Enclosure 1

NOTICE OF VIOLATION

GPU Nuclear Corporation Oyster Creek Nuclear Generating Station Docket No. 50-219 License No. DPR-16 EWE 93-285

During an NRC inspection conducted on September 27, 1993, through October 15, 1993, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, (1993), the violation is listed below:

Technical specification 3.4.A.3, requires in part, if one core spray system loop becomes inoperable during the run mode, the reactor may remain in operation for a period not to exceed 7 days provided; average planar linear heat generation rate (APLHGR) of all rods in any fuel assembly, as a function of average planar exposure, at any axial location shall not exceed 90% of the limit given in Specification 3.10.A. The action to bring the core to 90% of the APLHGR Limits must be completed within two hours after the system has been determined to be inoperable.

Contrary to the above, on May 8, 1992 and October 31, 1992, one core spray system was inoperable during the run mode and average planar linear heat generation rate (APLHGR) of all rods in any firel assembly, as a function of average planar exposure, at any axial location was not at 90% or less of the limit. Specifically, the most limiting APLHGR in the reactor core was greater than 90% of the limit with one core spray system inoperable for greater than two hours.

This is a Severity Level IV Violation (Supplement I).

Pursuant to the provisions of 10 CFR 2.201, GPU Nuclear Corporation is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region I, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued to show cause why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

DATED AT KING OF PRUSSIA, PENNSYLVANIA THIS 24TH DAY OF FEBRUARY

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PDR

PDR

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GPU NUCLEAR CORPORATION ENFORCEMENT CONFERENCE JANUARY 25, 1994

AGENDA

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J. BARTON DIRECTOR O.C.

P. SCALLON MGR. PLT. OPERATIONS

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J. DOUGHER

O.C. FUELS GROUP

J. DOUGHER

O.C. FUELS GROUP

MGR. O.C. LICENSING

VI. CORRECTIVE ACTIONS G. BUSCH (LONG TERM) MGR. O.C. LICENSING

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J. BARTON DIRECTOR O.C.

G. BUSCH

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- I. INTRODUCTION
 - OVERVIEW OF OSTI AND IT'S MEANING TO GPU NUCLEAR
 - ENFORCEMENT CONFERENCE

II. APPARENT VIOLATIONS

- EEI 50-219/93-81-03 FAILURE TO REDUCE APLHGR TO LESS THEN 90% OF LIMIT DURING APPLICABLE CORE SPRAY SURVEILLANCE. TECH SPEC 3.4.A.3.
- EEI 50-219/93-81-04 FAILURE TO MODIFY APPLICABLE CORE SPRAY SURVEILLANCE PROCEDURES PER 10 CFR 50 APPENDIX B, CRITERION III.

THOUGH IDENTIFIED AS SEPARATE APPARENT VIOLATIONS, BOTH SHARE THE SAME ROOT CAUSE.

III VIOLATION DISCUSSION

SEQUENCE OF EVENTS

	09/30/88 -	PLANT	SHUTDOWN	FOR	START	OF	12R	OUTAGE.
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- 12/88 TOPICAL REPORT 053 " THERMAL LIMITS WITH ONE CORE SPRAY SPARGER" ISSUED.
- 01/26/89 TSCR #160 SUBMITTED TO NRC.
- 01/30/89 PROCEDURES 202.1 AND 1001.22 CHANGED TO REFLECT APLHGR PENALTY.

SURVEILLANCE PROCEDURES WERE NOT REVISED.

- 03/28/89 PLANT STARTUP FROM 12R OUTAGE.
- 09/10/91 TS AMENDMENT #153 (TSCR#160) ISSUED BY NRC

RECENT EVENTS

- 10/01/93 OSTI TEAM MENTIONED CORE SPRAY/MAPLHGR ISSUE, ALONG WITH NUMEROUS OTHER ITEMS, DURING DAILY DEBRIEF.
- 10/05/93 CONDUCTED 610.3.006, CORE SPRAY ISOLATION VALVE ACTUATION TEST & CALIBRATION.

FOLLOWING DISCUSSIONS WITH STAFF, MANAGER PLANT OPERATIONS REQUESTED REVIEW OF ALL CORE SPRAY SYSTEM PROCEDURES TO DETERMINE WHICH SURVEILLANCES ACTUALLY DISABLED SYSTEM.

- 10/06/93 REVIEW COMPLETED. IDENTIFIED SEVERAL PROCEDURES WHICH DISABLED SYSTEM BEING TESTED.
- 10/07/93 MPO ISSUED INTERIM GUIDANCE TO ENSURE MAPLHGR AT OR BELOW 90% FOR CERTAIN CORE SPRAY SURVEILLANCES.

