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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Brian E. Holian, Acting Director

In the Matter of	)
	)
All Operating Reactor Licensees	)
	)

PROPOSED DIRECTOR'S DECISION UNDER 10 CFR 2.206

I. Introduction

By letter dated February 19, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16050A223), Roy Mathew, Sheila Ray, Swagata Som, Gurcharan Singh Matharu, Tania Martinez Navedo, Thomas Koshy, and Kenneth Miller (Petitioners), filed a petition pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 2.206, "Requests for action under this subpart." The Petitioners requested that the U.S. Nuclear Regulatory Commission (NRC) either: (1) issue orders to require immediate corrective actions including compensatory measures to address the operability of electric power systems in accordance with their plant technical specifications, and to implement plant modifications in accordance with current NRC regulatory requirements and staff guidance provided in the references within the 2.206 petition, or (2) issue orders to immediately shut down the nuclear power plants that are operating without addressing the significant design deficiency identified in NRC Bulletin (BL) 2012-01, "Design Vulnerability in Electric Power System," dated July 27, 2012, (ADAMS Accession No. ML12074A115) since the licensees are not in compliance with

their Technical Specifications (typically Section 3.8.1) related to onsite and offsite power systems.

Management Directive (MD) 8.11, “Review Process for 10 CFR 2.206 Petitions” (ADAMS Accession No. ML041770328), describes the NRC’s review process for 10 CFR 2.206 petitions. On February 24, 2016, the NRC’s petition manager acknowledged receipt of the petition and offered the Petitioners an opportunity to address the Petition Review Board (PRB). The Petitioners declined an opportunity to address the PRB on the basis that the petition already contained all of the relevant facts to support the PRB’s review.

On March 14, 2016, the PRB met internally to discuss the request for immediate action, and to make an initial recommendation to either accept or reject the petition for review. The PRB denied the request for immediate action on the basis that the petition presented no significant new information, and only raised issues that had already been the subject of NRC staff review for regulatory and safety significance. The PRB also made an initial recommendation that the petition met the criteria for review in accordance with MD 8.11, Section III.C (1), “Criteria for Reviewing Petitions Under 10 CFR 2.206.”

On March 15, 2016, the Petitioners were informed of the PRB’s decision to deny the request for immediate action and of the initial recommendation to accept the petition for review. The Petitioners declined a second opportunity to address the PRB on the basis that the petition already contained all of the relevant facts to support the PRB’s review. Therefore, consistent with its initial recommendation, the PRB declared its final recommendation to accept the petition for review.

In its March 21, 2016, acknowledgement letter (ADAMS Accession No. ML16069A214), the NRC staff informed the Petitioners that although their request for immediate action was denied, the petition was accepted for review.

The petition and other references related to this petition are available for inspection in the NRC's Public Document Room (PDR), located at O1F21, 11555 Rockville Pike (first floor), Rockville, Maryland 20852. Publicly available documents created or received at the NRC are accessible electronically through ADAMS in the NRC Library at http://www.nrc.gov/reading-rm/adams.html. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC's PDR reference staff by telephone at 1-800-397-4209, or 301-415-4737, or by e-mail to pdr.resource@nrc.gov.

II. Discussion

Based on the NRC's comprehensive activities related to the resolution of open phase conditions in the electric power system for current operating nuclear power plants, the NRC's review took longer than the standard of 120 days for reaching a decision on the petition. This section includes a discussion of the relevant operating experience, NRC and industry actions, applicable regulatory requirements and guidance, the safety significance of the issue underlying the petition, and the NRC's actions and decisions on the Petitioners' requests.

A. Summary of Byron Station, Unit 2 Event

As the basis for this petition, the Petitioners refer to the Byron Station, Unit 2, operating event. On January 30, 2012, Byron Station, Unit 2, experienced an automatic reactor trip from full power because the reactor protection scheme detected an undervoltage condition on the 6.9-kV buses that power reactor coolant pumps (RCPs) B and C (undervoltage on two of four RCPs initiate a reactor trip). The undervoltage condition was caused by a broken insulator for the phase C conductor for the 345-kV power circuit that supplies both station auxiliary transformers (SAT). The insulator failure resulted in an open circuit for the phase C conductor, which supplies the high voltage side of the SATs. The open circuit created an unbalanced

voltage condition on two 6.9-kV nonsafety-related RCP buses and the two 4.16-kV engineered safety features (ESF) buses. Some ESF loads that were energized relied on equipment protective devices to prevent damage from the resulting unbalanced overcurrent condition. The phase overcurrent condition resulted in a trip of several ESF loads.

