

A 04/14/78

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DOCDATE: 04/06/78
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DOCTYPE: LETTER NOTARIZED: NO COPIES RECEIVED
SUBJECT: LTR 1 ENCL 1
FORWARDING REVISIONS TO TESTS DESCRIBED IN APPLICANT'S 03/27/78 SUBMITTAL ON
QUESTIONS 6.1.E & 6.1.G RE THE CYCLE 8 FUEL RELOAD AT SUBJECT FACILITY.

PLANT NAME: RE GINNA - UNIT 1

REVIEWER INITIAL: XJM
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GENERAL DISTRIBUTION FOR AFTER ISSUANCE OF OPERATING LICENSE.
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FOR ACTION: BR ~~CHIEF~~ ZIEMANN**W/7 ENCL

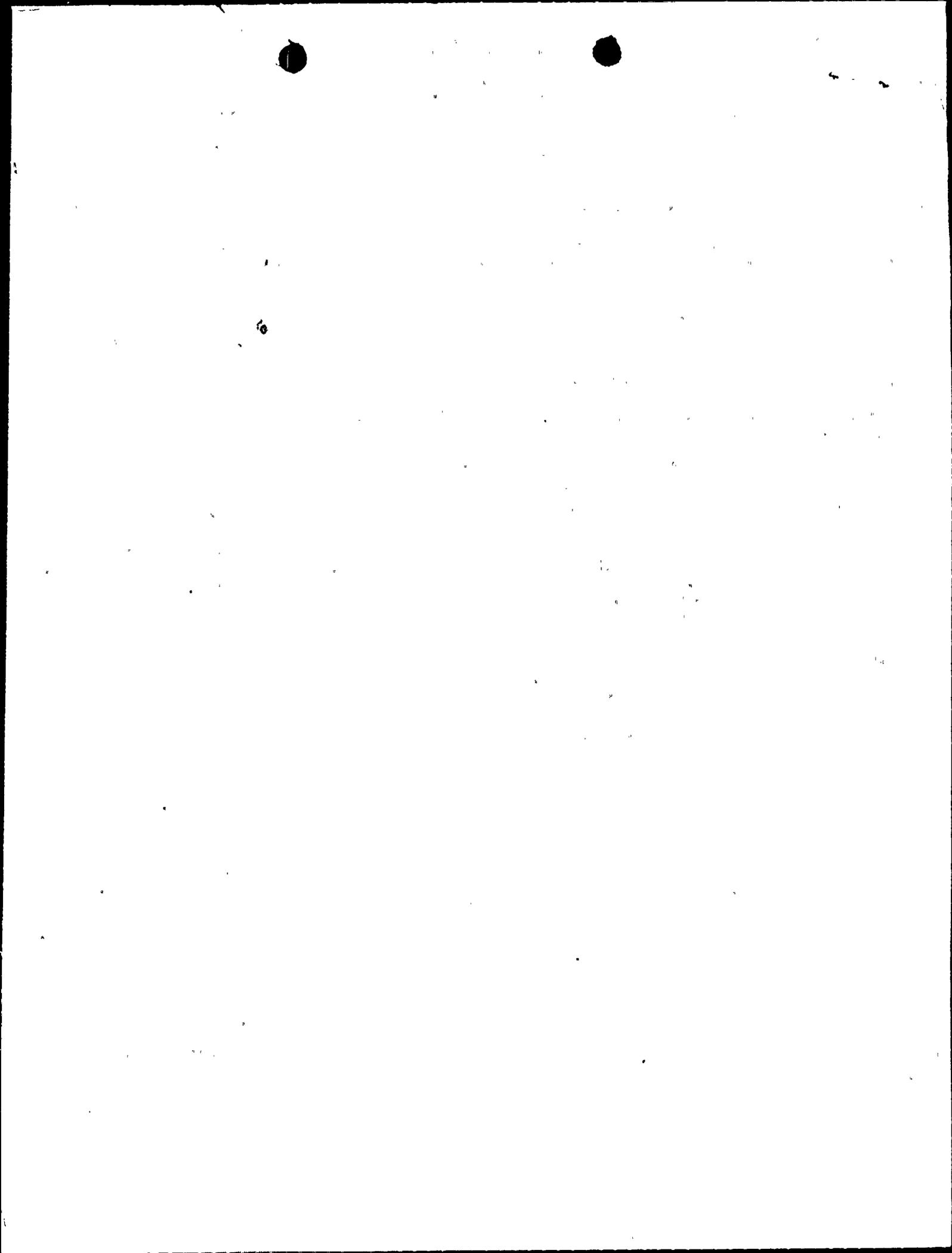
INTERNAL:	REG FILE**W/ENCL	NRC PDR**W/ENCL
	I-8-E**W/2 ENCL	OELD**LTR ONLY
	HANAUER**W/ENCL	CHECK**W/ENCL
	EISENHUT**W/ENCL	SHAO**W/ENCL
	BAER**W/ENCL	BUTLER**W/ENCL
	GRIMES**W/ENCL	J COLLINS**W/ENCL
	J. MCGOUGH**W/ENCL	

