

SAFETY EVALUATION

Introduction:

This safety evaluation supports a proposed change to Table 4.1-1 of the Turkey Point Technical Specifications. Item 1, Remark 1 is revised to add the option of using the " ΔT vs. reactor power curve" during shift checks of the Nuclear Power Range instrument channels.

Discussion:

The present Technical Specification requires use of the "load vs. flux curve" during shift checks of the Power Range instrumentation. The proposed change adds the option of using the " ΔT vs. reactor power curve".

The Power Range nuclear instrumentation is presently checked at least once per shift by comparing indicated power level with the power level derived from the "load vs. flux curve". By knowing the generator load and back pressure, the "load vs. flux curve" can be used to determine reactor power. However, because of secondary inefficiency caused by such things as opening heater bypasses, changes in intake cooling water temperature, or changes in back pressure, large corrections may be needed in order to derive the correct power level from the "load vs. flux curve".

Therefore, it is proposed that the Technical Specifications be amended to permit the use of the " ΔT vs. reactor power curve" when checking the accuracy of the Power Range instrumentation.

Secondary inefficiency will not affect the power level derived from this curve, and the curve will be easy to use because the relationship between ΔT and reactor power is linear.

The purpose of the channel check is to detect gross failures such as blown fuses, defective indicators, or faulted amplifiers which result in "upscale" or "downscale" indication. The capability of detecting such failures will not be reduced by use of the " ΔT vs. reactor power curve". In addition, the Power Range shift checks are backed-up by a daily calibration which provides a more accurate determination of instrument operability.

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Conclusions:

Based on these considerations, (1) the proposed change does not increase the probability or consequences of accidents or malfunctions of equipment important to safety and does not reduce the margin of safety as defined in the basis for any technical specification, therefore, the change does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

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