



October 16, 2000

L-2000-221  
10 CFR 50.4

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

RE: St. Lucie Unit 2  
Docket No. 50-389  
Follow-Up Report  
License Condition 2.F

This letter provides the Florida Power and Light Company (FPL) written follow-up report due within 14 days of St. Lucie Unit 2 exceeding License Condition 2.C. (1) Maximum Power Level. This report is required by St. Lucie Unit 2 Operating License Condition 2.F.

On September 25, 2000, St. Lucie Unit 2 experienced a leading edge flow meter (LEFM) "A" channel instrument problem that resulted in a calculated power level of 100.1% power for greater than 8 hours. An undetected instrumentation failure on the DP1 transducer path on the "A" channel LEFM resulted in a gradually decreasing feedwater flow output value that in turn led to a corresponding decrease in indicated calorimetric power. In response to the slowly lowering indicated power level, the plant operators began to demand a slight increase in turbine power by opening governor valves in small increments. Although the indicated calorimetric power level in use by the plant operators did not exceed 100.0%, the plant operators questioned the plant's response and requested an assessment of reactor power. Operations declared the LEFM out of service and the feedwater flow venturis were aligned to provide input to the power calorimetric. Reactor power was conservatively reduced to 99.3% power while the power anomaly was investigated.

On October 3, 2000, FPL completed a detailed assessment of the plant's performance over September 24, 2000 and September 25, 2000. During the period where LEFM indicated feedwater flow decreased, a slight increase in venturi based feedwater flow occurred. Based upon analysis of "B" channel LEFM feedwater flow and "A" and "B" channel venturi feedwater flow, the increase in power from September 24<sup>th</sup> was approximately 0.2% reactor power. The maximum calculated power level increased from approximately 99.9% on September 24, 2000 to approximately 100.1% (with a maximum of 100.2%) power on September 25, 2000.

A power level increase to 100.2% is well within the 1.3% uncertainty for calorimetric power and is bounded by the assumed safety analysis initial power level of 102%. The indicated increase did not exceed the Operations' control criteria for control of minor power excursions.

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The LEFM instrument problem resulted in a calculated power level of 100.1% power for greater than 8 hours. This exceeded the licensed maximum power of the Unit 2 Operating License Condition 2.C. (1). In accordance with License Condition 2.F. of the Operating License, this was reported to the NRC on October 3, 2000. The event has been entered into the plant's corrective action program (Condition Report (CR) 00-1656). The root cause will be determined and long-term corrective actions identified in accordance with the corrective action program.

Please contact us if there are any questions about this submittal.

Very truly yours,

  
Rajiv. S. Kundalkar  
Vice President  
St. Lucie Plant

RSK/KWF

cc: Regional Administrator, Region II, USNRC  
Senior Resident Inspector, USNRC, St. Lucie Plant