

REGULATOR INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8209080483. DOC. DATE: 82/08/31. NOTARIZED: NO. DOCKET #. 05000251.
 FACIL: 50-251 Turkey Point Plant, Unit 4, Florida Power and Light Co.
 AUTH. NAME: UHRIG, R.E. AUTHOR. AFFILIATION: Florida Power & Light Co.
 RECIP. NAME: EISENHUT, D.G. RECIPIENT. AFFILIATION: Division of Licensing

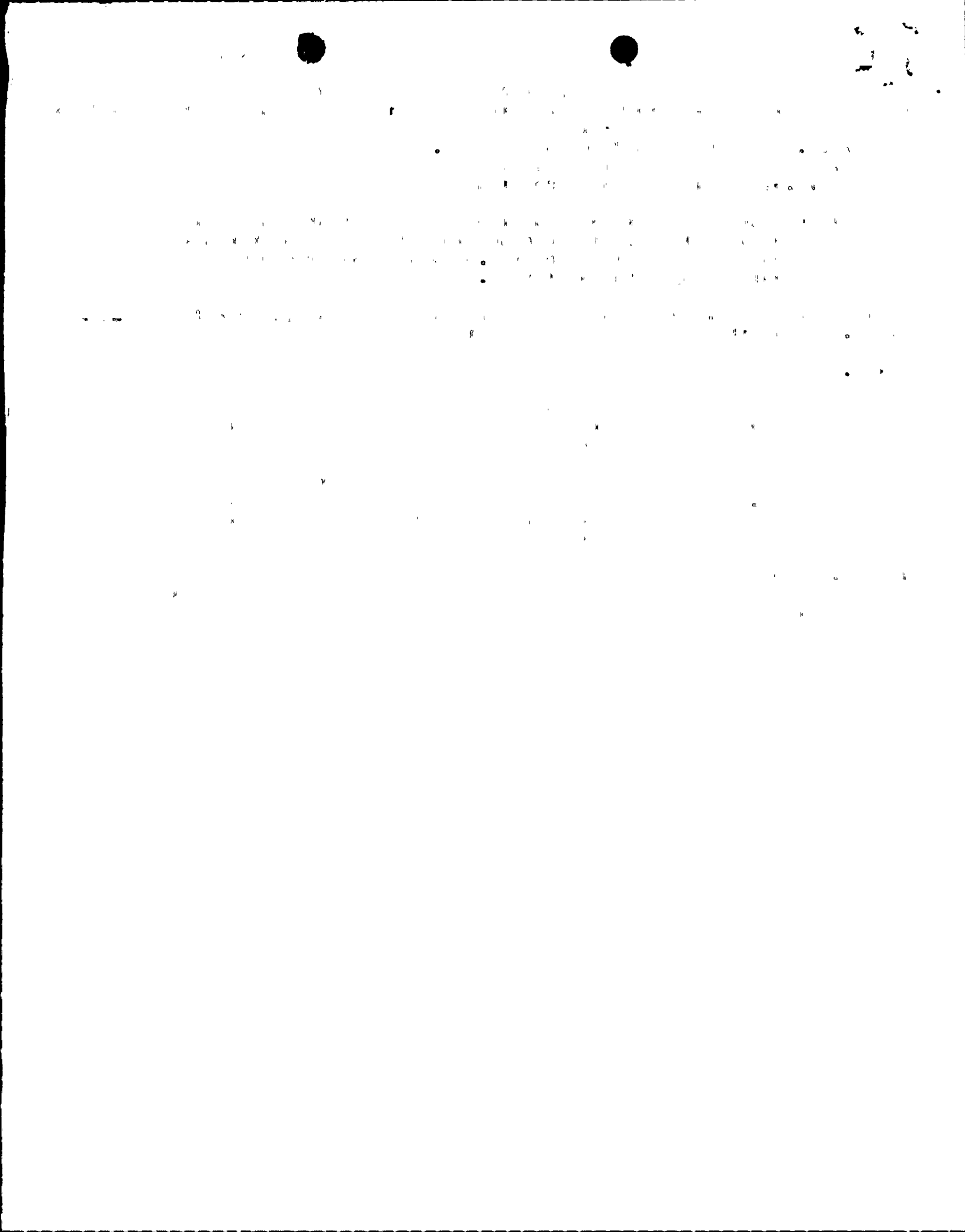
SUBJECT: Forwards comparison of design basis max fast neutron flux w/actual eight cycle average flux distribution at reactor pressure vessel inner radius. Suppls 820503 response to 820316 request for addl info.