EXTERNAL: LPDR/S
ROCHESTER, NY**W/ENCL
TIC**W/ENCL
NSIC**W/ENCL
ACRS CAT B**W/16 ENCL

DISTRIBUTION: LTR 40 ENCL 39
SIZE: 1P+2P

CONTROL NBR: 781010022

***** THE END *****





REGULATORY DOCKET FILE COPY



ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649

LEON D. WHITE, JR.
VICE PRESIDENT

TELEPHONE
AREA CODE 716 546-2700

April 6, 1978

US NRC
OPERATION SERVICES
BRANCH

1978 APR 10 PM 3 26

REGULATORY DISTRIBUTION
SERVICES UNIT

Director of Nuclear Reactor Regulation
Attn: Mr. D. L. Ziemann, Chief
Operating Reactor Branch #2
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Ziemann:

The additional information regarding the Cycle 8 fuel reload at R. E. Ginna requested by your March 10, 1978 letter was supplied by letter dated March 27, 1978. In response to requests by members of your staff, this letter modifies the tests described in our March 27 submittal.

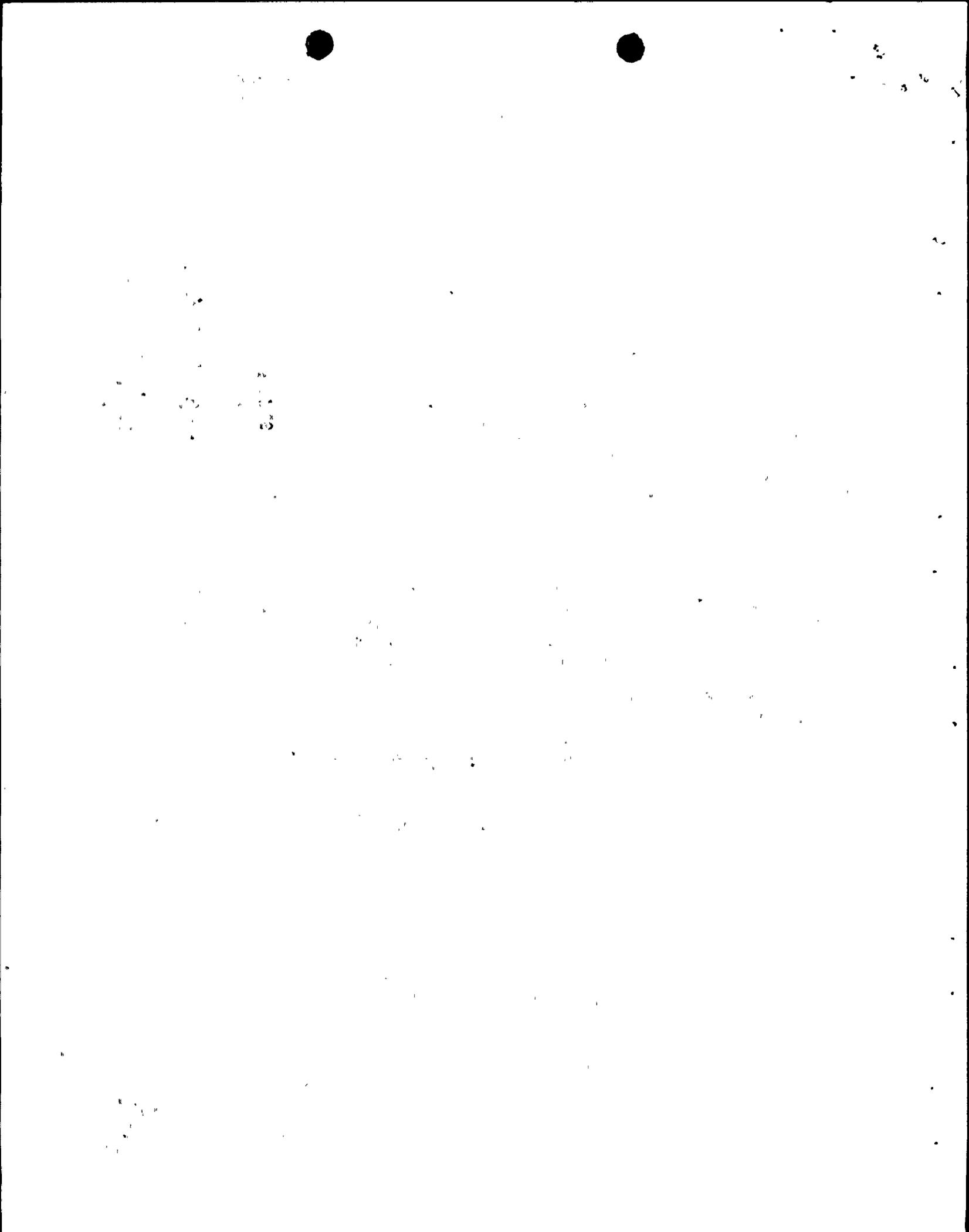
Attached are the revisions to our responses to questions 6.1.e and 6.1.g.

