



claims that these actions will chill efforts by NRC inspectors and employees of NRC-licensed facilities to raise safety concerns.

Based on these allegations, Petitioner sought a variety of relief including institution of a proceeding pursuant to 10 CFR Section 2.202 to modify, suspend or revoke the licenses issued by the NRC for PVNGS, issuance of citations to the Licensee for violations improperly and illegally deleted from an NRC Inspection Report, issuance of fines to certain employees of the Licensee for allegedly tampering, obstructing and impeding an ongoing NRC inspection, disciplinary actions against any and all NRC employees allegedly involved in retaliation against an NRC inspector, and such other and further relief as the NRC may deem appropriate.

In a letter to Mr. Colapinto of June 21, 1990, I acknowledged receipt of the Petition and informed him that the Petition would be treated under 10 CFR Section 2.206 of the Commission's regulations. I also informed Mr. Colapinto that allegations in the Petition concerning improprieties by NRC personnel have been referred to the Office of the Inspector General and that any inquiries regarding those allegations should be directed to the Office of the Inspector General. These matters seek relief outside the scope of 10 CFR Section 2.206 and will not be addressed further by me.

The allegations in the Petition fall into three categories. First, Petitioner alleges improprieties by NRC personnel regarding NRC inspection activities. As noted above, this matter has been referred to the Office of the Inspector General. Second, the Petitioner alleges improprieties by APS personnel regarding NRC inspection activities. These allegations of

wrongdoing have been referred to the NRC's Office of Investigations (OI). At a later time, upon receipt of the OI Report, I will issue a Final Director's Decision dealing with these allegations. Finally, the Petitioner alleges that serious safety violations exist at PVNGS in the systems for emergency lighting and fire protection which were uncovered as a result of routine NRC inspection activities. At this time, I have decided to issue this Partial Director's Decision dealing with these safety allegations. Due to the nature and extent of the deficiencies found, the Office of Nuclear Reactor Regulation (NRR) has participated with Region V in the evaluation and resolution of this matter. In addition to participating in the referenced inspections, NRR has been reviewing the emergency lighting and fire protection programs at PVNGS.

## II. DISCUSSION

From January through August 1990, the NRC conducted several inspections regarding the fire protection program at PVNGS, particularly the area of emergency lighting. The inspections were documented in Inspection Report Nos. 50-528/90-02 of April 24, 1990, 50-528/90-25 of July 5, 1990, and 50-528/90-35 of September 21, 1990. In general, the findings of these Inspection Reports raised major concerns in the emergency lighting area. These concerns were also raised in the Petition of May 22, 1990 in a broader sense. The concerns documented in the Inspection Reports included deficiencies in the application of Quality Assurance (QA) to emergency lighting, failure to test emergency lights in their "as found" condition, rates of emergency light failure in conjunction with inadequate preventive maintenance associated with emergency lighting. The inspections also

determined that APS had repeatedly failed to conduct appropriate evaluations of deficiencies in the emergency lighting area to determine the cause and to prevent recurrence and that the Licensee had failed to apply appropriate engineering and quality oversight involvement to the emergency lighting system.

The results of these inspections were discussed during a transcribed Enforcement Conference held in Region V on July 10, 1990. Based on questions raised at the Enforcement Conference regarding the Licensee's application of its QA Program to fire protection equipment, the NRC could not determine the extent to which the Licensee had applied its QA Program to fire protection in the past and that a potential safety issue existed in this regard. As a result, on July 10, 1990, NRC Region V requested the Licensee to justify continued operation of the PVNGS facility in regard to the APS fire protection program. APS submitted to NRC Region V an evaluation and justification for continued operation on July 20, 1990. Although the Licensee's evaluation identified deficiencies in the application of its QA Program to fire protection equipment, the Licensee concluded that the deficiencies did not have a significant adverse effect on the safety of the public. Specifically, the deficiencies consisted of a failure to comply fully with the QA requirements for PVNGS fire protection systems, e.g., fire detection and alarm, fire barriers, lube oil collection, in-plant communications, ventilation, manual fire fighting equipment and emergency lighting systems, called for by the QA guidelines of Branch Technical Position Auxiliary Power Conversion System Branch (BTP APCS)

9.5-1, Appendix A. BTP APCS 9.5-1 Appendix A is an NRC document entitled, "Guidelines for Fire Protection for Nuclear Power Plants Docketed Prior to July 1, 1976." The Licensee's evaluation concluded that the deficiencies did not preclude the fire protection systems and equipment being adequate to support the continued safe operation of PVNGS. Although QA deficiencies were identified, the continued safe operation of PVNGS was based on: the adherence to existing administrative procedures governing the fire protection program, the completion of ongoing inspections and testing, assurances that the design basis is complied with based upon extensive walkdowns by the Licensee of its fire protection systems and the increased frequency of preventive maintenance. In addition, APS initiated efforts to ensure implementation of upgraded QA Program requirements to the fire protection program at PVNGS. Consequently, NRC Region V concluded that there was reasonable assurance that PVNGS could continue to operate safely.

