



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200  
ATLANTA, GEORGIA 30303-1200

September 19, 2019

EA-19-025

Mr. Ernest J. Kapopoulos, Jr.  
Site Vice President  
H.B. Robinson Steam Electric Plant  
Duke Energy Progress, LLC  
3581 West Entrance Road, RNPA01  
Hartsville, SC 29550

SUBJECT: H. B. ROBINSON STEAM ELECTRIC PLANT - NRC INSPECTION REPORT  
05000261/2019012, AND INVESTIGATION REPORT 2-2018-004; AND  
APPARENT VIOLATIONS

Dear Mr. Kapopoulos:

This letter refers to the investigation completed on March 18, 2019, by the Nuclear Regulatory Commission's (NRC) Office of Investigations (OI) at Duke Energy's H. B. Robinson Steam Electric Plant. The purpose of the investigation was to determine if the assigned Inside Auxiliary Operators (IAOs) at Robinson deliberately failed to conduct fire watches and operator rounds as required by procedure and deliberately falsified records. Enclosure 1 to this report presents the results of this investigation. A Factual Summary of the OI Investigation is provided as Enclosure 2.

Based on the results of this investigation, three apparent violations (AVs) were identified and are being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The AVs are more fully discussed in Enclosure 1.

The first AV being considered for escalated enforcement involves the failure to follow fire protection requirements of 10 CFR § 50.48(a)(2)(i). Specifically, on multiple occasions between September 15, 2017 and September 21, 2017, four inside auxiliary operators (IAOs) assigned the duties of an hourly fire watch in the A and B emergency diesel generator rooms failed to visually watch or inspect the assigned location for signs of fire. The IAOs failed to enter the rooms as required by AD-EG-ALL-1522, "Duties of a Fire Watch," Revision 3. The NRC concluded that the actions of the IAOs were apparently deliberate as discussed in the enclosed Factual Summary and caused Duke Energy to be in apparent violation of 10 CFR § 50.48(a)(2)(i).

The second AV being considered for escalated enforcement involves the failure to follow the requirements of Technical Specification 5.4.1.a, which requires the licensee to implement procedures established through Regulatory Guide 1.33, Appendix A, including administrative procedures for Log Entries, Record Retention, and Review Procedures. Specifically, on several occasions between July 1, 2017 and October 31, 2017, IAOs failed to conduct operator rounds in accordance with procedure AD-OP-ALL-1000, "Conduct of Operations," Revision 8. The NRC concluded that the actions of the IAOs were apparently deliberate as discussed in the enclosed Factual Summary and caused Duke Energy to be in apparent violation of Technical Specification 5.4.1.a.

The third AV being considered for escalated enforcement involves the inaccurate/incomplete documentation of the information recorded for the operator rounds and fire watch logs, contrary to the requirements of 10 CFR § 50.9(a), Completeness and Accuracy of Information. Specifically, on several occasions, as described in the two previous AVs, IAOs failed to enter an area to conduct operator rounds or fire watches yet signed off as completing them. The NRC concluded that the actions of the IAOs were apparently deliberate as discussed in the enclosed Factual Summary and caused Duke Energy to be in apparent violation of 10 CFR § 50.9(a).

Before the NRC makes its enforcement decision, we are providing you an opportunity to (1) respond to the apparent violation(s) addressed in this inspection report within 30 days of the date of this letter, (2) request a Pre-decisional Enforcement Conference (PEC), or (3) request Alternative Dispute Resolution (ADR). If a PEC is held, the NRC may issue a press release to announce the time and date of the conference; however, the PEC will be closed to public observation since information related to an Office of Investigations report will be discussed and the report has not been made public. If you decide to participate in a PEC or pursue ADR, please contact Randy Musser at 404-997-4603 within 10 days of the date of this letter. A PEC should be held within 30 days and an ADR session within 45 days of the date of this letter.

If you choose to provide a written response, it should be clearly marked as a "Response to Apparent Violation(s) in NRC Inspection Report 05000261/2019-012; EA-19-025" and should include for each apparent violation: (1) the reason for the apparent violation or, if contested, the basis for disputing the apparent violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken; and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. Additionally, your response should be sent to the NRC's Document Control Center, with a copy mailed to Mark Miller, Director of Reactor Projects, Region II, 245 Peachtree Center Avenue NE, Atlanta, GA 30303, within 30 days of the date of this letter. If an adequate response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision or schedule a PEC.