Approximately 8 minutes after the reactor trip, the control room operators manually opened circuit breakers to separate the unit buses from the offsite power source. When the operators opened the SAT feeder breakers to the two 4.16-kV ESF buses, the loss-of-voltage relays started the emergency diesel generators (EDGs) and the EDGs restored power to the ESF buses. If the condition had been allowed to persist for an additional few minutes, damage to the RCP seals could have occurred due to loss of RCP seal cooling water. This in turn could have resulted in excessive leakage of reactor coolant from the RCP seals in the containment building.

B. Summary of NRC and Industry Actions

Following this event, the NRC completed a reactive inspection pursuant to Inspection Procedure 93812, “Special Inspection,” at Byron Station, Unit 2. The special inspection (ADAMS Accession No. ML12087A213) reviewed the circumstances surrounding the January 30, 2012, electrical insulator failure in the Byron switchyard, which resulted in a Unit 2 automatic reactor trip and notice of unusual event emergency declaration.

On February 16, 2012, the Institute of Nuclear Power Operations (INPO) issued a Level 2 INPO Event Report describing the Byron event and requiring a review of the lessons learned and corrective actions for applicability by all licensees. As a result of the Byron event, every affected U.S. nuclear power plant now has compensatory measures in place to ensure that control room operators are aware of the issue and are trained to respond, and has modified power source switching procedures to ensure that plants have emergency power, if needed.

On March 1, 2012, the NRC issued Information Notice 2012-03, “Design Vulnerability in Electric Power System,” (ADAMS Accession No. ML120480170) to inform the licensees operating and constructing commercial power reactors of the operating experience involving the loss of one of the three phases of the offsite power circuit.

On July 27, 2012, the NRC issued BL 2012-01 to confirm licensee compliance with 10 CFR Appendix A, “General Design Criteria for Nuclear Power Plants,” to 10 CFR Part 50, General Design Criteria (GDC) 17, “Electric Power Systems,” or principal design criteria specified in the updated final safety analysis report (UFSAR), 10 CFR 50.55a(h)(2), and 10 CFR 50.55a(h)(3). Each licensee’s response to BL 2012-01 was submitted to the NRC by October 25, 2012, and can be found in ADAMS under each licensee’s docket number.

The NRC staff reviewed the licensee responses to BL 2012-01 and documented the details of this review in a summary report dated February 26, 2013 (ADAMS Accession No. ML13052A711). Based upon the licensee responses to BL 2012-01, the NRC staff determined that most nuclear power reactors are susceptible to this open phase design vulnerability and recommended that the NRC take regulatory actions to address this design vulnerability.

On October 9, 2013, the Nuclear Energy Institute (NEI) notified the NRC that the industry’s Chief Nuclear Officers had approved a formal initiative to address open phase conditions, and that the initiative represented a formal commitment among nuclear power plant licensees to address this design vulnerability for operating reactors and new reactor plant designs (ADAMS Accession No. ML13333A147).

By letter dated December 20, 2013 (ADAMS Accession No. ML13351A314), the NRC issued a Request for Additional Information (RAI) to licensees to verify that they had completed interim corrective actions and compensatory measures and to determine the status of each licensee's long-term corrective actions. The licensees’ responses to the RAI are publicly available under each licensee’s docket number in ADAMS. Their responses describe the

compensatory measures implemented at each plant (primarily enhancements to plant operating procedures and operator training) to minimize plant risk and to ensure adequate safety margins.

The NRC provided a response to the industry initiative, including a discussion of the planned open phase isolation system (OPIS) to be installed at each plant, in a letter to NEI dated November 25, 2014 (ADAMS Accession No. ML14120A203). The NRC noted that the capability of the onsite ESF power system to permit functioning of structures, systems, and components may depend upon successful operation of OPIS, and that the proposed solution needs to fully address GDC 17 or the principal design criteria specified in each plant's UFSAR. The NRC also communicated functional criteria for demonstrating compliance with existing regulatory requirements. The letter stated that the NRC staff concluded that although existing NRC regulations have requirements for the onsite and offsite power systems to permit functioning of structures, systems, and components important to safety for any failures in the offsite power system including a single failure in the onsite power system, open phase conditions were not specifically identified as an issue during the licensing reviews of the current operating nuclear power plants. The letter stated that for this reason, the NRC staff had recommended to the Commission that the NRC grant enforcement discretion to operating reactor licensees and refrain from issuing an enforcement action for certain noncompliances which would require a reactor shutdown while addressing the design vulnerability related to open phase conditions within their electrical power system.

