B 7/28/78

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS) 50-250£ DISTRIBUTION FOR INCOMING MATERIAL

REC: STELLO V

ORG: UHRIG R E

NRC

FL PWR & LIGHT

DOCDATE: 07/20/78 DATE RCVD: 07/28/78

DOCTYPE: LETTER

COPIES RECEIVED

SUBJECT:

NOTARIZED: NO

LTR 3 ENCL 40

FORWARDING SUPPLEMENT TO APPLICANT'S 07/10/78 PROPOSED AMEND TO LIC NOS DPR-31 & 41 RE FULL PWR OPERATION WITH UP TO 25% OF STEAM GENERATOR TUB &ES PLUGGED, CONSISTING OF "NON-LOCA ACCIDENTS SAFETY EVALUATION FOR HIGHER

LEVELS OF STEAM GENERATOR TUBE PLUGGIPG

PLANT NAME: TURKEY PT #3

TURKEY PT #4

REVIEWER INITIAL: MLX

DISTRIBUTER INITIAL: L

GENERAL DISTRIBUTION FOR AFTER ISSUANCE OF OPERATING LICENSE,

(DISTRIBUTION CODE A001)

FOR ACTION:

BR CHIEF ORB#1 BC**W/7 ENCL

INTERNAL:

REG FILEX W/ENCL T & E**W/2 ENCL

HANAUER**W/ENCL

AD FOR SYS & PROJ**W/ENCL REACTOR SAFETY BR**W/ENCL

EEB**W/ENCL

J. MCGOUGH**W/ENCL

NRC PDR**W/ENCL OELD**LTR ONLY

CORE PERFORMANCE BR**W/ENCL

ENGINEERING BR**W/ENCL PLANT SYSTEMS BR**W/ENCL EFFLUENT TREAT SYS**W/ENCL

EXTERNAL:

LPDR1S

MIAMI, FL**W/ENCL

TERA**W/ENCL NSIC**W/ENCL

ACRS CAT B**W/16 ENCL

DISTRIBUTION: SIZE: 3P+43P

LTR 40

ENCL 39

CONTROL NBR: 782090005

THE END

July 20, 1978 L-78-242

Office of Nuclear Reactor Regulation Attention: Mr. Victor Stello, Director Division of Operating Reactors U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Dear Mr. Stello:

Turkey Point Units 3 and 4 Docket Nos. 50-250 and 50-251 Supplement to Proposed Amendment to Facility Operating Licenses DPR-31 and DPR-41

and Collins Desired File Cong Florida Power & Light Company (FPL) letter L-78-230 of July 10, 1978, contained proposed amendments to the Turkey Point Units 3 and 4 Operating Licenses to allow full power operation with up to 25% of the steam generator tubes plugged. The proposed amendments resulted from an evaluation of non-LOCA transients. An analysis of the LOCA transients, which could lead

On July 12, after receipt of the FPL July 10 submittal, the NRC staff initiated a telephone conference call to discuss the FPL safety evaluation submitted in support of the proposed amendments. During the phone call, FPL representatives and the NRC staff scheduled a meeting for the purpose of continuing the discussion. The meeting was held on July 13, 1978. As a result of the meeting, it was agreed that FPL would submit a supplement to the July 10 letter containing a corresponding evaluation developed by the NSSS vendor. The NSSS vendor analysis is attached. The difference between it and the FPL analysis is as follows:

to further proposed amendments, is scheduled to be submitted by August 10, 1978.

Section 3.2 - Evaluation

The NSSS vendor did not consider the effects of fuel rod bow in the evaluation and recommended that the generic rod bow penalty on $F_{\Delta H}$ be applied. Where appropriate, FPL modified the evaluation such that it included the effects of a rod bow penalty, consistent with a previous submittal (FPL letter L-77-106 of April 4, 1977) and showed that the rod bow penalty could be absorbed without a reduction in $F_{\Delta H}$. Any other differences are editorial in nature.

Section 3.3.1 - Uncontrolled Control Rod Assembly Withdrawal b) at Power

The NSSS vendor reanalysis did not include the development of new transient curves. Instead the NSSS vendor examined the setpoints and concluded that there was substantial margin in the current

782090005

PEOPLE ... SERVING PEOPLE

Office of Nuclear Reactor Regulation Page Three

Please call if you have further questions regarding this or previous submittals.

Very truly yours,

Robert E. Uhrig Vice President

REU/MAS/RDH/cpc

Attachment

cc: Mr. James P. O'Reilly, Region II Robert Lowenstein, Esquire

Office of Nuclear Reactor Regulation Page Two

(FSAR) Overtemperature ΔT setpoint and that the Overpower ΔT setpoint should be changed. FPL performed a reanalysis of the transients with the setpoints developed by the NSSS vendor with the rod bow penalty included and showed that the DNBR limits were not violated. The Overpower ΔT and Overtemperature ΔT setpoints resulting from the two reanalyses are therefore identical.

c) <u>Section 3.3.2 - Loss of Reactor Coolant Flow (Flow Coast-Down Accident)</u>

The NSSS vendor reanalysis did not consider the effects of fuel rod bow. FPL modified the reanalysis to include a rod bow penalty.

Although the vendor reanalysis did not consider rod bow, the minimum DNBR obtained by the vendor during the transient is 1.48. This value shows that the effect of rod bowing can be accommodated without penalizing any operating parameter.

d) <u>Section 4.0 - Technical Specifications</u>

The only difference between the Technical Specifications proposed by the NSSS vendor and FPL are the Reactor Core Thermal and Hydraulic Safety Limits curves, Figure 2.1-lb. In generating these curves the vendor did not include the effects of rod bow penalty, but FPL did. The FPL curves were developed using the COBRA code exclusively, in conformance with the methods used to generate the companion curves, submitted in FPL letter L-78-217 on June 22, 1978, for lesser amounts of steam generator tube plugging. As the rod bow penalty is already included in these curves, there is no need for any further penalty to the $F_{\Delta H}$ limit or to any other operating parameter.

e) Section 6.0 - References

FPL requests a timely review of their Safety and Fuel Management Analysis Methods (Reference 6) and of the DYNODE-P Code (Reference 7), as these methods and codes are to be used in future analyses to be submitted by FPL in support of licensing actions.

A question was raised at the July 13 meeting concerning the NSSS vendor's use of a modified FLARE code on the Unit 4, Cycle 5 design (refer to Unit 4, Cycle 5 Reload Safety Evaluation, FPL letter L-78-210, dated June 19, 1978). We have discussed the use of this code with NSSS vendor representatives, and they have verified that all uses of the FLARE model for the cycle 5 design were backed up (confirmed) with the use of their standard methods.