With respect to the other deficiencies identified as a result of the NRC inspection activities at PVNGS, the Licensee has initiated acceptable corrective actions. Specifically, APS has indicated that the following corrective actions will be completed:

- o Emergency lighting has been designated as "QAG" (quality augmented) which is consistent with the PVNGS QA Criteria Manual. Plant procedures will be reviewed to ensure that the QAG program is being fully implemented in the fire protection area.
- o Holophane batteries are currently being replaced to ensure adequate capacity.

- o Emergi-lites are being replaced with more reliable Holophane units and fluorescent fixtures.
- o The low-voltage disconnect relay setpoint will be lowered on all Exide uninterrupter power supplies to prevent early disconnect of the batteries.
- o The preventive maintenance (PM) program will be upgraded. One of the enhancements will ensure that lights are properly aimed. The PM interval will also be changed from quarterly to monthly on selected lighting units.
- o Test procedures will be revised to ensure that emergency lights are tested in their as-found condition and that the battery capacity is measured. Surveillance frequencies have also been increased.

On August 1, 1990, APS submitted the details and schedules for the corrective actions summarized above. Corrective actions addressing immediate concerns have been completed. The remaining corrective actions will provide assurance that the Licensee's fire protection program, including emergency lighting, remain acceptable in the future. The NRC inspection staff is monitoring these corrective actions to assure timely completion. Until these remaining actions are completed, there is reasonable assurance that the facility can be operated with adequate protection of the public health and safety based on the adherence to existing administrative procedures governing the fire protection program, the completion of ongoing inspections and testing, assurances that the design basis is complied with based upon extensive walkdowns by the Licensee of its fire

protection systems and the increased frequency of preventive maintenance.

As a separate matter during the aforementioned NRC inspection activities, APS contracted with an independent consultant to review the emergency lighting issues at PVNGS. At the request of NRC Region V, on August 3, 1990, APS submitted the independent review of emergency lighting that was completed by APS's consultant, ABB Impell Corporation. Although Impell confirmed the existence of previously identified deficiencies, these deficiencies did not negate the earlier conclusion as to the continued safe operation of PVNGS. Impell identified the following four areas of concern in its independent review: deficiencies in QA classifications, problems in design adequacy including battery sizing, misdirected lighting, and inadequate maintenance. Impell noted that APS's past corrective actions regarding emergency lighting have addressed the immediate concerns without focusing on the underlying programmatic issues. The corrective actions undertaken by the Licensee and listed above adequately address the programmatic issues identified by Impell. In response to continuing NRC concern, APS appears to be addressing the broader programmatic issues with regard to emergency lighting and fire protection at PVNGS.

As to the deficiencies identified in the NRC inspections, on October 16, 1990, the NRC Staff issued a Notice of Violation and Proposed Imposition of Civil Penalty (EA 90-121) to the Licensee in the amount of \$125,000, for violations of NRC requirements in the fire protection area. The civil penalty was proposed in part to emphasize the need for lasting remedial action in this area.

### III. CONCLUSION

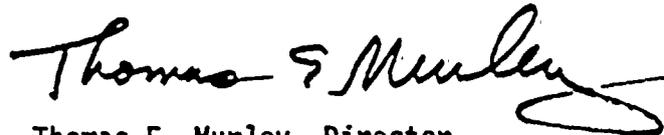
NRC's review of the history of fire protection deficiencies at PVNGS, particularly in the area of emergency lighting, indicates that APS should have applied more effort to identify and resolve the technical problems. APS's failure to apply the required QA Program to its fire protection program appears to have been a major root cause of previously identified deficiencies.

As discussed herein, APS has implemented extensive corrective actions to ensure compliance with applicable fire protection program requirements, especially regarding the reliability of its emergency lights. Although many of the deficiencies noted above were identified as a result of rigorous NRC oversight and were not initially acknowledged and resolved by APS, it appears that APS recognizes the importance of NRC fire protection requirements and is now approaching full compliance.

The institution of proceedings pursuant to 10 CFR Section 2.202, as requested by Petitioner, is appropriate only where substantial health and safety issues have been raised. See Consolidated Edison Company of New York (Indian Point, Units 1, 2 and 3), CLI-75-8, 2 NRC 173, 175 (1975), and Washington Public Power System (WPPS Nuclear Project No. 2), DD-84-7, 19 NRC 899, 923 (1984). As discussed above, there is reasonable assurance that PVNGS can be operated with adequate protection of the public health and safety pending completion of ongoing corrective actions. Based on the foregoing, I find that the institution of a proceeding pursuant to 10 CFR Section 2.202 to modify, suspend, or revoke the NRC licenses held by APS

is not warranted. This decision is based on the corrective actions initiated by APS to deal with the concerns which were identified by NRC inspection activities conducted at PVNGS in the areas of emergency lighting and fire protection. Therefore, I have decided to deny this aspect of Petitioner's request for action pursuant to 10 CFR Section 2.206. Consideration of Petitioner's remaining requests will be based upon the completion and outcome of OI activities at which time a Final Director's Decision will be issued. As provided in 10 CFR Section 2.206 (c), a copy of this Decision will be filed with the Secretary of the Commission for its review.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Thomas E. Murley", with a large, sweeping flourish at the end.

Thomas E. Murley, Director  
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland  
the 31st day of October 1990.