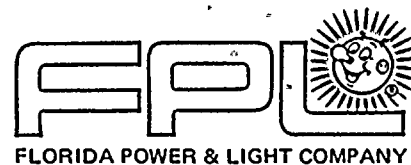
DISTRIBUTION CODE: A001S COPIES RECEIVED: LTTR 1 ENCL 1 SIZE: 2
 TITLE: OR Submittal: General Distribution

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	NRR ORB1 BCI 01	7 7		
INTERNAL:	ELD/HDS4	1 0	NRR/DHFS DEPY08	1 1
	NRR/DL DIR.	1 1	NRR/DL/ORAB	1 0
	NRR/DSI/RAB	1 1	REG FILE 04	1 1
	RGN2	1 1		
EXTERNAL:	ACRS 09	10 10	LPDR 03	1 1
	NRC POR. 02	1 1	NSIC 05	1 1
	NTIS	1 1		

TOTAL: NUMBER OF COPIES REQUIRED: LTTR 28 ENCL 26





August 31, 1982
L-82-382

Office of Nuclear Reactor Regulation
Attention: Mr. Darrell G. Eisenhut, Director
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Eisenhut:

Re: Turkey Point Unit 4
Docket No. 50-251.
Plant Specific Fluence Data

In our May 3, 1982 (L-82-179) response to your letter of March 16, 1982 we provided additional information on Turkey Point Unit No. 4 plant specific fluence data. At the time of this submittal, we had not quantified the effect of the low leakage core loading patterns for Turkey Point Unit No. 4. Westinghouse has now performed neutron transport calculations using the Turkey Point Unit No. 4 actual 8 core cycle average flux distribution to quantify the effect of the low leakage core loading patterns.

At the end of Core Cycle 8, the actual peak fast neutron flux is 81% of the design peak fast neutron flux (ϕ actual = 0.81 ϕ design). Accordingly, the fluence at the inner radius of the Turkey Point Unit No. 4 reactor pressure vessel should be 9.1×10^{18} n/cm² at 5.67 EFPY. Projections of fluence for the next 3 EFPY results in fluence of 1.39×10^{19} n/cm² based on the average of the actual 8 cycle average flux distribution.

Attached is a comparison of design basis maximum fast neutron flux (E > 1MEV) with Turkey Point Unit No. 4 actual 8 cycle average flux distribution at the reactor pressure vessel inner radius.

