints will be Reduced

The licensee proposed to modify the two loop APRM Scram, Rod Block and Rod Block Monitor (RBM) setpoints to account for back flow through half the jet pumps. These setpoints equations will be changed in the SSES TS. The changes are similar to other plant TS changes and are acceptable to the staff.

6. The Recirculation Control will be in Manual Control

The staff requires that the licensee operate the recirculation system in the manual mode to eliminate the need for control system analyses and to reduce the effects of potential flow instabilities.

7. The Allowable Recirculation Pump Speed During SLO

The recirculation pumps will be operated only up to 80% of rated speed for Unit No. 1 and 90% of rated speed for Unit No. 2 in SLO due to vessel internal vibrations.

8. Surveillance Requirements

- a. The staff requires that the licensee perform daily surveillance on the jet pumps to ensure their operability. The staff finds that surveillance requirement 4.4.1.1.2.9 fulfills this requirement.
- b. The staff requires that the core plate delta P noise be measured once per 24 hours and the recirculation pump speed will be reduced if the noise exceeds 1 psi peak to peak. The staff requires the licensee to make this an administratively controlled surveillance. This surveillance is not intended to be a Technical Specification requirement.