On March 16, 2015, NEI provided the NRC with a revised initiative, changing its implementation completion date for OPIS from December 31, 2017, to December 31, 2018 in order to provide adequate time for licensees to implement necessary plant modifications (ADAMS Accession Nos. ML15075A455 and ML15075A456).

On March 22, 2016, NEI provided the NRC with an update on the industry initiative regarding their proposed plans to resolve the open phase condition issue (ADAMS Accession

Nos. ML16091A099 and ML16091A100). Specifically, NEI reported that approximately one-third of the industry fleet had implemented open phase monitoring or protection systems (as of March 22, 2016) and that the remaining plants planned to complete implementation by the December 31, 2018, due date. This letter also contained a detailed discussion of the actions already taken by the nuclear industry to resolve the open phase condition vulnerability for operating reactors.

On May 31, 2016, the NRC staff submitted SECY-16-0068, "Interim Enforcement Policy For Open Phase Conditions In Electric Power Systems For Operating Reactors," to the Commission (ADAMS Accession No. ML15219A327). In SECY-16-0068, the NRC staff requested Commission approval of an Interim Enforcement Policy (IEP), associated with inoperable electrical power systems (offsite and onsite) caused by an open phase condition design vulnerability in the offsite electric power system that would require a reactor shutdown or prevent a reactor startup if a licensee could not come into conformance within the TS-required completion times.

While awaiting the Commission's decision on SECY-16-0068, the NRC staff issued Temporary Instruction (TI) 2515/192, "Inspection of the Licensee's Interim Compensatory Measures Associated With The Open Phase Condition Design Vulnerabilities In Electric Power Systems" (ADAMS Accession No. ML16181A170), on November 9, 2016. The objective of this performance-based inspection guidance is to verify implementation of interim compensatory measures associated with an open phase condition design vulnerability in electric power system for operating reactors that have not completed permanent plant design modifications. The inspections of the power reactors were completed on March 31, 2017.

On March 9, 2017, the Commission issued the staff requirements memorandum (SRM) for SECY-16-0068 (ADAMS Accession No. ML17068A297). The Commission disapproved the staff's request to establish an IEP "for the purpose of exercising enforcement discretion for

purported noncompliance with NRC requirements and nonconformance with design criteria during the pendency of licensee implementation of actions to address an open phase condition." The SRM for SECY-16-0068 provided direction to the NRC staff regarding the implementation of the voluntary industry initiative to support the closure of BL 2012-01. Specifically, the SRM for SECY-16-0068 stated:

> Going forward, the staff should verify that licensees have appropriately implemented the voluntary industry initiative. If the staff determines that a licensee does not adequately address potential OPCs, including updating the licensing basis to reflect the need to protect against OPCs, the staff should consider the appropriate regulatory mechanism to impose the necessary requirements to protect against OPCs using the current guidance on such matters from the Office of the General Counsel.
>
> The staff should provide the Commission with a notation vote paper if this situation arises for any licensee or licensees, with options, including the staff's recommended path forward. In addition, if disagreements arise between the staff and the industry during implementation of the voluntary industry initiative, and the related issues have policy implications, the staff should promptly raise such issues to the Commission for resolution.
>
> Once satisfactory implementation of the technical resolution has been verified for each licensee, the associated NRC Bulletin should be closed. The staff should update the Reactor Oversight Process to provide periodic oversight of industry's implementation of the OPC initiative.

C. Applicable NRC Regulatory Requirements and Guidance

GDC 17 establishes requirements for the electric design of nuclear power plants for which a construction permit application was submitted after the Commission promulgated the GDC. GDC 17 states:

> An onsite electric power system and an offsite electric power system shall be provided to permit functioning of structures, systems, and components important to safety. The safety function for each system (assuming the other system is not functioning) shall be to provide sufficient capacity and capability to assure that (1) specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded as a result of anticipated operational occurrences and (2) the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents….

