September 13, 1978
L-78-297

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:

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

On August 9, 1978, Florida Power & Light Company requested an
amendment to Facility Operating Licenses DPR-31 and DPR-41 as
a result of a reevaluation of ECCS cooling performance (FPL
letter L-78-264). This revised ECCS evaluation was performed
by Westinghouse using an evaluation model approved in the in-
ternal NRC memorandum, Safety Evaluation Report on Revised
Westinghouse ECCS Evaluation Model dated August 23, 1978 for
D. B. Vassallo, Assistant Director for Light Water Reactors,
from D. F. Ross, Assistant Director for Reactor Safety.

Attached as Attachment 1 are the results of 18 case analyses
which were performed for the remainder of Turkey Point 3, Cycle
5, (present burnup over 4000 MWD/MTU) and for the upcoming Tur-
key Point 4, Cycle 5. These results are being forwarded to you
in accordance with a request by a member of your staff.

Attachment 2 provides information concerning our planned test
program to be performed following the current refueling outage.
This information was requested by a member of your staff.

Attachment 3 revises Table 3 from the Turkey Point Unit 4,
Cycle 5 Reload Safety Evaluation, which was submitted to you
on June 19, 1978.

Very truly yours,

Robert E. Uhrig
Vice President

REU/GDW/npb

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FIGURE 1

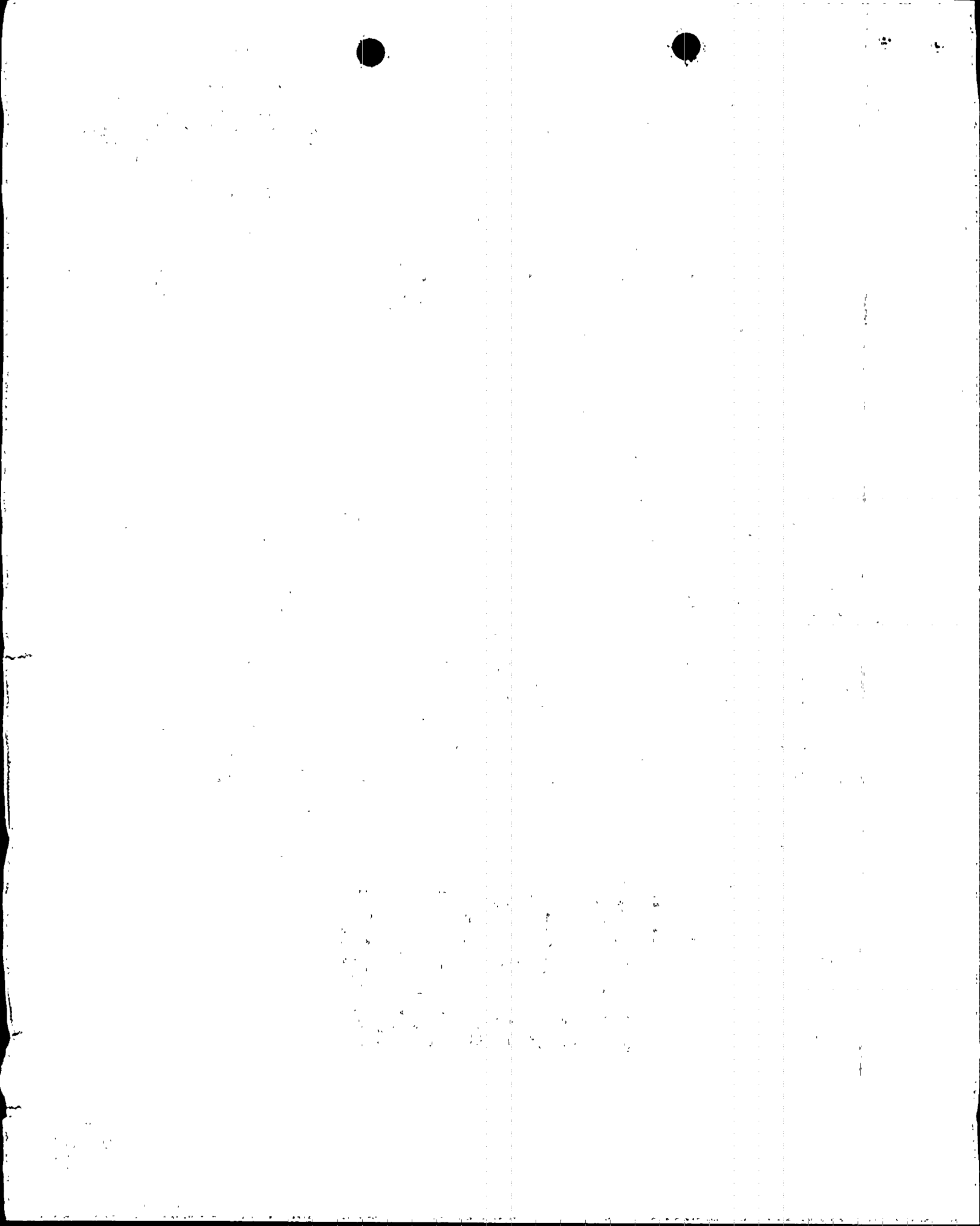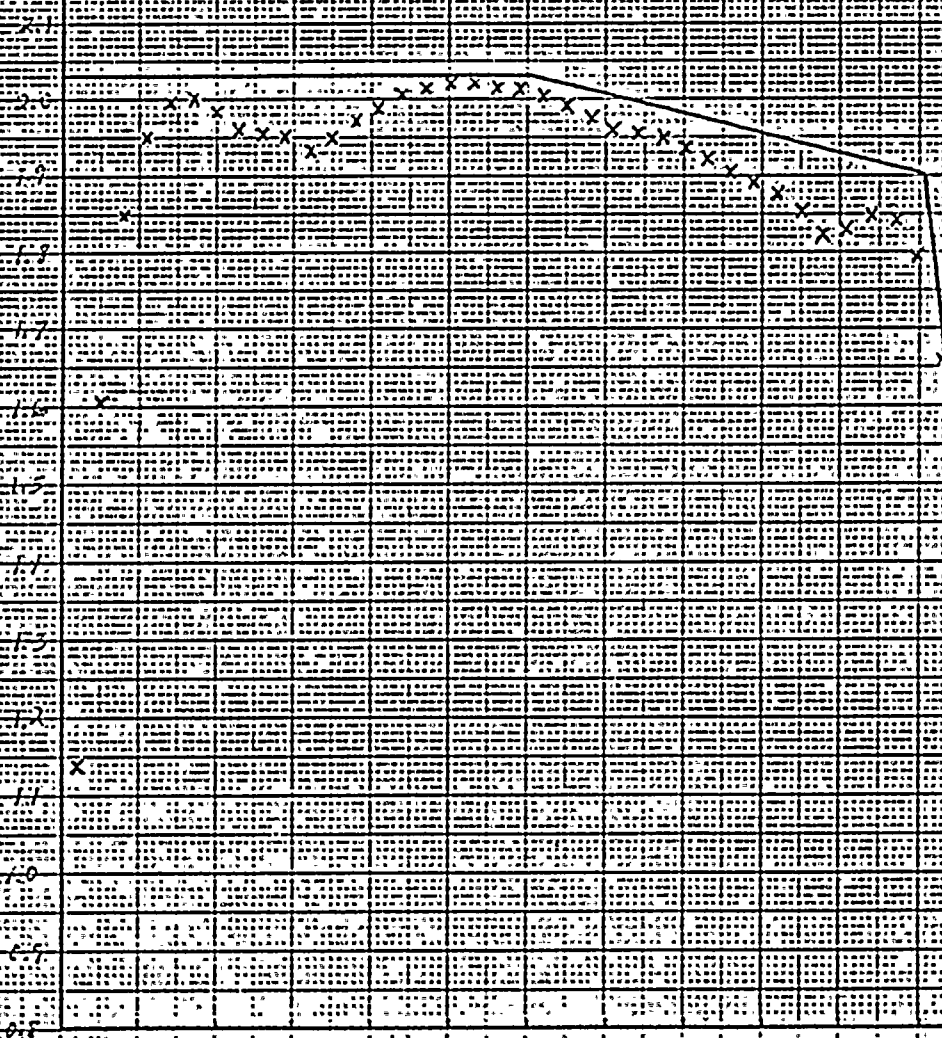Turkey Point Unit 3 - Cycle 5
Maximum $[F_Q^T \cdot P_{rel}]$ vs. Axial Height
During Normal Operation from
1000 MWD/MTU Cycle 5 Burnup to EOL
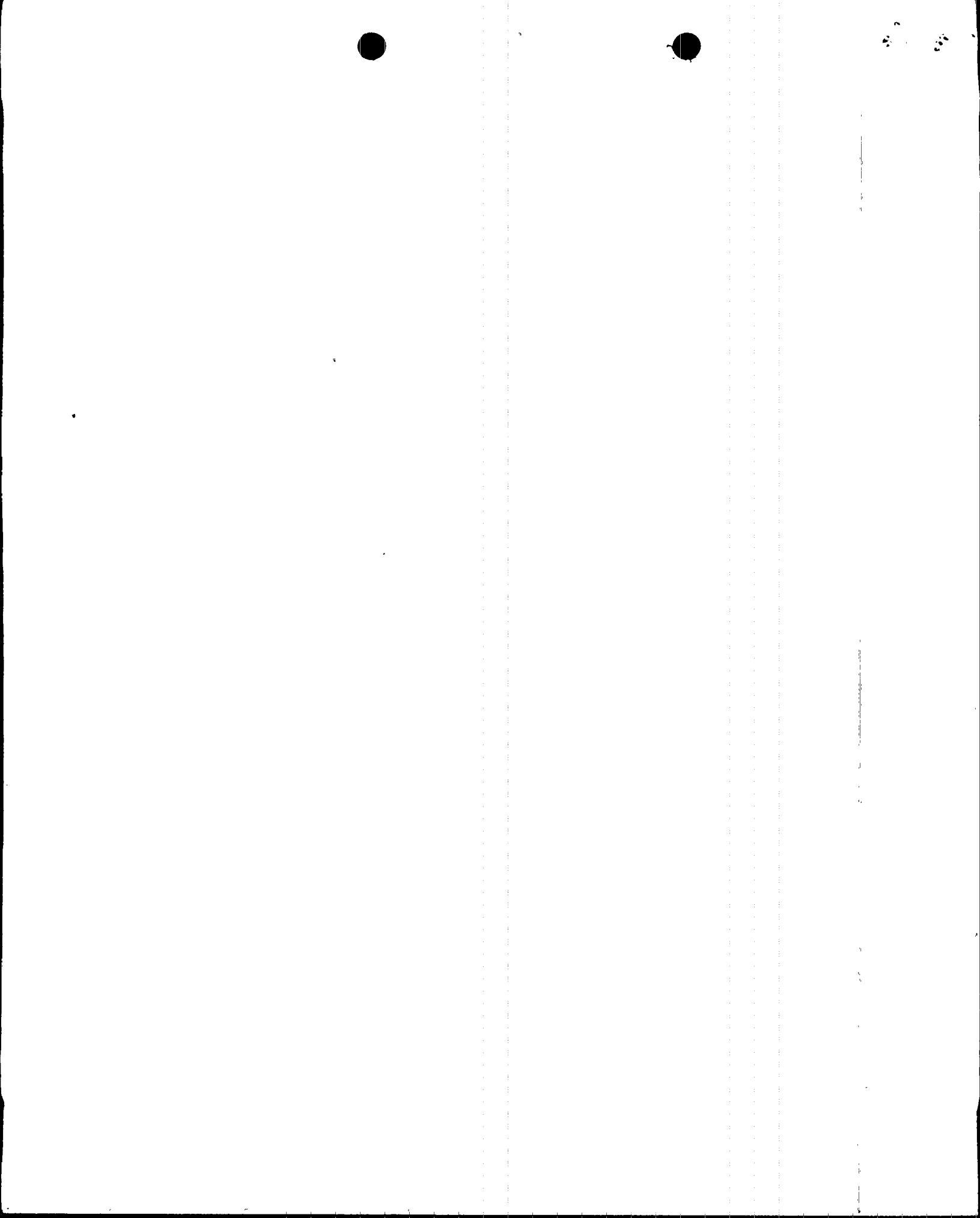
FIGURE 2

