

SPECIAL REPORT 80-2

MODERATOR TEMPERATURE COEFFICIENT

The all-control rods out, beginning of life, moderator temperature coefficient (MTC) was determined on July 6, 1980 to be 0.85×10^{-5} delta k/k/°F. This does not meet the criteria of less positive than 0 delta k/k/°F established in the Sequoyah Nuclear Plant Unit 1 Technical Specifications. Control rod withdrawal limits (See attached) have been determined. A conservatism of 1×10^{-5} delta k/k/°F has been included in the limits to ensure that the reactor is not operated with a positive MTC. The predicted burnup at which the MTC will be restored to within its limit is 1000 MWD/MTU.

This report is submitted in accordance with Technical Specification 6.9.2 and 3.1.1.3 Action a.

Attachment

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Figure A.28

Operating Limits to Maintain a Negative MTC

