UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
Duke Power Company	)	Docket No. 50-369
(McGuire Unit 1)	)	License No. NPF-9
	)	EA 86-52

ORDER IMPOSING CIVIL MONETARY PENALTY

I

Duke Power Company (the licensee) is the holder of Operating License No. NPF-9 (the license) issued by the Nuclear Regulatory Commission (the Commission/NRC) on January 23, 1981. The license authorizes the licensee to operate McGuire Unit 1 in accordance with conditions specified therein.

II

A safety inspection of the licensee's activities under the license was conducted by the NRC from January 6 - February 28, 1986. As a result of this inspection, it appeared that the licensee had not conducted its activities in full compliance with NRC requirements. A Notice of Violation and Proposed Imposition of Civil Penalty (Notice) was served upon the licensee by letter dated June 2, 1986. The Notice stated the nature of the violation, the provisions of the NRC's requirements that the licensee had violated, and the amount of the civil penalty proposed for the violation. The licensee responded to the Notice by letters dated July 2 and 22, 1986.

III

Upon consideration of the licensee's response and the statements of fact, explanation, and argument for mitigation of the proposed civil penalty contained therein, as set forth in the Appendix to this Order, the Director, Office of Inspection and Enforcement, has determined that the violation occurred as stated and that the penalty proposed for the violation designated in the Notice of Violation and Proposed Imposition of Civil Penalty should be imposed.

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (42 USC 2282, PL 96-295), and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay a civil penalty in the amount of Fifty Thousand Dollars ($50,000) within thirty days of the date of this Order by check, draft, or money order payable to the Treasurer of the United States and mailed to the Director, Office of Inspection and Enforcement, U. S. Nuclear Regulatory Commission, Washington, D.C. 20555.

V

The licensee may, within thirty days of the date of this Order, request a hearing. A request for a hearing shall be addressed to the Director, Office of Inspection and Enforcement, at the above address. A copy of the hearing request

shall also be sent to the Assistant General Counsel for Enforcement, Office of the General Counsel, U. S. Nuclear Regulatory Commission, Washington, D.C. 20555. If a hearing is requested, the Commission will issue an Order designating the time and place of the hearing. Upon failure of the licensee to request a hearing within thirty days of the date of this Order, the provisions of this Order shall be effective without further proceedings. If payment has not been made by that time, the matter may be referred to the Attorney General for collection.

In the event the licensee requests a hearing as provided above, the issues to be considered at such hearing shall be:

(a) whether the licensee violated NRC requirements as set forth in the Notice of Violation and Proposed Imposition of Civil Penalty, and

(b) whether, on the basis of such violations, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 19th day of September 1986

APPENDIX

On June 2, 1986 a Notice of Violation and Proposed Imposition of Civil Penalty (Notice) was issued for a violation of an NRC requirement. Duke Power Company's responses to the Notice were provided in letters dated July 2 and 22, 1986. A restatement of the violation, a summary of the licensee's responses, the NRC staff's evaluation of the licensee's responses, and the staff's conclusions are set forth below.

Restatement of the Violation

Technical Specification 3.5.2 requires for Modes 1, 2, and 3 that two independent emergency core cooling system (ECCS) subsystems shall be operable with each subsystem comprised of one operable centrifugal charging pump, one operable safety injection (SI) pump, one operable RHR heat exchanger, one operable RHR pump, and an operable flow path capable of taking suction from the refueling water storage tank (RWST) on a safety injection signal and automatically transferring suction to the containment sump during the recirculation phase of operation.

With both ECCS subsystems flowpaths inoperable, Technical Specification 3.0.3 applies, which required that except as provided in the associated requirements, within one hour, action shall be initiated to place the unit in a mode in which the specification does not apply.

Technical Specification 3.0.4 requires that entry into an operational mode or other specified condition shall not be made unless the conditions for the Limiting Condition for Operation are met without reliance on provisions contained in the ACTION requirements.

Contrary to the above, during the period beginning at 9:00 p.m. on November 2, 1985 until 7:30 p.m. on November 4, 1985, the plant entered Modes 2 and 3 with both trains of the ECCS subsystems for Unit 1 inoperable in that the safety injection pumps would initially take suction from the volume control tank (VCT) instead of the RWST and the capability to automatically transfer suction from the RWST to the containment sump did not exist.

This a Severity Level III violation (Supplement I).
(Civil Penalty - $50,000)

Summary of the Licensee's Responses

Duke Power Company, in its responses, admits that the violation occurred as stated in the Notice, but believes the civil penalty is not warranted and requests mitigation of the proposed civil penalty.

The licensee states that plant personnel were aware of the inoperability of the valves and acted accordingly. The licensee believes that although the valve operators were inoperable and the valves were not capable of automatic closure as designed, there were several factors that should be considered regarding the manual manipulation of the valves had a safety injection occurred.