If you choose to request a PEC, the conference will afford you the opportunity to provide your perspective on these matters and any other information that you believe the NRC should take into consideration before making an enforcement decision. The decision to hold a predecisional enforcement conference does not mean that the NRC has determined that a violation has occurred or that enforcement action will be taken. This conference would be conducted to obtain information to assist the NRC in making an enforcement decision. The topics discussed during the conference may include information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned.

In lieu of a PEC, you may also request Alternative Dispute Resolution (ADR) with the NRC in an attempt to resolve this issue. ADR is a general term encompassing various techniques for resolving conflicts using a neutral third party. The technique that the NRC has decided to employ is mediation. Mediation is a voluntary, informal process in which a trained neutral (the "mediator") works with parties to help them reach resolution. If the parties agree to use ADR, they select a mutually agreeable neutral mediator who has no stake in the outcome and no power to make decisions. Mediation gives parties an opportunity to discuss issues, clear up misunderstandings, be creative, find areas of agreement, and reach a final resolution of the issues. Additional information concerning the NRC's program can be obtained at <http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html>. The Institute on Conflict Resolution (ICR) at Cornell University has agreed to facilitate the NRC's program as a neutral third party. Please contact ICR at 877-733-9415 within 10 days of the date of this letter if you are interested in pursuing resolution of this issue through ADR.

In addition, please be advised that the number and characterization of apparent violations described in the enclosed inspection report may change as a result of further NRC review. You will be advised by separate correspondence of the results of our deliberations on this matter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice and Procedure," a copy of this letter, its enclosure(s), and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

If you have any questions concerning this matter, please contact Randy Musser of my staff at 404-997-4603.

Sincerely,

*/RA/*

Mark S. Miller, Director  
Division of Reactor Projects

Docket No.: 05000261

License No.: DPR-23

Enclosures:

1. Inspection Report 05000261/2019012
2. Factual Summary

cc w/ encl: Distribution via ListServ

SUBJECT: H.B. ROBINSON STEAM ELECTRIC PLANT - NRC INSPECTION REPORT  
05000261/2019002, AND INVESTIGATION REPORT 2-2018-004; AND  
APPARENT VIOLATIONS

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**U.S. NUCLEAR REGULATORY COMMISSION  
Inspection Report**

Docket Number: 05000261

License Number: DPR-23

Report Number: 05000261/2019012

Enterprise Identifier: I-2019-012-0036

Licensee: Duke Energy Progress, LLC

Facility: H. B. Robinson Steam Electric Plant

Location: Hartsville, SC 29550

Approved By: Randall A. Musser, Chief  
Reactor Projects Branch 3  
Division of Reactor Projects

## SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee’s performance of the H.B. Robinson Steam Electric Plant in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC’s program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

### List of Findings and Violations

Failure to Perform Hourly Fire Watches			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Initiating Events	Green Apparent Violation (Traditional Enforcement) AV 05000261/2019012-01 Open EA-19-025	[H.8] - Procedure Adherence	71111.05Q
The inspectors identified an apparent violation of 10 CFR § 50.48, Fire Protection, and an associated reactor oversight process Green finding for the failure to conduct hourly fire watches in accordance with procedure AD-EG-ALL-1522, “Duties of a Fire Watch.”			
Failure to Implement Operator Rounds			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Not Applicable	Apparent Violation AV 05000261/2019012-02 Open EA-19-025	Not Applicable	71111.05Q
An apparent violation of Technical Specification 5.4.1.a was identified for the failure to conduct operator rounds in accordance with procedure AD-OP-ALL-1000, “Conduct of Operations.”			
Incomplete and Inaccurate Information Associated with Operator Rounds and Fire Watch Logs			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Not Applicable	Apparent Violation AV 05000261/2019012-03 Open EA-19-025	Not Applicable	71111.05Q
The inspectors identified an apparent violation of 10 CFR § 50.9(a) for not maintaining complete and accurate fire watch and operator rounds logs. On several occasions, Inside Auxiliary Operators (IAOs) failed to enter an area to conduct operator rounds or fire watches yet signed off as completing them.			

