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BECO 86-038

Mr. John A. Zwolinski, Director  
BWR Project Directorate #1  
Division of Licensing  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

License DPR-35  
Docket 50-293

IRM Downscale Setpoint

Dear Sir:

We have identified a discrepancy between Pilgrim Nuclear Power Station Technical Specification Table 3.2.C and the accompanying Bases section 3.2. Specifically, Table 3.2.C states that the rod block downscale setpoint for the IRM is 5/125 of full scale. Bases section 3.2 (page 71, paragraph six) states that the downscale trip for the IRM is set at 2.5 indicated on scale. We have reviewed this discrepancy and have concluded that Table 3.2.C is correct and that the Bases are misleading.

Bases section 3.2, page 71, paragraph 6 is therefore revised as described below:

Change "The downscale trips are set at 2.5 indicated on scale."

to "The downscale trips are as shown in Table 3.2.C."

This revision to the Bases will make the Bases consistent with the Technical Specifications. Actual setpoints are best defined in tables and should not appear in the Bases.

A revised page 71 is included in this submittal. You are requested to remove existing page 71 and insert new page 71 in your Controlled Copy of Pilgrim Nuclear Power Station Technical Specifications.

Should you have any questions, please contact me.

Sincerely yours,

*W.D. Harrington*

Enclosure

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### 3.2 BASES (Cont'd)

The control rod block functions are provided to prevent excessive control rod withdrawal so that MCPR does not decrease to the Safety Limit MCPR. The trip logic for this function is 1 out of n: e.g., any trip on one of six APRM's, eight IRM's, or four SRM's will result in a rod block.

The minimum instrument channel requirements assure sufficient instrumentation to assure the single failure criteria is met. The minimum instrument channel requirements for the RBM may be reduced by one for maintenance, testing, or calibration. This time period is only 3% of the operating time in a month and does not significantly increase the risk of preventing an inadvertent control rod withdrawal.

The APRM rod block function is flow biased and prevents a significant reduction in MCPR, especially during operation at reduced flow. The APRM provides gross core protection; i.e., limits the gross core power increase from withdrawal of control rods in the normal withdrawal sequence. The trips are set so that MCPR is maintained greater than the Safety Limit MCPR.

The RBM rod block function provides local protection of the core, for a single rod withdrawal error from a limiting control rod pattern.

The IRM rod block function provides local as well as gross core protection. The scaling arrangement is such that trip setting is less than a factor of 10 above the indicated level.

A downscale indication on an APRM or IRM is an indication the instrument has failed or the instrument is not sensitive enough. In either case the instrument will not respond to changes in control rod motion and thus, control rod motion is prevented. The downscale trips are as shown in Table 3.2.C.

The flow comparator and scram discharge volume high level components have only one logic channel and are not required for safety.

The refueling interlocks also operate one logic channel, and are required for safety only when the mode switch is in the refueling position.

For effective emergency core cooling for small pipe breaks, the HPCI system must function since reactor pressure does not decrease rapidly enough to allow either core spray or LPCI to operate in time. The automatic pressure relief function is provided as a backup to the