III VIOLATION DISCUSSION (CONTINUED)

ROOT CAUSE OF THE EVENT

- BASED ON T.S. STRUCTURE, OPERATIONAL PHILOSOPHY WAS NOT TO ENTER LCO'S WHEN CONDUCTING T.S. SURVEILLANCES.
 - UNLIKE STANDARD T.S. OYSTER CREEK T.S. DO NOT CONTAIN EXPLICIT REQUIREMENTS TO ENTER LCO'S DURING SURVEILLANCE TESTING WHICH RENDER EQUIPMENT INOPERABLE.
- OYSTER CREEK T.S. DID REQUIRE TESTING REDUNDANT SYSTEMS, OPERATIONAL PHILOSOPHY WAS TO CONDUCT SUCH TESTING IMMEDIATELY UPON DECLARATION OF INOPERABILITY.
- LCO ENTRY LEADS TO BOTH REDUNDANT SYSTEMS INOPERABLE REQUIRING PLANT SHUTDOWN.
 - BASED ON ABOVE, IT WAS NOT CONSIDERED PRACTICAL NOR WAS IT CONSIDERED THE INTENT OF THE T.S. TO ENTER LCO'S AS A RESULT OF SURVEILLANCE TESTING.
 - BASED ON ABOVE OPERATIONAL PHILOSOPHY, DID NOT RECOGNIZE A NEED TO APPLY APLHGR PENALTY ON SURVEILLANCE TESTING

CORRECTIVE ACTIONS (SHORT TERM)

- INTERIM GUIDANCE ISSUED BY PLANT OPERATIONS MANAGEMENT REQUIRES PLANT TO REDUCE APLHGR DURING CORE SPRAY SURVEILLANCE TESTING.
 - REVIEWED TECHNICAL SPECIFICATIONS TO IDENTIFY ANY SIMILAR UNIQUE CONCERNS. NONE WERE IDENTIFIED.
 - REVIEWED T.S.SURVEILLANCES TO IDENTIFY THOSE WHICH CAUSE INOPERABILITY OF EQUIPMENT.

SAFETY ASSESSMENT OF LER 93-006 EVENTS

1 F 1 A

		(ONE	APPENDIX K OPERABLE CSS)	UPPER BOUND 95% (ONE OPERABLE CSS)	REALISTIC (ONE OPERABLE CSS)
2700°F	COOLABLE GEOMETRY MAINTAINED				
2200°F	10 OPD 50 46	2301°F	100% MAPLHGR		
	10 CFR 50.40	2130 F	90% MAPLHGR	2155°F 95% MAPLHGR	
					1936°F 100% MAPLHGR
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* 2200°F CONSERVATIVE SUCCESS CRITERIA	* APPENDIX K (LICENSING) ANALYSIS BASED ON DESIGN BASIS ACCIDENT PHILOSOPHY	* UPPER BOUND 95th PERCENTILE ANALYSIS DEMONSTRATES LARGE APPENDIX K CONSERVATISM	* REALISTIC ANALYSIS USED IN RISK-BASED EVALUATIONS
>2200° NOT NECESSARILY FUEL DAMAGE	CONSERVATIVE (BOUNDING) MODELS	ACCOUNTS FOR UNCERTAINTIES IN EXPERIMENTAL AND PLANT MODELING PLUS VARIABILITY IN PLANT PARAMETERS	DEMONSTRATES ONE OPERABLE CSS MEETS - 10 CFR 50.46
<2700° COOLABLE GEOMETRY	CONSERVATIVE (BOUNDING) INPUT ASSUMPTIONS	METHODOLOGY IS AN ACCEPTABLE ALTERNATIVE TO APPENDIX K	

IV SAFETY ASSESSMENT OF LER 93-006 EVENTS. (CORE SPRAY INOPERABLE - APLHGR PENALTY NOT APPLIED)

ANALYSIS

- USING UPPER BOUND 95% METHODOLOGY, WHICH IS AN ACCEPTABLE ALTERNATIVE TO APPENDIX K, THE 2200°F CRITERIA WAS NOT EXCEEDED.
- USING APPENDIX K METHODOLOGY 2200°F WOULD BE MARGINALLY EXCEEDED BUT IN ALL CASES COOLABLE GEOMETRY IS MAINTAINED.