….

> Electric power from the transmission network to the onsite electric distribution system shall be supplied by two physically independent circuits (not necessarily on separate rights of way) designed and located so as to minimize to the extent practical the likelihood of their simultaneous failure under operating and postulated accident and environmental conditions….
>
> Provisions shall be included to minimize the probability of losing electric power from any of the remaining supplies as a result of, or coincident with, the loss of power generated by the nuclear power unit, the loss of power from the transmission network, or the loss of power from the onsite electric power supplies.

For current operating power plants designed before the promulgation of GDC 17, the plant-specific UFSAR sets forth criteria similar to GDC 17, which requires, among other things, that plants have an offsite and an onsite electric power system with adequate capacity and capability to permit the functioning of structures, systems, and components important to safety in the event of anticipated operational occurrences and postulated accidents.

10 CFR 50.55a(h)(2) requires nuclear power plants with construction permits issued after January 1, 1971, but before May 13, 1999, to have protection systems that meet the requirements in Institute of Electrical and Electronics Engineers (IEEE) Standard 279-1968, “Proposed IEEE Criteria for Nuclear Power Plant Protection Systems; IEEE Standard 279-1997, “Criteria for Protection Systems for Nuclear Power Generating Stations”; or IEEE Standard 603-1991, “Criteria for Safety Systems for Nuclear Power Generating Stations,” and the correction sheet dated January 30, 1995. For nuclear power plants with construction permits issued before January 1, 1971, protection systems must be consistent with their licensing basis or meet the requirements of IEEE Standard 603-1991 and the correction sheet dated January 30, 1995.

10 CFR 50.55a(h)(3) requires that applications filed on or after May 13, 1999, for construction permits and licenses under 10 CFR Part 50, or for design approvals, design

certifications, and combined licenses under 10 CFR Part 52, must meet the requirements for safety systems in IEEE Standard 603-1991 and the correction sheet dated January 30, 1995. These IEEE standards state that the protection systems must automatically initiate appropriate protective actions whenever a condition the system monitors reaches a preset level. Once initiated, protective actions should be completed without manual intervention to satisfy the applicable requirements of the IEEE standards.

To support future licensing, the NRC staff also developed draft Branch Technical Position (BTP) 8-9, "Open Phase Conditions in Electric Power System Review Responsibilities" (ADAMS Accession No. ML14057A433), to provide design criteria and staff guidance consistent with applicable regulations and existing guidance found in Chapter 8 of the Standard Review Plan, "Electric Power Systems." Public comments requested through a *Federal Register* notice on June 5, 2014 (79 FR 32580) were addressed when finalizing the BTP. The final BTP 8-9 was published in July 2015 (ADAMS Accession No. ML15057A085), and the NRC staff plans to use this guidance for future licensing actions to verify compliance with applicable regulations related to electric power systems.

D. Safety Assessment

In the petition, the Petitioners stated that operating experience demonstrates that the open phase condition is a significant safety concern since a design basis event concurrent with an open phase condition would in most cases result in the plant exceeding criteria specified in 10 CFR 50.46, "Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors." The Petitioners also stated that the NRC's Accident Sequence Precursor (ASP) analysis for the Byron event indicated the risk, Conditional Core Damage Probability, as 1×10^{-4}.

At the time that the petition was filed with the NRC, thirteen open phase events had

been identified over the last fourteen years (in the United States and internationally). Since the time that compensatory measures were implemented at nuclear power plants, the licensee for Oconee, Unit 3, identified and reported the discovery of an open phase condition at the Oconee facility on December 7, 2015. Two separate transformers required for safe shutdown of the three operating Oconee nuclear units were identified with open phase conditions. Since the transformers are common to one onsite and one offsite power source, both power sources were rendered inoperable. The Petitioners concluded that this event indicates that the lessons learned and manual compensatory actions implemented after the Byron event by licensees were ineffective.

The NRC conducted a special inspection of this event (ADAMS Accession No. ML16057A062) and determined that, contrary to the event at Byron, Unit 2, on January 30, 2012, no effects were experienced on the Unit 3 plant buses because the plant buses were energized by the auxiliary transformer (supplied by the main generator) and no reactor trip signal occurred to transfer the plant buses to the startup transformer. If a reactor trip signal had occurred, it would have been similar to the Byron event, in that when the operators recognized power supply to the safety buses was deficient (one phase degraded), they could have energized the safety buses from an onsite emergency power source.