## INSPECTION RESULTS

Failure to Perform Hourly Fire Watches			
Cornerstone	Significance/Severity	Cross-Cutting Aspect	Report Section
Initiating Events	Green Apparent Violation (Traditional Enforcement) AV 05000261/2019012-01 Open EA-19-025	[H.8] - Procedure Adherence	71111.05Q
<p>The inspectors identified an apparent violation of 10 CFR § 50.48, Fire Protection, and an associated reactor oversight process Green finding for the failure to conduct hourly fire watches in accordance with procedure AD-EG-ALL-1522, "Duties of a Fire Watch."</p> <p><u>Description:</u> On September 15, 2017, the licensee established an hourly fire watch in the 'A' and 'B' EDG rooms located in the Auxiliary Building due to the CO2 suppression system being out of service. On September 25, 2017, the inspectors identified that hourly fire watches were not being conducted in accordance with licensee procedure AD-EG-ALL-1522, "Duties of a Fire Watch," or being documented accurately. A review of the watch logs by the NRC disclosed multiple discrepancies, including logs being entered by the Inside Auxiliary Operators (IAOs) at the same time they attend mandatory shift turnover meetings.</p> <p>On October 3, 2017, the inspectors requested to review the door card reader logs and the hourly fire watch logs for the assigned IAO for the period of September 15 - 21, 2017. On October 24, 2017, the inspectors completed the review and identified discrepancies between the fire watch logs and the door logs, which would indicate when a particular individual entered at a room.</p> <p>In response, Duke Energy formed an "Internal Investigation Team" to investigate the matter. Duke Energy reviewed fire watch records from between July 1, 2017, and October 31, 2017 and determined that on several occasions, four individuals failed to enter the Auxiliary Building to conduct a fire watch yet signed the fire watch as completed.</p> <p>The NRC concluded that the actions of the IAOs were apparently deliberate, and caused Duke Energy to be in apparent violation of the licensee's fire protection program as implemented by procedure AD-EG-ALL-1522, "Duties of a Fire Watch," Revision 3.</p> <p>Corrective Actions: Duke Energy completed an internal investigation into the matter. Operations management at Robinson issued standing instructions on October 25, 2017, outlining procedural requirements and operations expectations for reviewing fire watch paperwork and performing pre-job briefs. A self-study training package covering the duties of a fire watch was assigned to operations on September 27, 2017, and completed on November 17, 2017. In addition, individual IAOs who missed fire watches received disciplinary corrective actions.</p> <p>Corrective Action References: Nuclear Condition Report (NCR) 2152726, NCR 2153334</p> <p><u>Performance Assessment:</u></p> <p>Performance Deficiency: IAOs failed to conduct hourly fire watches in the 'A' and 'B' EDG rooms in accordance with procedure AD-EG-ALL-1522, "Duties of a Fire Watch."</p>			

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Protection Against External Factors attribute of the Initiating Events cornerstone and adversely affected the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations.

Significance: The inspectors assessed the significance of the finding using Appendix F, "Fire Protection and Post - Fire Safe Shutdown SDP." The finding screened as Green because it did not increase the likelihood of a fire, delay detection of a fire, or result in a more significant fire than previously analyzed such that the credited safe shutdown strategy could be adversely impacted. Therefore, the apparent violation is associated with a reactor oversight process Green NCV.

Cross-Cutting Aspect: H.8 - Procedure Adherence: Individuals follow processes, procedures, and work instructions.

Enforcement: The ROP's significance determination process does not specifically consider willfulness in its assessment of licensee performance. Therefore, it is necessary to address this violation which involves willfulness using traditional enforcement to adequately deter non-compliance.

Violation: 10 CFR § 50.48(a)(2)(i) requires that a licensee's fire protection plan must describe the "Administrative controls and personnel requirements for fire prevention and manual fire suppression activities." The H.B. Robinson, Unit 2 Operating License requires that the licensee "shall *implement and maintain in effect* all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c)."

Procedure AD-EG-ALL-1522, "Duties of a Fire Watch," Revision 3, provides the administrative and technical guidance concerning the duties of Fire Watch personnel and the personnel qualifications required for performing a Fire Watch. An hourly fire watch is defined in AD-AG-ALL-1522 as "Fire watches performed at intervals of 60 minutes." Section 5.2 describes the duties of the fire watch. Specifically, Section 5.2.c states:

*Visually watch or inspect the assigned location for the required duration of the Fire Watch for the following:*

1. *No visible signs of fire (e.g., smoke, heat, flames).*
2. *No unauthorized fire hazard has been added to the location that could cause a fire to start or increase the chances of a fire starting.*
3. *Changing conditions that could contribute to increased fire risk (e.g., changes in transient fire loading).*
4. *Good housekeeping practices are maintained for assigned areas.*

Contrary to the above, on multiple occasions between September 15, 2017 and September 21, 2017, four auxiliary operators assigned the duties of an hourly fire watch in the A and B emergency diesel generator rooms failed to visually watch or inspect the assigned location for signs of fire. The auxiliary operators failed to enter the rooms as required by AD-EG-ALL-1522.