CONCLUSIONS

- LER 93-006 SURVEILLANCE EVENTS NOT A SAFETY CONCERN.
- LER 93-006 SURVEILLANCE EVENTS POSED NO INCREASED RISK TO THE HEALTH AND SAFETY OF THE PUBLIC.

PRA CONSIDERATION

- RISK BASED EVALUATIONS USE REALISTIC MODEL.
- ONE CORE SPRAY SYSTEM AT OYSTER CREEK MEETS 2200°F AND SINGLE FAILURE CRITERIA USING REALISTIC MODEL.
- SINCE 2200°F NOT EXCEEDED (REALISTIC MODEL) NO BENEFIT TO CDF BY REDUCING MAPLHGR.
- 87% OF TOTAL CORE DAMAGE FREQUENCY, DUE TO GENERAL PLANT TRANSIENTS - ONLY 13% TO LOCA. MANEUVERING THE PLANT TO PERFORM SURVEILLANCES RESULTS IN AN INCREASE IN CDF.

CONCLUSION

POWER MANEUVERS FOR SURVEILLANCE PURPOSES WOULD POSE AN INCREASE RISK THAN OPERATING ABOVE 90% MAPLHGR.

* CDF - CORE DAMAGE FREQUENCY

VI. CORRECTIVE ACTION (LONG TERM)

REVISE PROCEDURES TO INCORPORATE APLHGR PENALTY IN SURVEILLANCES.

DEVELOP OPERATIONAL PHILOSOPHY OF ENTRY TO LCO'S RECOGNIZING IT IS NOT THE INTENT OF TECHNICAL SPECIFICATIONS TO REQUIRE PLANT SHUTDOWN TO PERFORM SURVEILLANCE TESTING.

- RECENT T.S. AMENDMENT ALLOWS VERIFICATION VS TESTING WHICH FARTIALLY ALLEVIATES CONCERN.
- ADDITIONAL T.S. CHANGES NECESSARY TO SUPPORT OVERALL PHILOSOPHY CHANGE (I.E., INOP TRAIN - SURV. TEST REQUIRED)

COMPLETE ACTION PLAN WHICH RESOLVES PROBLEM AREAS

- REVISE PROCEDURES TO MAINTAIN EQUIPMENT SYSTEM OPERABILITY DURING SURVEILLANCES WHERE POSSIBLE.
- CONSIDER MODIFICATIONS TO ALLOW SURVEILLANCE TESTING WITHOUT RENDERING EQUIPMENT SYSTEMS INOPERABLE.
- REVISE TECH SPEC TO PROVIDE APPROPRIATE PROVISIONS FOR SURVEILLANCE TESTING.

等解释的自然的问题自然的问题。

VII. ENFORCEMENT POLICY

SAFETY SIGNIFICANCE

- NO INCREASE IN RISK
- PCT CRITERIA OF 10 CFR 50.46 WOULD HAVE BEEN MET USING DIFFERENT METHODOLOGY WHICH HAS BEEN NRC ACCEPTED AT OTHER FACILITIES.

MITIGATING/ESCALATING FACTORS

- BROAD BASE CORRECTIVE ACTIONS WERE/ARE BEING IMPLEMENTED.
- NO PREVIOUS VIOLATIONS FOR WHICH CORRECTIVE ACTIONS WOULD HAVE PREVENTED THIS INCIDENT.
- BASED ON APPENDIX C SEVERITY CRITERIA, LEVEL IV VIOLATION WOULD APPLY BASED ON SAFETY SIGNIFICANCE.

Enclosure 3

Persons in attendance at the January 25, 1994, Oyster Creek Enforcement Conference

GPU Nuclear Corporation

J. Barton, Vice President and Director, Oyster Creek

J. Fornicola, Licensing and Regulatory Affairs, Director

G. Busch, Manager Oyster Creek Licensing

P. Scallon, Manager Plant Operations, Oyster Creek

J. Dougler, Senior Engineer, Oyster Creek Fuels

US Nuclear Regulatory Commission

R. Cooper, Director, Division of Reactor Projects, (DRP) Region I

A. Dromerick, Project Manager, Nuclear Reactor Regulation

K. Smith, Regional Counsel, Region I

L. Doerflein, Chief, Reactor Projects Branch 4, DRP Region I

J. Kennedy, Acting Chief, Reactor Projects Section 4B, Region I

P. Kaufman, Project Engineer, Reactor Projects Section 4B, Region I

L. Briggs, Senior Resident Inspector, Oyster Creek, Region I

S. Pindale, Resident Inspector, Oyster Creek, Region I

M Banerjee, Senior Enforcement Specialist

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