THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

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MURRAY R. EDELMAN
VICE PRESIDENT
NUCLEAR

February 6, 1985
PY-CEI/NRR-0179 L

Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Perry Nuclear Power Plant
Docket Nos. 50-440; 50-441
Response to NRC Report on Perry
Conformance with Regulatory
Guide 1.97 Rev. 2

Dear Mr. Youngblood:

In a letter dated December 11, 1984, the NRC issued an EG&G evaluation report on Perry Nuclear Power Plant Units 1 & 2 conformance to Regulatory Guide 1.97 Rev. 2. CEI was requested to submit a response to the open items identified in the EG&G report, and to review the report.

Based on our review of the subject report, we have no corrections to its contents or assumptions. Our response to the four open items described in your letter is attached.

If you have any questions, please contact us.

Very truly yours,

Murray R. Edelman

Murray R. Edelman
Vice President
Nuclear Group

MRE:njc

Attachments

cc: Jay Silberg, Esq.
J. Stefano (2)
J. Grobe

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Response to Open Items on Regulatory Guide 1.97 Compliance

1. Neutron Flux

CEI concurs that Neutron flux monitoring instrumentation designed to Category 1 requirements is currently an industry development item. This was the basis for note 6 of Perry FSAR Table 7.1-4 which stated that upgrading to a Category 1 classification would be considered upon successful equipment development by a vendor. CEI will continue to monitor industry progress in developing such equipment, but cannot determine any specific time frame when category 1 instrumentation might be available for installation at Perry.

2. Suppression Chamber Spray Flow

As applicable to Perry's BWR-6 Mark III design, Perry has Category 2 instrumentation for containment spray flow in lieu of suppression chamber spray flow. This is noted in Perry FSAR Table 7.1-4. Containment spray flow instrumentation as applied to Perry's design is also described in FSAR Section 7.3.1.1.4.

3. RHR Service Water System Operation

Use of RHR service water flow as a category 2 variable is considered an acceptable alternative to verify system operation in lieu of heat exchanger outlet temperature. Indication of this variable confirms heat removed from the RHR primary side, as long as the heat exchanger bypass valve (E12-F048A/B) is closed. This is also indicated in the control room. Instrumentation designed to Category 2 requirements for service water flow and heat exchanger bypass valve position is identified in FSAR Table 7.1-4.

It is noted that Perry's design does have control room indication of Heat Exchanger outlet temperature via a multi-point recorder. This recorder receives input from eleven non-safety temperature sensing devices in the RHR System. All instrumentation associated with the recorder is installed to Category 3 requirements.

4. Cooling Water Temperature to ESF Systems

The emergency closed cooling water system (ECCWS) described in FSAR Sections 9.2.2 and 7.3.1.1.6.c is a closed loop system. The primary function of the system is to provide an emergency supply of cooling water to ESF components in the event of an accident. Although not specifically referenced in the FSAR, the minimum expected water temperature downstream of the ECCWS heat exhangers is considered to be above 50°F based on the building temperature in which the closed system piping and components are installed. Tables 3.11-3,4, and 5 of the FSAR reflect minimum temperatures of 80°F and higher during normal operating conditions. Under worst case conditions associated with long term cold shutdown, plant heating systems will maintain building temperatures at 60°F or above.

Based on the above, the lower limit of Perry ECCWS temperature indication (50°F) is considered adequate.