Turkey Point Unit 4 - Cycle 5

Maximum [$F_Q \cdot P_{rel}$] vs. Axial Height
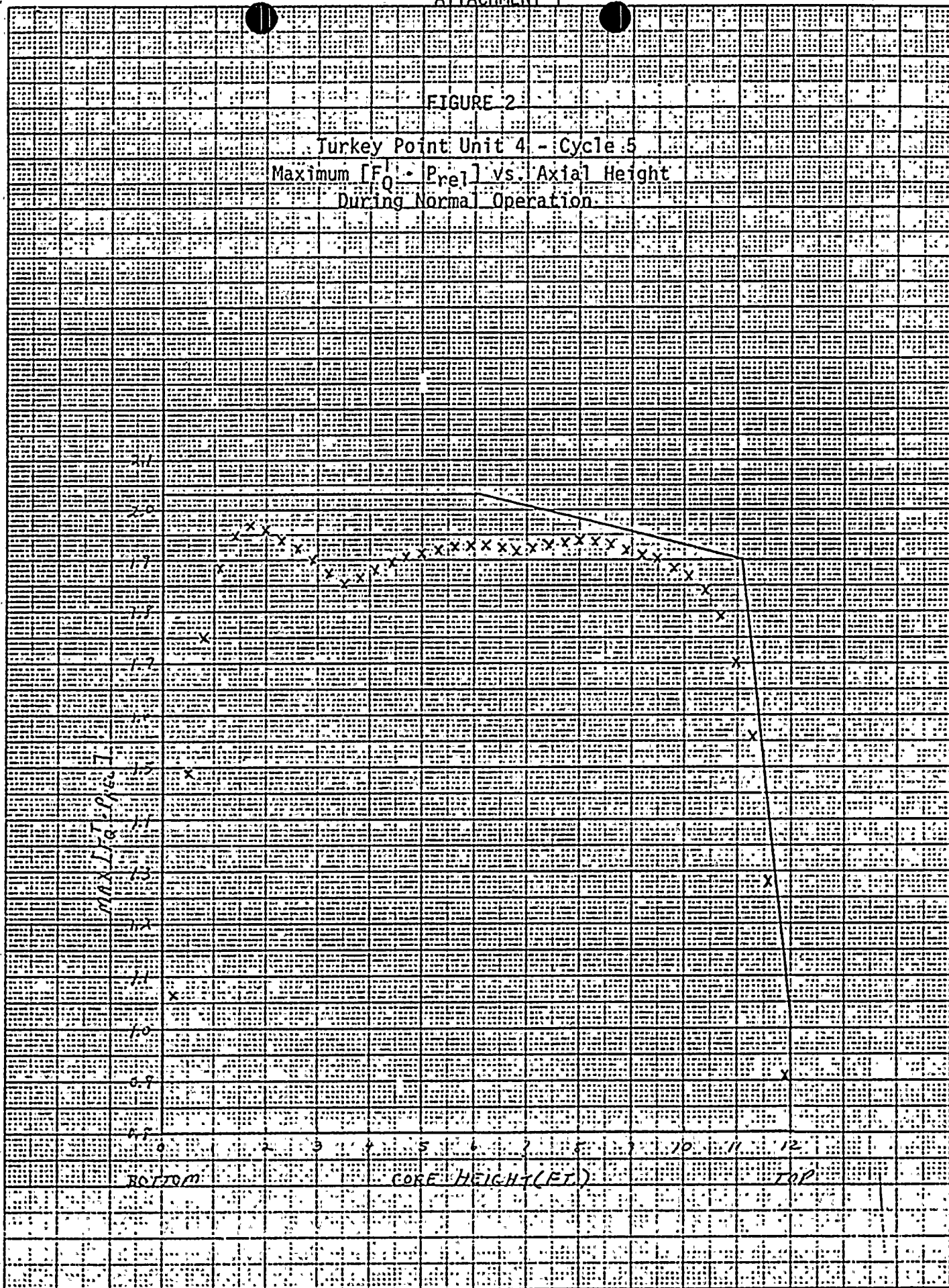
During Normal Operation