Very truly yours,

L. D. White, Jr.

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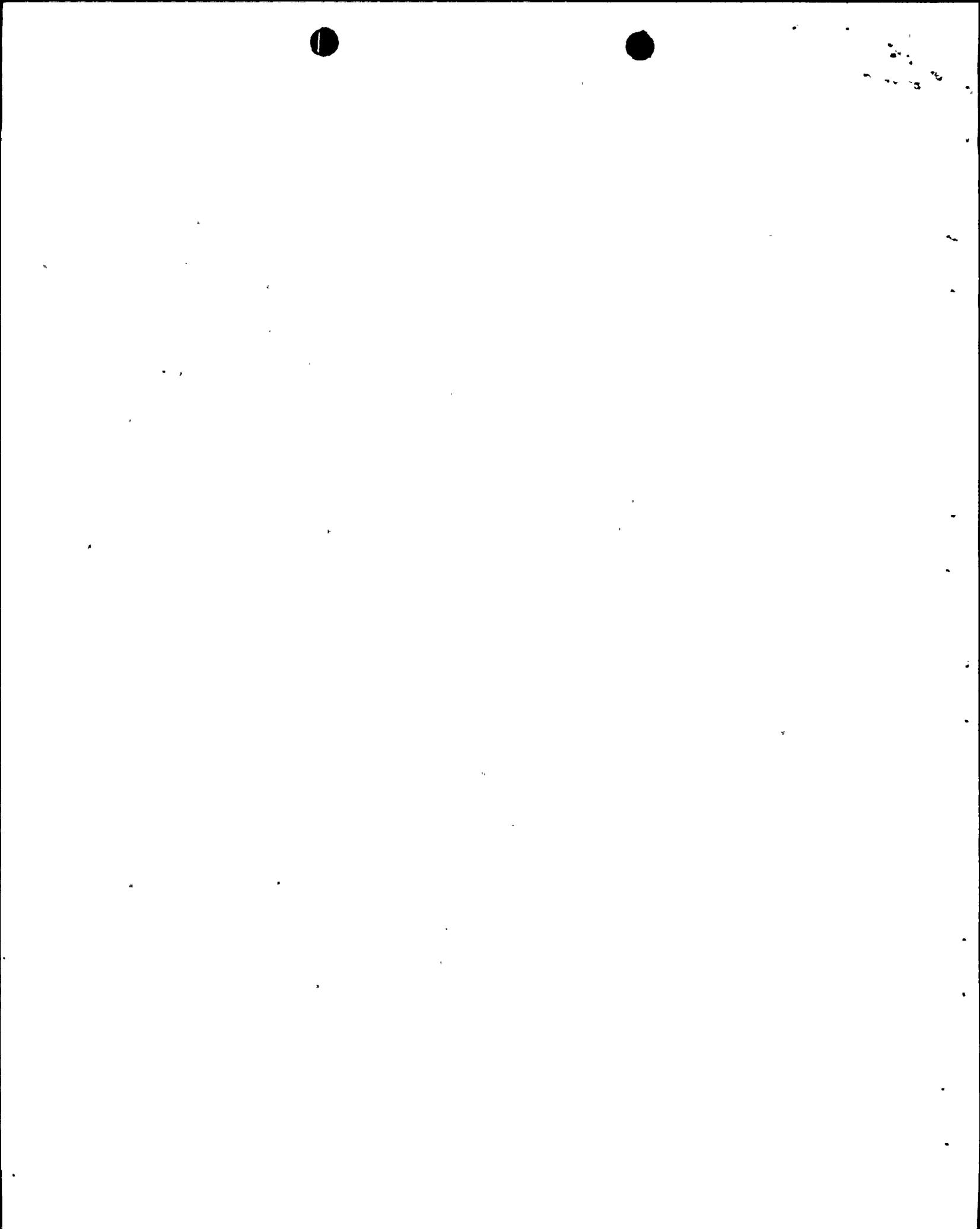
Question 6.1.e Provide the details of the regulating control rod group reactivity worth tests. Give the predicted worth of each group to be measured, the stuck rod worth and the predicted total worth for all rods. What is the acceptance criteria for these tests? What are the procedures if the acceptance criteria is not met?

