

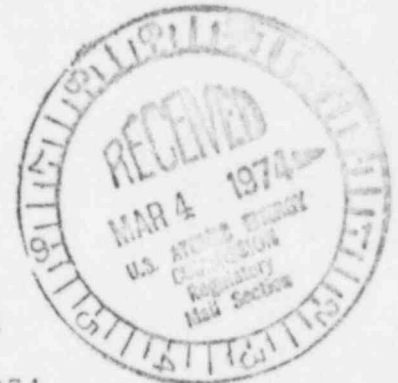
FLORIDA POWER & LIGHT COMPANY

February 27, 1974

Mr. John F. O'Leary, Director
Directorate of Licensing
Office of Regulation
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. O'Leary:

ABNORMAL OCCURRENCE NO. 250-74-4
FEBRUARY 25, 1974
OCCURRENCE DATE: FEBRUARY 18, 1974
TURKEY POINT UNIT NO. 3
FAILURE TO PERFORM REQUIRED
FULL INCORE DETECTOR FLUX MAP



A. Conditions Prior to Occurrence

Unit No. 3 was operating at a load of 740 MWe (approximately 95% of rated reactor power). Reactor power had been maintained at this power level for about six hours following a controlled load increase from 400 MWe (approximately 60% of rated reactor power).

B. Description of Occurrence

About 2:15 PM on February 18, 1974, it was determined that the recent monthly incore detector flux map did not meet the requirements of Change No. 11 to the Technical Specifications for operation of the reactor at power levels greater than 75% of rated reactor power. Accordingly, immediate operator action was taken to reduce load on Unit No. 3 to approximately 73% of rated reactor power in preparation for performing a full core flux map.

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C. Designation of Apparent Cause

Recently implemented changes to Turkey Point Unit Nos. 3 & 4 Technical Specifications imposed additional surveillance requirements for operation of the reactor above 75% of rated reactor power. All of these requirements were met except the February incore flux map did not meet the criteria specified for a full core flux map. Therefore, operation of Unit No. 3 reactor above 75% of rated reactor power did not comply with the recently implemented Technical Specifications.

D. Analysis of Occurrence

A full core flux map was performed on Unit No. 3 reactor as soon as practical after reducing load below 75% of rated reactor power. Evaluation of the results of the full core flux map concluded that power distribution was well within acceptable limits. The specified hot channel factors, peak linear power density, radial power shapes, and axial power distribution were well within acceptable limits.

Comparison of the full core flux map with previous partial core flux maps, concluded that these surveillance tests were in agreement.

If an abnormal power distribution had occurred during this incident, the power range nuclear instrumentation system or the rod position indication system would have detected the condition. The operator would have been alerted to the condition by visual indication in the control room, actuation of alarms, or automatic operation of the reactor protection system. Manual operator action or automatic action by the reactor protection system would place the reactor in a safe condition and limit the effect of abnormal power distribution.

The incidents analyzed and presented in the Turkey Point Unit Nos. 3 & 4 Final Safety Analysis Report assume conservative values for hot channel factors, limiting local rod power density, and power distribution. The full core flux map demonstrated that measured or calculated values for hot channel factors, local power

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density, radial power shapes, and axial power distribution were more conservative than the values used in the safety analysis. Therefore, operation of Unit No. 3 reactor above 75% of rated reactor power at the time of this occurrence did not adversely affect the safe operation of the reactor or present any danger to the public health or safety.

E. Corrective Action

Immediate operator action was to reduce load on Unit No. 3 below 75% of rated reactor power. This complies with the requirements of the recently imposed changes to Technical Specifications.

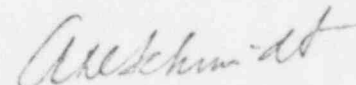
Performance of a full core flux map and evaluation of results demonstrated that reactor power distribution was well within acceptable limits.

Precautions have been added to applicable procedures to ensure that the requirements specified in the recently imposed Technical Specifications for reactor operation above 75% of rated reactor power are met.

F. Failure Data

This is the first failure to meet a limiting condition for operation involving Power Distribution Limits.

Very truly yours,


A. D. Schmidt
Director of Power Resources

VTC/kmw

cc: Mr. Norman C. Moseley
Mr. Jack R. Newman