TABLE 3

TURKEY POINT 4 - CYCLE 4 AND 5

SHUTDOWN REQUIREMENTS AND MARGINS

	CYCLE 4		CYCLE 5	
	BOC	EOC	BOC	EOC
Control Rod Worth (%Δp)				
All Rods Inserted Less Worst Stuck Rod	5.64	5.89	6.51	6.54
(1) Less 10%	5.08	5.30	5.86	5.89
Control Rod Requirements (%Δp)				
Reactivity Defects (Doppler, T_{avg}, Void, Redistribution)	1.76	2.69	2.13	2.70
Rod Insertion Allowance	.70	.70	.50	.50
(2) Total Requirements	2.46	3.39	2.63	3.20
Shutdown Margin [(1)-(2)] %Δp	2.62	1.91	3.23	2.69
Required Shutdown Margin (%Δp)	1.00	1.77	1.36	1.77
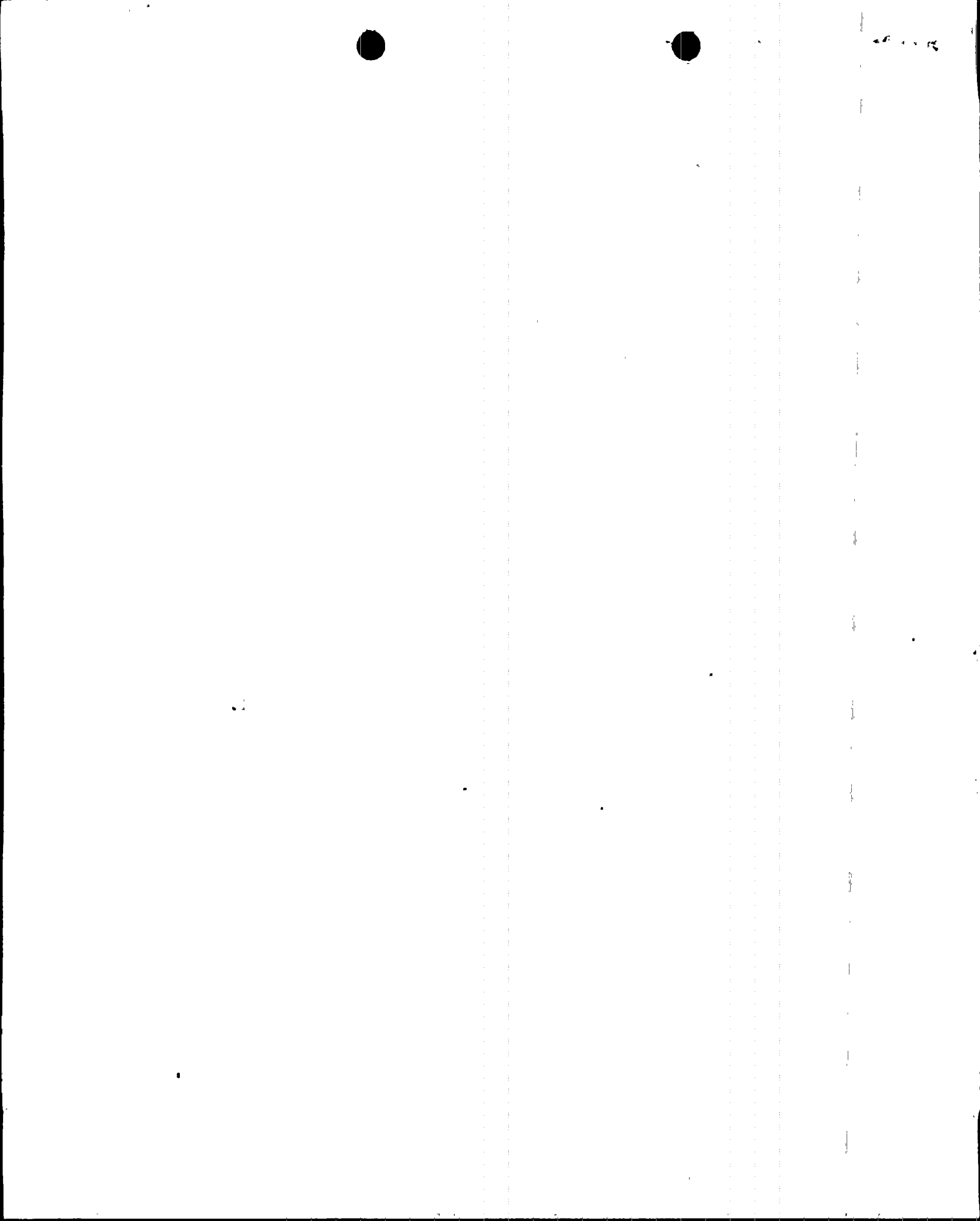
UNIT 4 CYCLE 5
STARTUP PHYSICS TESTS

1. ### Control Rod Worth

    Acceptance criteria for total measured rod worth is $\pm 10\%$
    of design. If the measured rod worth does not meet the
    criteria, a calculation of shutdown margin will be made.
    If shutdown margin cannot be attained, the cause will be
    determined and corrective action taken before power esca-
    lation begins.

2. ### Temperature Coefficient

    Acceptance criteria: Temperature coefficient is proven
    negative. If the temperature coefficient is not negative
    with ARO, a maximum boron will be specified below which
    the temperature coefficient is negative.

3. ### HZP Flux Map and 75% Power Flux Map

    Acceptance criteria: A calculation of peaking factors
    shall be made to determine the maximum allowable power
    level. Values for maximum $F\Delta H$ and F_O must be less than
    those specified in the Technical Specifications to ensure
    that the assumptions used in the analysis for establishing
    DNB margin, Linear Heat Rate, and thermal margins remain
    valid during operations.

4. ### ARO Boron Concentration HZP

    The HZP, ARO boron concentration acceptance criteria is
    ± 100 ppm of the design value. If the acceptance criteria
    cannot be met the cause shall be determined and appropriate
    action taken to find the deviation.

5. ### Power Defect

    The acceptance criteria for the measurement is $\pm 10\%$ of
    the design value. If this cannot be met the shutdown boron
    concentrations shall be adjusted for Hot and Cold Shutdown
    to ensure adequate shutdown margin.