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Nuclear Power Plant
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NewYorkPower Authority

Michael J. Colomb
Site Executive Officer

October 22, 1999
JAFP-99-0285

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, D.C. 20555

SUBJECT: James A. FitzPatrick Nuclear Power Plant
Docket No. 50-333
Response to Verbal Request For Additional Information Regarding Proposed Changes to the Technical Specifications for LPRM Calibration (JPTS-99-001)

Reference:
1. NYPA Letter, J. Knubel to the NRC, "Proposed Change to the Technical Specifications Regarding LPRM Calibration (JPTS-99-001)," (JPN-99-002), dated January 15, 1999
2. NYPA Letter, M. J. Colomb to the NRC, "Calibration Methodology of Local Power Range Monitors," (JAFP-99-0012), dated January 18, 1999

Dear Sir:

This letter forwards the Authority's response to a NRC verbal Request for Additional Information (RAI) regarding the Reference 1 Technical Specification (TS) Amendment request for the James A. FitzPatrick Nuclear Power Plant. In a teleconference held on September 20, 1999, the NRC requested that the Authority place additional clarifying information into Technical Specification (TS) Bases 4.1.B regarding calibration methodology of the Local Power Range Monitors (LPRMs).

The Authority has added a proposed paragraph to the TS Bases which states the following: *"Each LPRM location need not be scanned with a TIP machine. 3D-Monicore derives calibration data for unscanned TIP channels by performing calculations using data from scanned channels and correcting for symmetry. It is acceptable to use this data for calibrating LPRMs for which actual TIP data is not available. This is the only method of obtaining calibration data for calibrating the LPRMs associated with one inoperable TIP machine. Calibrating the LPRMs with more than one TIP machine inoperable has not been addressed and is, therefore, unacceptable."*

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The Information noted above is based on information previously submitted to the NRC (References 1 and 2) and is consistent with the Current Licensing Basis. Therefore, the Authority has concluded that this information does not affect the bases or conclusions of the no significant hazards consideration described in Reference 1.

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Please remove the proposed new and marked-up TS Page 38 from the Reference 1 submittal (Located in Attachments 1 and 3, respectively). Insert the revised proposed new and marked-up TS page 38, which are attached to this submittal, into Attachments 1 and 3 of Reference 1.

There are no new commitments made in this letter. If you have any questions, please contact Mr. George Tasick.

Very Truly Yours,

Michael J. Colomb
Site Executive Officer

MJC:JJC:las

cc: Regional Administrator
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King of Prussia, PA 19406

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4.1 BASES (cont'd)

The individual sensor response time may be measured by simulating a step change of the particular parameter. This method provides a conservative value for the sensor response time, and confirms that the instrument has retained its specified electromechanical characteristics. When sensor response time is measured independently, it is necessary to also measure the remaining portion of the response time in the logic train up to the time at which the scram pilot valve solenoids de-energize. The channel response time must include all component delays in the response chain to the ATTS output relay plus the design allowance for RPS logic system response time. A response time for the RPS logic relays in excess of the design allowance is acceptable provided the overall response time does not exceed the response time limits specified in the UFSAR. The basis for excluding the neutron detectors from response time testing is provided by NRC Regulatory Guide 1.118, Revision 2, section C.5.

The sensors for the Reactor High Pressure and Reactor Water Level - Low (L3) trip functions are exempted from response time testing based on analyses provided in NEDO-32291-A, "System Analyses for the Elimination of Selected Response Time Testing".

Two instrument channels in Table 4.1-1 have not been included in Table 4.1-2. These are: mode switch in shutdown and manual scram. All of the devices or sensors associated with these scram functions are simple on-off switches and, hence, calibration during operation is not applicable.

B. The MFLPD is checked once per day to determine if the APRM scram requires adjustment. Only a small number of control rods are moved daily and thus the MFLPD is not expected to change significantly and thus a daily check of the MFLPD is adequate.

LPRM gain settings are determined from the local flux profiles measured by the Traversing Incore Probe (TIP) System. This establishes the relative local flux profile for appropriate representative input to the APRM System. The 1000 MWD/T frequency is based on operating experience with LPRM sensitivity changes.

Each LPRM location need not be scanned with a TIP machine. 3D-Monicore derives calibration data for unscanned TIP channels by performing calculations using data from scanned channels and correcting for symmetry. It is acceptable to use this data for calibrating LPRMs for which actual TIP data is not available. This is the only method of obtaining calibration data for calibrating the LPRMs associated with one inoperable TIP machine. Calibrating the LPRMs with more than one TIP machine inoperable has not been addressed and is, therefore, unacceptable.

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Amendment No. ~~44, 89, 134, 183, 227, 233,~~ 235

B. The MFLPD is checked once per day to determine if the APRM scram requires adjustment. Only a small number of control rods are moved daily and thus the MFLPD is not expected to change significantly and thus a daily check of the MFLPD is adequate.

The sensitivity of LPRM detectors decreases with exposure to neutron flux at a slow and approximately constant rate. This is compensated for in the APRM system by calibrating twice a week using heat balance data and by calibrating individual LPRM's every 1000 effective full power hours, using TIP traverse data.

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