One of the factors submitted for consideration was the existence of a procedure which could have resulted in the manual closure of valves 1NV-141 and 1NV-142, if a safety injection had occurred. Step D.2 of procedure EP/1/A/5000/01, "Safety Injection," required manual valve alignment, if necessary, by directing the operator to check the ESF monitor light panels and to "manually align equipment as required." The licensee's safety analysis shows that the charging pumps could potentially become hydrogen bound approximately 18.25 minutes after initiating safety injection, allowing sufficient time for manual actions.

The licensee also stated that the lower boration level of water in the VCT as compared to the RWST is not a safety concern. The boron concentration in the VCT would be approximately that of the reactor coolant system and would not affect reactivity which would be controlled by the control rods.

NRC Evaluation of the Response

The NRC staff has reviewed the licensee's responses and concludes that no new information has been presented which was not known to the staff at the time the Notice of Violation and Proposed Imposition of Civil Penalty was issued.

The staff notes that in the evaluation of this incident, the licensee places considerable reliance on manual actions to assure the safety function of the charging system for safety injection. The staff recognizes that the verification of the closure and, if necessary, manual alignment of the VCT outlet valves upon the initiation of safety injection is required by procedures and that there may have been enough time to perform the necessary manual actions. However, the staff does not typically acknowledge manual actions in design-basis accident analyses that require the charging system to operate automatically. Furthermore, with regard to the licensee's determination that the boron concentration of the VCT is not a safety concern based on the control of reactivity by the control rods, the injection of borated water of a sufficient boron concentration is to counter potential operational events. Examples of such events are: the failure of two or more control rods to insert following a reactor trip, an unexplained or uncontrolled reactivity increase, and an inadequate shutdown margin. The higher boron concentration of the RWST relative to the reactor coolant system is in part to ensure the availability of negative reactivity control.

The staff considers this violation to be significant because both trains of the charging system were in a degraded condition while the VCT outlet valves were open. The degraded condition of the charging system is cause for significant concern. In categorizing the incident as a Severity Level III violation, the staff recognizes that (1) certain emergency procedures were in place which could have led to the identification and closure of the required valves, (2) that plant personnel were aware that the VCT valves were inoperable although they were not aware that this violated a technical specification, and (3) that analyses showed that the charging pumps would not become inoperable for approximately 18 minutes after the initiation of safety injection. If the charging system had been determined to be unable to perform its intended safety function rather than being in a degraded condition, this incident would have been categorized a higher severity level. Therefore, the staff believes the violation was appropriately classified as a Severity Level III violation.

In considering mitigation of the civil penalty, although Duke Power Company requested mitigation of the proposed civil penalty, it failed to specifically address the five factors in Section V(B) of 10 CFR Part 2, Appendix C, which describes the bases for mitigation or escalation of a civil penalty. The five factors involve: prompt identification and reporting, unusually prompt and extensive corrective actions, past performance in the area of concern, prior notice of a similar event (escalation only), and multiple occurrences of a violation (escalation only). In evaluating these factors, the NRC considered that (1) there was not prompt identification of the violation in that the NRC identified this violation to the licensee approximately two months after the occurrence of the incident, (2) the corrective actions taken were not unusually prompt in that some of the corrective actions proposed by Duke Power Company will not be in place until 1987, and (3) the licensee's past performance at the McGuire facility in the area of plant operations is considered poor based on the Systematic Assessment of Licensee Performance (SALP) Category 3 ratings in the area of plant operations for the periods ending August 31, 1984 and February 28, 1986 and two escalated enforcement actions taken in 1984 and 1985 related to the failure to maintain the containment spray and upper head injection accumulator systems in an operable condition. The factors of prior notice of a similar event and multiple occurrences were not considered appropriate for escalation of the civil penalty. Therefore, the staff believes that the civil penalty was appropriately assessed without mitigation or escalation.

Conclusion

The violation occurred as stated in the Notice and the licensee has not provided an adequate basis for either mitigating or remitting the proposed penalty. Accordingly, a civil penalty in the amount of Fifty Thousand Dollars ($50,000) should be imposed.

Duke Power Company

bcc w/encl:
NRC Resident Inspectors
D. Hood, NRR
H. Nicolaras, NRR
Document Control Desk
State of South Carolina
State of North Carolina
PDR
SECY
CA
ACRS
JMTaylor, IE
JNGrace, RII
RStarostecki, IE
JAxelrad, IE
HWong, IE
JLieberman, OGC
JSniezek, DED/ROGR
FIngram, PA
GJohnson, RM
Enforcement Coordinators
RI, RII, RIII, RIV, RV
HDenton, NRR
JPartlow, IE
BHayes, OI
SConnelly, OIA
JCrooks, AEOD
ES File
EA File
DCS

HJW	Per Telecon w/ L. Trocine HJW	Per Telecon w/ B. Paton HJW	9/17 #3c		
IE:ES	RII	OGC	ES:D	IE:DD	IE:D
HWong	JNGrace	JLieberman	JAxelrad	RStarostecki	JTaylor
9/17/86	9/17/86	9/18/86	9/17/86	9/ /86	9/18/86