Enforcement Action: This violation is being treated as an apparent violation (AV) pending a final significance (enforcement) determination.

Failure to Implement Operator Rounds			
Cornerstone	Severity	Cross-Cutting Aspect	Report Section
Not Applicable	Apparent Violation AV 05000261/2019012-02 Open EA-19-025	Not Applicable	71111.05Q
An apparent violation of Technical Specification 5.4.1.a was identified for the failure to conduct operator rounds in accordance with procedure AD-OP-ALL-1000, "Conduct of Operations."			
<p><u>Description:</u> In October 2017, Duke Energy formed an "Internal Investigation Team" to investigate an NRC identified issue regarding missed fire watches by Inside Auxiliary Operators (IAOs) in the auxiliary building. Duke Energy's review determined that on several occasions, IAOs failed to enter the auxiliary building to conduct a fire watch yet signed the fire watch as completed. Given that discrepancies were identified in fire watch rounds conducted by the IAOs, the Duke Energy team conducted a review of operator rounds for the time period between July 1, 2017 and October 31, 2017. The licensee reviewed and compared security card door access information with the recorded operator rounds log information. The licensee's investigation determined that IAOs had signed off as completing rounds when there was no evidence to support the operators had been in those areas during the times documented. Specifically, four IAOs failed to enter the spent fuel heat exchanger room to complete rounds on nine separate occasions between July 12 and October 1, 2017.</p> <p>The NRC concluded that the actions of the IAOs were apparently deliberate, and caused Duke Energy to be in apparent violation of Technical Specification 5.4.1.a, which requires, through Regulatory Guide 1.33, Appendix A, administrative procedures be established for Log Entries, Record Retention, and Review Procedures. The IAOs failed to conduct operator rounds in accordance with procedure AD-OP-ALL-1000, "Conduct of Operations," Revision 8.</p> <p>Corrective Actions: The individual IAOs who failed to conduct operator rounds received disciplinary corrective actions. In addition, operations management made it a requirement that IAOs shall not cover operator rounds for another IAO unless there is a legitimate reason and permission is obtained from operations management.</p> <p>Corrective Action References: Nuclear Condition Report (NCR) 2152726, NCR 2153334</p> <p><u>Performance Assessment:</u> The inspectors determined this violation was associated with a minor performance deficiency when addressed in the NRC's reactor oversight process (ROP).</p> <p><u>Enforcement:</u> The ROP's significance determination process does not specifically consider willfulness in its assessment of licensee performance. Therefore, it is necessary to address this violation which involves willfulness using traditional enforcement to adequately deter non-compliance.</p> <p>Violation: Technical Specification 5.4.1.a requires, in part, that written procedures be established, implemented, and maintained covering the activities specified in Appendix A, "Typical Procedures for Pressurized Water Reactors and Boiling Water Reactors," of Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operations)," Revision 2. Regulatory Guide 1.33, Appendix A, Section 1.h requires administrative procedures established for Log Entries, Record Retention, and Review Procedures. Procedure AD-OP-</p>			

ALL-1000, "Conduct of Operations," Revision 8, provided instructions for operators to conduct and log watchstanding rounds. Section 5.6.9 of AD-OP-ALL-1000 required the following:

1. *Thorough Operator tours are conducted to monitor local plant conditions, system and equipment operation, and to detect actual or potential problems that could hamper safe plant, system, or component operation.*
2. *Rounds are typically performed at the beginning of the shift. Each watchstander is to make a comprehensive tour of their area of responsibility. Shift supervision may allow rounds to be delayed based on plant or work conditions.*

Contrary to the above, on multiple occasions between July 1 and October 31, 2017, auxiliary operators failed to conduct operator tours in all required areas of responsibility. Specifically, four auxiliary operators failed to enter SDS Door 37 for the spent fuel pool heat exchanger room, which is an area they were required to tour for that watch station.

Enforcement Action: This violation is being treated as an apparent violation (AV) pending a final significance (enforcement) determination.