At Oconee, the onsite emergency power source is the Keowee hydro generators. The NRC inspectors determined that interim compensatory measures were in place at the facility at the time of the event and that the open phase condition was identified during a routine walk-down surveillance, not from automatic alarms in the control room as expected by the licensee. The inspectors noted in the inspection report that when the startup transformer is not supplying the plant buses, there is not enough current flow for the installed relays to detect an open phase condition. The fact that operators failed to receive alarms in the control room intended to alert them of an open phase condition during the December 7, 2015, event at Oconee highlights the

importance of implementing permanent design changes at all affected facilities.

The events that occurred at Byron Station, Unit 2, and Oconee Nuclear Station are considered by the NRC to be safety significant because the occurrence of the open phase condition either resulted or could have resulted in a design basis event (i.e., loss of offsite power), and a condition by which electric power from the onsite emergency power system was not automatically distributed to safety-related equipment needed to mitigate the consequences of the event. The events were also significant in that plant operators were presented with circumstances they did not immediately understand and they did not have adequate procedures for addressing an open phase condition.

Operating experience has shown that an open phase condition may result in one of many possible impacts on the plant and that the other actual open phase events in the United States have resulted in conditions much less severe from a safety perspective than the Byron event. There has been no instance of a design basis accident occurring independent of—yet simultaneously with—an open phase condition. This is to be expected given the low likelihood of an open phase condition and a design basis accident occurring during the same time interval.

Given the current range of estimates of these likelihoods for operating reactors, the risk associated with a design basis accident occurring independently yet simultaneously with an open phase condition is expected to be small. Therefore, the likelihood of a design basis accident concurrent with an open phase condition resulting in the plant exceeding criteria specified in 10 CFR 50.46 would accordingly be small.

The importance of implementing permanent design changes at all affected facilities is further supported by information in a white paper prepared by the NRC staff to provide risk insights on the impact of a postulated loss of a single phase in a three phase high voltage offsite power circuit (ADAMS Accession No. ML17234A631). The white paper assessed the change in core damage frequencies for specific plants emphasizing the plant type (BWR or PWR) and the

electrical switchyard configurations. In summary, the white paper demonstrates that an undetected open phase condition, as modeled in the study, has the potential to introduce an additional increase in core damage frequency. This assessment demonstrates that without modifications to install an OPIS, the core damage frequency for the plants evaluated might increase anywhere from 1E-3/yr to 1E-6/yr from their base core damage frequency. Based on risk insights derived from the assessment, the NRC staff concluded that the use of visual inspection rounds in switchyard areas alone will have minimal benefit for decreasing the impact of open phases. However, the use of a detection system and/or automatic actuation system (i.e., OPIS) would greatly reduce this vulnerability. Additional plant modifications, such as RCP seal loss of coolant accident mitigation systems, can also provide an additional measure of safety.

The insights in the white paper provide a more appropriate representation of change in plant risk from an open phase condition than those estimates cited by the Petitioners (i.e., $1x10^{-4}$) that were developed through the NRC's ASP analysis. The NRC's ASP Program is one of three agency programs that assess the risk significance of operational events that have occurred at licensed U.S. commercial nuclear power plants. This program systematically evaluates the risk significance of events that have occurred, but due to the success of systems and operators to mitigate the event, did not result in inadequate reactor core cooling and severe core damage (i.e., precursor events). An accident sequence precursor is an initiating event or degraded condition that, when coupled with one or more postulated failures of mitigating structures, systems or components, or operator errors, could result in a plant condition involving inadequate core cooling and severe reactor core damage. The objective of ASP analyses is to estimate either the conditional probability of core damage (initiating event) or the increase in conditional probability of core damage (failures or degradations) given the occurrence of an initiating event or failure(s). Consequently, the results of calculations made in an ASP analysis

only reflect the probability that a core damage event could have occurred due to the combination of actual and postulated events. An ASP analysis is an example of a retrospective application of probabilistic risk assessment (PRA) in which an initiating event, equipment failures, degradations, and/or outages are mapped into the risk model to obtain a numerical estimate of their risk significance. The results from ASP analyses do not reflect the expected frequency of core damage events. This differs from the results produced in a plant-specific PRA. The results from a PRA provide an estimate of the frequency of core damage for the plant that accounts for the frequency of events that could initiate a sequence of equipment failures/unavailabilities and/or human errors leading to the occurrence of core damage.