Very truly yours,

Robert E. Uhrig
Vice President
Advanced Systems & Technology

REU/JEM/cab
Attachment

cc: Mr. James P. O'Reilly, Region II
Mr. Harold F. Reis, Esquire

A001

8209080483 820831
PDR ADOCK 05000251
P PDR

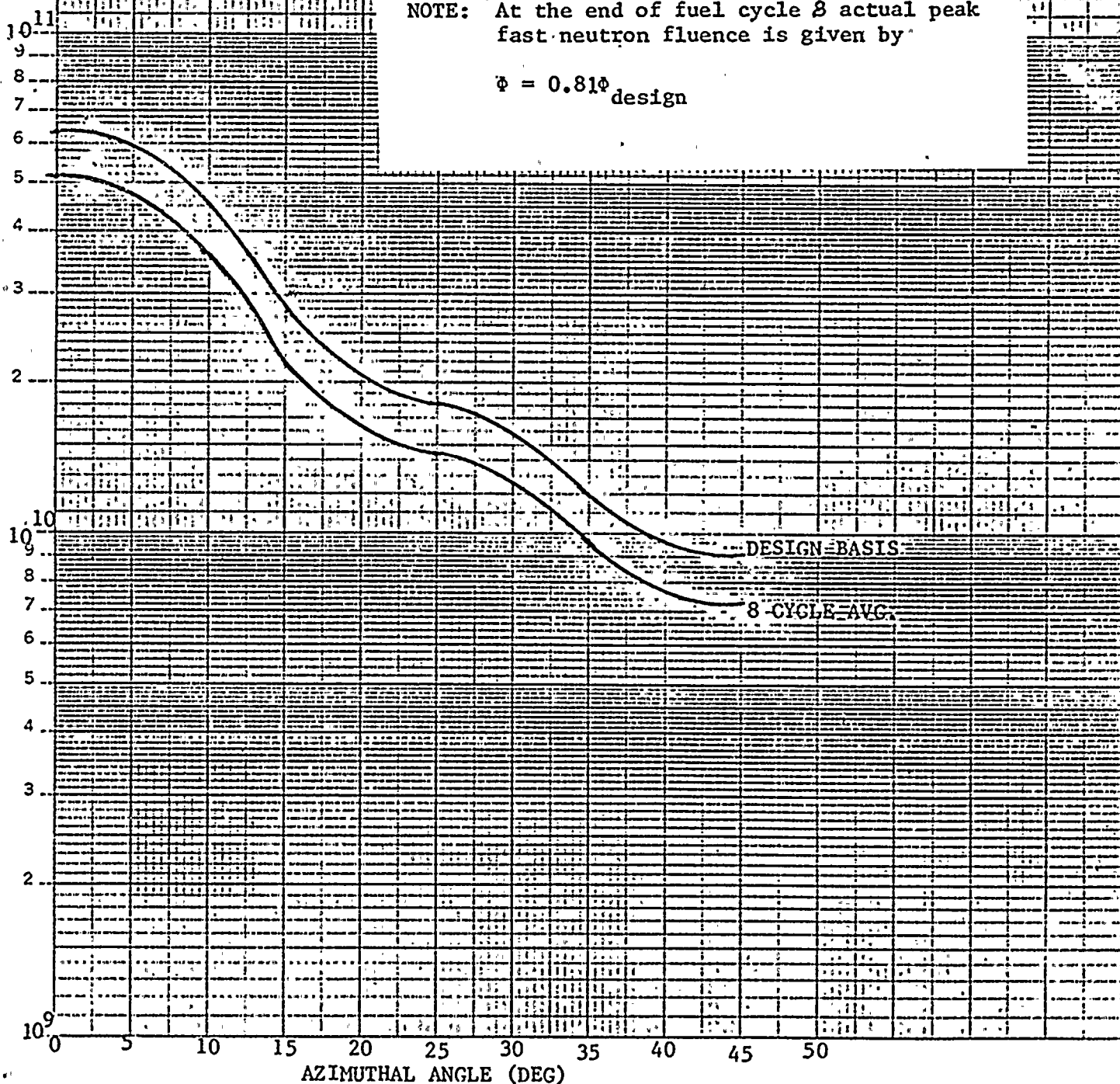
FLORIDA POWER & LIGHT COMPANY
TURKEY POINT UNIT NO. 4

Comparison of design basis maximum fast neutron flux
($E > 1$ mev) with actual 8 cycle average flux distribution
at the reactor pressure vessel inner radius.

NOTE: At the end of fuel cycle 8 actual peak
fast neutron fluence is given by

$$\Phi = 0.81\Phi_{\text{design}}$$

NEUTRON FLUX (n/cm²-sec)



Handwritten marks and scribbles in the top right corner.