

ATTACHMENT 2
PROPOSED TECHNICAL SPECIFICATIONS
SURRY POWER STATION

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5. The allowable QUADRANT POWER TILT is 2.0% and is only applicable while operating at THERMAL POWER > 50%.
6. If, except for operation at THERMAL POWER \leq 50% or for physics and control rod assembly surveillance testing, the QUADRANT POWER TILT exceeds 2%, then:
 - a. Within 2 hours, either the hot channel factors shall be determined and the power level adjusted to meet the requirement of Specification 3.12.B.1, or
 - b. The power level shall be reduced from RATED POWER 2% for each percent of QUADRANT POWER TILT. The high neutron flux trip setpoint shall be similarly reduced within the following 4 hours.
 - c. If the QUADRANT POWER TILT exceeds \pm 10%, the power level shall be reduced from RATED POWER 2% for each percent of QUADRANT POWER TILT within the next 30 minutes. The high neutron flux trip setpoint shall be similarly reduced within the following 4 hours.
7. If, except for operation at THERMAL POWER \leq 50% or for physics and control rod assembly surveillance testing, after a further period of 24 hours, the QUADRANT POWER TILT in Specification 3.12.B.5 above is not corrected to less than 2%:
 - a. If the design hot channel factors for RATED POWER are not exceeded, an evaluation as to the cause of the discrepancy shall be made and a special report issued to the Nuclear Regulatory Commission.
 - b. If the design hot channel factors for RATED POWER are exceeded and the power is greater than 10%, then the high neutron flux, Overpower Δ T and Overtemperature Δ T trip setpoints shall be reduced 1% for each percent the hot channel factor exceeds the RATED POWER design values within the next 4 hours, and the Nuclear Regulatory Commission shall be notified.

A 2% QUADRANT POWER TILT allows that a 5% tilt might actually be present in the core because of insensitivity of the excore detectors for disturbances near the core center such as misaligned inner control rod assembly and an error allowance. No increase in F_Q occurs with tilts up to 5% because misaligned control rod assemblies producing such tilts do not extend to the unrodded plane, where the maximum F_Q occurs.

The QPTR limit must be maintained during power operation with THERMAL POWER > 50% of RATED POWER to prevent core power distributions from exceeding the design limits.

Applicability during power operation \leq 50% RATED POWER or when shut down is not required because there is either insufficient stored energy in the fuel or insufficient energy being transferred to the reactor coolant to require the implementation of a QPTR limit on the distribution of core power. The QPTR limit in these conditions is, therefore, not important. Note that the $F_{\Delta H}^N$ and $F_Q(Z)$ LCOs still apply, but allow progressively higher peaking factors at 50% RATED POWER or lower.

The limits of the DNB-related parameters assure that each of the parameters are maintained within the normal steady-state envelope of operation assumed in the transient and accident analyses. The limits are consistent with the UFSAR assumptions and have been analytically demonstrated to be adequate to maintain a minimum DNBR which is greater than the design limit throughout each analyzed transient. Measurement uncertainties are accounted for in the DNB design margin. Therefore, measurement values are compared directly to the surveillance limits without applying instrument uncertainty.

The 12 hour periodic surveillance of temperature and pressure through instrument readout is sufficient to ensure that these parameters are restored to within their limits following load changes and other expected transient operation. The measurement of the Reactor Coolant System Total Flow Rate once per refueling cycle is adequate to detect flow degradation.

ATTACHMENT 3
SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION
SURRY POWER STATION

10 CFR 50.92 SIGNIFICANT HAZARDS CONSIDERATION REVIEW

Surry's Technical Specifications related to QPTR do not explicitly define the power levels at which the requirements are applicable. Maintaining compliance with these specifications at power levels $\leq 50\%$ does not enhance nuclear safety and imposes unnecessary operational constraints. To alleviate these constraints and ensure that the Technical Specifications clearly reflect the applicability of the QPTR requirements, Virginia Electric and Power Company is proposing an administrative change to Technical Specifications 3.12.B.5, 3.12.B.6, 3.12.B.7, and the Section 3.12 Basis.

Virginia Electric and Power Company has reviewed the proposed Technical Specifications change against the criteria of 10 CFR 50.92 and has concluded that the Technical Specifications change, as proposed, does not pose a significant hazards consideration. Specifically, the proposed change is considered to be administrative in nature in that it is a clarification of the applicability of the QPTR requirements. Operation of Surry Power Station in accordance with the proposed Technical Specifications change will not:

1. Involve a significant increase in the probability of occurrence or the consequences of an accident previously evaluated.

The application of the QPTR limits, as proposed, will assure that the gross core radial power distribution remains consistent with design limits above 50% power. At or below 50% rated thermal power, there is insufficient stored energy in the fuel or insufficient energy being transferred to the reactor coolant to require implementation of a QPTR limit on the distribution of core power. Therefore, the proposed change to clarify the applicability of the QPTR requirements has no impact on the probability of an accident occurrence and does not increase the consequences of any design basis accident.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated.

There are no plant modifications or changes in methods of plant operation introduced by the proposed change. The change would limit the application of QPTR limits to operation at power levels $> 50\%$ to preclude core power distributions from occurring which would violate fuel design criteria previously analyzed. At or below 50% rated thermal power, there is no impact to core power distributions which could affect the fuel design criteria. Therefore, the proposed change does not create the possibility for an accident or malfunction of a different type than that previously evaluated in the safety analysis report.

3. Involve a significant reduction in a margin of safety.

The proposed change only affects the applicability of the QPTR limits. The QPTR limits remain unchanged to preclude any violation of previously analyzed fuel design criteria. Adherence to the QPTR limits, hot channel factors, and applicable Limiting Conditions for Operation will continue. Therefore, the margin of safety as described in the Bases Section of any part of the Technical Specifications is not reduced.