Analyses performed as part of the NRC's ASP Program can be used to identify trends that may contribute to increased risk to the safety of operating reactors, and the results can be used to explore areas that may require additional evaluation to determine the appropriate regulatory response. Due to their conditional nature, the numerical result of an ASP analysis is not used by the NRC staff as a risk metric in determining the acceptability of changes to a facility's licensing basis.

The Petitioners further stated that based upon the applicable codes, standards, and regulations, the licensing bases and design bases for all U.S. nuclear power plants require that both offsite and onsite power systems must be operable and capable of supporting design bases functions. In the SRM for SECY-16-008, the Commission directed the NRC staff to address the open phase condition concern by verifying that licensees have appropriately implemented the voluntary industry initiative and, if a licensee does not adequately address potential open phase conditions, including updating the licensing basis to reflect the need to protect against open phase conditions, to consider the appropriate regulatory mechanism to impose the necessary requirements to protect against open phase conditions. In accordance with this direction, implementation of a second TI for the open phase condition in the NRC

Inspection Manual will focus NRC inspections on the evaluation of the industry initiative associated with the open phase condition design vulnerabilities. This effort will verify that licensees have appropriately implemented the voluntary initiative and updated the plant licensing basis. As stated in the SRM, if the staff determines that a licensee does not adequately address potential open phase conditions, including updating the licensing basis to reflect the need to protect against open phase conditions, the staff will consider the appropriate regulatory mechanism to impose the necessary requirements to protect against open phase conditions.

E. Evaluation of the Petitioners' Requests

This section includes both the Petitioners' requests and the NRC's decisions.

Petitioners' Request 1: **Issue orders which require immediate corrective actions including compensatory measures to address the operability of electric power systems in accordance with their plant technical specifications, and to implement plant modifications in accordance with current NRC regulatory requirements and staff guidance provided in the references within the 2.206 petition.**

Petitioners' Request 2: **Issue orders to immediately shutdown the nuclear power plants that are operating without addressing the significant design deficiency identified in BL 2012-01, "Design Vulnerability in Electric Power System," since the licensees are not in compliance with their Technical Specifications Limiting Condition for Operation 3.8.1 (typical) requirements related to onsite and offsite power systems.**

NRC Decision for Petitioners' Requests 1 and 2:

The NRC staff has decided not to issue orders at this time to operating reactor licensees regarding an open phase condition, as requested by the Petitioners. This decision is based upon the licensee responses to BL 2012-01, subsequent licensee responses to the NRC's RAI,

the actions taken by licensees in response to the industry open phase condition voluntary formal initiative (which included immediate compensatory measures and a commitment to install permanent design modifications), and the completion of NRC inspections using TI 2515/192 to verify whether the licensee has implemented the compensatory measures specified in TI Section 03.01 to mitigate the potential impact of an open phase condition. These comprehensive actions resolve the Petitioners' request to issue orders to licensees.

III. Conclusion

Based upon the information summarized above, the NRC found the petition insufficient to warrant granting the Petitioners' Requests 1 and 2. The Petitioners' concerns related to the open phase condition vulnerability for operating reactors represent a safety issue that the Commission agreed should not be left unaddressed, and these concerns are currently being resolved through the implementation of the industry's open phase condition initiative. This approach is consistent with the Commission's direction to the NRC staff in the SRM for SECY-16-0068, recognizing that the nuclear industry is already implementing the voluntary industry initiative (permanent modifications such as OPIS). The NRC staff will determine each licensee's final actions through plant inspections, and the results will be made public in ADAMS, as appropriate.

On this basis, the Petitioners' requests are denied. The NRC does not plan to take the enforcement actions specified in the Petitioner's request. Therefore, the NRC is closing this petition.

As provided for in 10 CFR 2.206(c), a copy of this Director's Decision will be filed with the Secretary of the Commission for the Commission to review. The decision will constitute the final action of the Commission 25 days after the date of the decision unless the Commission, on its own motion, institutes a review of the decision within that time.

Dated at Rockville, Maryland, this day of .

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Brian E. Holian, Acting Director
Office of Nuclear Reactor Regulation