



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION III  
801 WARRENVILLE ROAD  
LISLE, ILLINOIS 60532-4351

April 2, 1998

EA 97-567  
EA 97-569

Mr. T. Palmisano  
Site Vice President and General Manager  
Palisades Nuclear Power Generating Plant  
27780 Blue Star Memorial Highway  
Covert, MI 49043-9630

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES  
\$55,000 (NRC SPECIAL INSPECTION REPORT 50-255/97014(DRS))

Dear Mr. Palmisano:

This refers to the special inspection conducted on October 28 through November 19, 1997, at the Palisades Nuclear Power Plant. The purpose of this inspection was to review the circumstances surrounding the removal of all control rods from service to conduct maintenance during power operation. These issues and the need for effective corrective actions were discussed during a public exit meeting on November 19, 1997. The report documenting our inspection activities was issued December 12, 1997. Due to the significance of these issues a predecisional enforcement conference was conducted on December 19, 1997.

Based on the information developed during the inspection and the information provided during the predecisional enforcement conference, the NRC has determined that six violations of NRC requirements occurred. These violations are cited in the enclosed Notice of Violation (Notice) and Proposed Imposition of Civil Penalties. The circumstances surrounding each violation are described in detail in the subject inspection report.

The violations refer to both conduct of operations errors made by a shift operating crew and failures to follow maintenance-related procedures by maintenance personnel when power was removed from all of the control rod drives during power operation to facilitate the repair of a single control rod drive. These errors reflected significant weaknesses in pre-evolutionary preparations, communications, and supervision that resulted in the breakdown of oversight and control of operations and maintenance activities.

Specifically, during the preplanning of this activity, the operating crew failed to implement a plant procedure mandating that a safety assessment be conducted to ensure the system configuration was acceptable for the current plant status. The crew incorrectly removed power from all of the control rod drives without communicating that system configuration to the shift supervisor. Five of the on shift licensed operators did not realize that removing power to all of the control rod drives, during power operation, was a system configuration that the Technical Specifications only permitted for a limited time. Before removing power from all of the control rods, the operating crew erroneously referenced a previous tag out that had removed power from all of the control rod drives during shutdown conditions. Before starting the repair, maintenance personnel incorrectly documented that power to only one control rod drive motor was removed; the system

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configuration required by the maintenance procedure prerequisites. If maintenance personnel had complied with the procedure requirements and correctly verified the prerequisite, this work request could either have been deferred until the specified system configuration was established or changed to accommodate the expanded work scope. During the repair, maintenance personnel inadvertently expanded the scope of the authorized work when they removed and reinstalled relays for three additional control rod drive motors. This was accomplished without documenting the additional work activity. The shift management team failed to exercise its oversight responsibilities by failing to stop the maintenance activity or expand the scope of the post maintenance test after observing a mechanic exceed the scope of the maintenance activity by removing and reinstalling the additional relays. As a result, an inadequate post maintenance test was performed because the change in scope was not adequately communicated to maintenance or operations personnel. When the expanded maintenance scope was discussed with the operations manager, the post maintenance test was still not revised to include the expanded maintenance scope. Inherent in the failure of your staff to recognize the increased maintenance work scope and the need for additional post maintenance testing was your staff's incorrect interpretation that removing and inspecting the relays did not constitute maintenance that could adversely affect system operation.

While the NRC acknowledges that the control rods remained trippable, both manually and automatically, which ensured that the reactor protection functions provided by the control rods were available and that the control room crew had discussed contingencies needed to respond to an operational transient, the failures present in this case represent a significant lack of attention to licensed responsibilities and, therefore, a significant regulatory concern. The procedural violations evidenced by both maintenance and operations personnel, in light of their root causes discussed above, could in different circumstances present actual or potential safety consequences. Accordingly, the violations in the Notice are classified in the aggregate, in accordance with NUREG-1600, "General Statement of Policy and Procedure for NRC Enforcement Actions (Enforcement Policy)," as a Severity Level III problem.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$55,000 is considered for each Severity Level III problem. Because the Palisades facility has been the subject of escalated enforcement actions within the last 2 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. The NRC recognizes that the Palisades site management team identified many of the violations. However, the site management team did not identify the inadequate pre-evolutionary preparations, ineffective communications, and lack of supervision; that collectively these violations represented. As a result, the NRC interceded to focus the attention of plant management on the broader programmatic nature of the problem. Therefore *Identification* credit was not warranted. *Corrective Action* credit was evaluated and determined to be warranted. *Corrective Actions* consisted of, but were not limited to: (1) removing licensed operators from shift duties and conducting remedial training for the operations personnel on duty at the time of the event;

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A Severity Level III violation and a \$50,000 civil penalty were issued on August 13, 1996, for violations of 10 CFR Part 50, Appendix R (EA 96-131).



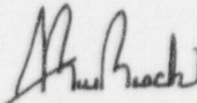
(2) meeting with all shift operating crew members to discuss crew communications, emergent work planning, and adherence to Technical Specifications; (3) briefing maintenance workers about the event and the lessons learned from the incident; and (4) improving the mechanisms for managing emergent work and error likely situations.

Therefore, to emphasize the importance of implementing work controls for systems that are vital to plant safety, the importance of procedural compliance, and emphasize the breakdown in the conduct of operations activities, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in the base amount of \$55,000.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In developing your corrective actions, you should address actions planned or taken, if any, to address the adequacy of your corrective actions in response to previous procedural violations involving work control and control room activities. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room.

Sincerely,



A. Bill Beach  
Regional Administrator

Docket No. 50-255

Enclosure: Notice of Violation and Proposed  
Imposition of Civil Penalties

cc w/encl: Robert A. Fenech, Senior Vice  
President, Nuclear, Fossil  
and Hydro Operations  
Thomas C. Bordine, Manager  
Licensing Department  
Richard Whale, Michigan  
Public Service Commission  
Michigan Department of  
Environmental Quality  
Department of Attorney General (M!)

T. Palmisano

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