Response: The differential worth of banks D, C, B, and A will be measured. From these measurements the integral bank worths can be obtained.

The differential bank worth is measured by first obtaining a critical configuration with the bank of interest approximately full withdrawn. Then boron dilution is initiated. The bank of interest is then inserted a given number of steps with the reactivity computer monitoring flux and reactivity response. The reactivity response calculated by the reactivity computer is then recorded for the associated change in bank position. This sequence is repeated until the bank is fully inserted. From the resulting data a plot of differential bank worth versus bank position is developed. The integral bank worth will be developed from these data.

The acceptance criteria for these tests are that the measured individual bank integral worth be within 15% of the predicted values and that the total worth of all four banks be within 10% of the predicted value. If the criterion on individual bank worth is not met, an evaluation will be performed to determine the cause and any potential impacts. If the criterion in total worth of the four banks is not met, additional banks will be measured until the measurement is within 10% of the prediction. This will be continued, if necessary, to measurement at an N-1 rod inserted condition. The result of an N-1 measurement, with appropriate allowance for measurement uncertainty, will be compared to the value assumed in the Safety Analyses.

The predicted values for the regulating control rod group reactivity worth tests have not yet been calculated but will be presented, as required, in the Summary Report of the Physics Startup Tests.



Question 6.1.g Provide details of the power coefficient measurement near full power. What methods are used to compare measured value with predictions? What is the acceptance criteria for this test and what procedures are followed if acceptance criteria is not met.

Response:

The power coefficient measurement is done at a power level greater than 65% after the fuel preconditioning requirements have been satisfied. A power oscillation is created by ramping the turbine approximately +10% and -10% rated power. The core T_{ave} is then kept equal to T_{ref} by inserting and withdrawing control rods. The reactivity computer is used to obtain the reactivity associated with each control rod move. From these data the power coefficient can be calculated.

If the difference between the measured and calculated power coefficient is within 30%, the results of this test will be considered acceptable. If this criteria can not be met the test will be repeated and if the average measured value is within the envelope of power coefficients used in the accident analysis, there is no safety concern and the results of these tests will be considered acceptable.

If the average value of the tests is outside the envelope of power coefficients used in the accident analysis, operating restrictions will be imposed which will result in safe operation of the reactor until the accident analysis is re-evaluated using the measured data and safe operation of the cycle can be shown.

