

May 9, 1996

EA 96-080 and 96-100

Duke Power Company  
ATTN: Mr. T. C. McMeekin  
Vice President  
McGuire Site  
12700 Hagers Ferry Road  
Huntersville, NC 28078-8985

SUBJECT: NOTICE OF VIOLATION  
(NRC Inspection Report Nos. 50-369, 370/96-02)

Dear Mr. McMeekin:

This refers to an inspection conducted by the NRC on March 11 through April 1, 1996, at the McGuire facility. This inspection included a review of the circumstances and conditions that resulted in Unit 2 Refueling Water Storage Tank (RWST) level instrumentation becoming inoperable during cold weather, as well as an evaluation of the failure of a Unit 2 Emergency Diesel Generator (EDG) to start. The results of this inspection were sent to you by letter dated April 4, 1996. A closed, predecisional enforcement conference was conducted in the Region II office on April 15, 1996, to discuss the apparent violations, the root causes, and your corrective actions to preclude recurrence. A list of conference attendees, NRC slides, and a copy of your presentation materials are enclosed.

Based on the information developed during the inspection and the information that you provided during the conference, the NRC has determined that violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the subject inspection report.

Violation A involves the failure to provide adequate procedural guidance to assure that the Unit 2 RWST level transmitters would not freeze and become inoperable during cold weather. Specifically, plant procedures did not require monitoring to ensure that thermostat controls for the strip heaters were properly set. As a result, during testing activities in February 1996 one RWST level transmitter was discovered to be frozen and inoperable. A second transmitter was then declared inoperable, although this inoperability was not conclusively verified prior to taking immediate corrective action to apply heat. Level transmitters for the RWST could similarly have been inoperable during periods when ambient temperatures were below freezing. With two of three channels inoperable, the function of the transmitters to provide a low level signal for the automatic swapover of the Emergency Core Cooling System (ECCS) pumps to the containment sump, and the actuation of alarms to alert operators to manually initiated reactor coolant recirculation, would not have occurred. During certain accident scenarios, this could have resulted in the possible failure or degradation of several ECCS pumps, potentially

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increasing the severity of the accident. Therefore, this violation has been categorized in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, as a Severity Level III violation.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$50,000 is considered for a Severity Level III violation. Because your facility has been the subject of escalated enforcement actions within the last two years<sup>1</sup>, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Because you identified the violation during an operability verification of the level transmitters, the NRC determined that credit for the factor of *Identification* was appropriate.

Regarding corrective actions, your immediate measures included restoration of the operability of the affected instruments, and verification of the operability of the remaining RWST level instrumentation for both McGuire units. Additional actions included the establishment of a task force to review your freeze protection program in depth, and the implementation of procedural revisions and plant modifications to prevent recurrence. Based on these facts, the NRC determined that credit was warranted for the factor of *Corrective Action*, resulting in no civil penalty for Violation A.

Violation B in the enclosed Notice involves EDG inoperability in excess of Technical Specification requirements. At least four failures of EDGs to start due to false low lube oil pressure indication occurred at McGuire between 1981 and 1996. Your failure to correct this long-term deficiency resulted in the valid failure of EDG 2B to start during testing on February 6, 1996. Your subsequent evaluation determined that marginal design coupled with ambient temperatures below 71 degrees F would have rendered the EDG inoperable for periods in excess of 72 hours on at least two previous occasions. During these periods of inoperability, the action requirement of Technical Specification 3.8.1.1 for an inoperable diesel was not met.

The safety consequence of the inoperability of the 2B EDG was reduced because at least one EDG was functional at all times, the 2B EDG could have been restarted if it failed on low lube oil pressure, and the diesels were not called upon to function in an emergency situation during the periods of inoperability. However, the inoperability of an EDG beyond the times allowed by the TS limiting conditions for operation represents an increased safety risk relative to the single failure assumed in the accident analysis. Therefore, this Violation B has been categorized in accordance with the Enforcement Policy as a Severity Level III violation.

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<sup>1</sup> Two Severity Level (SL) III violations with a \$75,000 civil penalty were issued on March 16, 1994, concerning control of safeguards material (EA 93-311). A \$100,000 civil penalty was issued on May 16, 1994, involving a loss of offsite power event (EA 94-038). An SL III violation was issued on August 22, 1995, concerning inadequate design control of emergency diesel generator turbochargers (EA 95-156).

For Violation B, the NRC concluded that credit was warranted for *Identification* because the issue was identified through your investigation of the failure of the EDG to start during surveillance testing. The NRC further determined that credit was warranted for *Corrective Action*, based on immediate implementation of compensatory measures to monitor EDG room and lube oil temperatures to ensure EDG operability, and plans to correct the design deficiency through equipment modifications. Based on these considerations, the NRC has determined that a civil penalty would not be assessed for Violation B.

Therefore, to encourage prompt identification and comprehensive correction of violations, I have been authorized, after consultation with the Office of Enforcement, not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Sincerely,

Original Signed by  
Stewart D. Ebnetter

Stewart D. Ebnetter  
Regional Administrator

Docket Nos. 50-369, 50-370  
License Nos. NPF-9, NPF-17

Enclosures: 1. Notice of Violation  
2. List of Attendees  
3. NRC Slides  
4. Licensee Presentation Material

cc w/encls: (See Page 4)

DPC

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cc w/encls:  
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cc w/encls: Cont'd on Page 5

DPC

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cc w/encls (Cont'd):  
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KClark, RII

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CCasto, RII

CEvans, RII

R. Crlenjak, RII [IFS Update Required]

RZimmerman, NRR

VNerses, NRR

IMS:RII

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NRC Resident Inspector

U.S. Nuclear Regulatory Commission

12700 Hagers Ferry Road

Huntersville, NC 28078-8985

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R. Crlenjak, RII [IFS Update Required]

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NRC Resident Inspector

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