Incomplete and Inaccurate Information Associated with Operator Rounds and Fire Watch Logs			
Cornerstone	Severity	Cross-Cutting Aspect	Report Section
Not Applicable	Apparent Violation AV 05000261/2019012-03 Open EA-19-025	Not Applicable	71111.05Q
The inspectors identified an apparent violation of 10 CFR § 50.9(a) for not maintaining complete and accurate fire watch and operator rounds logs. On several occasions, Inside Auxiliary Operators (IAOs) failed to enter an area to conduct operator rounds or fire watches yet signed off as completing them.			

Description: On September 15, 2017, the licensee established an hourly fire watch in the 'A' and 'B' EDG rooms located in the Auxiliary Building due to the CO2 suppression system being out of service. On September 25, 2017, the inspectors identified that hourly fire watches were not being conducted in accordance with licensee procedure AD-EG-ALL-1522, Duties of a Fire Watch, or being documented accurately. A review of the watch logs by the NRC disclosed multiple discrepancies, including logs being entered by the IAOs at the same time they attend mandatory shift turnover meetings.

On October 3, 2017, the inspectors requested to review the door card reader logs and the hourly fire watch logs for the assigned IAO for the period of September 15 - 21, 2017. On October 24, 2017, the inspectors completed the review and identified discrepancies between the fire watch logs and the door logs, which would indicate when a particular individual entered at a room.

In response, Duke Energy formed an "Internal Investigation Team" to investigate the matter. Duke Energy reviewed fire watch records from between July 1, 2017, and October 31, 2017 and determined that on several occasions, four individuals failed to enter the Auxiliary Building to conduct a fire watch yet signed the fire watch as completed. In addition, the licensee's investigation determined that IAOs had signed off as completing rounds when there was no evidence to support the operators had been in those areas during the times documented. Specifically, four IAOs failed to enter the spent fuel heat exchanger room to complete rounds on nine separate occasions between July 12 and October 1, 2017, yet signed the rounds log as being complete.

The NRC concluded that the actions of the IAOs were apparently deliberate. By falsifying the fire watch and operator round logs, the IAOs caused Duke Energy to be in apparent violation of 10 CFR 50.9(a).

Corrective Actions: Duke Energy completed an internal investigation into the matter. The individual IAOs who falsified operator rounds and fire watch records received disciplinary corrective actions. In addition, operations management at Robinson issued standing instructions on October 25, 2017, outlining procedural requirements and operations expectations for reviewing fire watch paperwork and performing pre-job briefs. A self-study training package covering the duties of a fire watch was assigned to operations on September 27, 2017, and completed on November 17, 2017. Operations management made it a requirement that IAOs shall not cover operator rounds for another IAO unless there is a legitimate reason and permission is obtained from operations management.

Corrective Action References: Nuclear Condition Report (NCR) 2152726, NCR 2153334

Performance Assessment: This violation is associated with the apparent violations which are documented in this report. The apparent violation associated with the failure to conduct fire watches has an associated reactor oversight process (ROP) Green NCV. The apparent violation for the failure to conduct operator rounds is associated with a ROP minor performance deficiency.

Enforcement: The ROP's significance determination process does not specifically consider willfulness in its assessment of licensee performance. Therefore, it is necessary to address this violation which involves willfulness using traditional enforcement to adequately deter non-compliance.

Violation: 10 CFR 50.9(a) states, in part, that information required by the Commission's regulations, orders, or license conditions to be maintained by the licensee shall be complete

and accurate in all material respects.

Contrary to the above, on multiple occasions between September 15, 2017 and September 21, 2017, the licensee willfully maintained records of hourly fire watch logs that were not complete and accurate in all material respects. Specifically, fire watch patrol documentation as required by AD-EG-ALL-1522 annotated that hourly fire watches were completed, when on multiple occasions such fire watches had not been performed. The hourly fire watch patrol data is material to the NRC in that it provides evidence of compliance with regulatory requirements.

In addition, on multiple occasions between July 1 and October 31, 2017, the licensee willfully maintained records of operator rounds logs that were not complete and accurate in all material respects. Specifically, auxiliary operators failed to comply with the procedural requirements of AD-OP-ALL-1000, "Conduct of Operations," in that the auxiliary operators recorded data for areas that they never actually entered on multiple occasions. The operator rounds logs are material to the NRC in that it provides evidence of compliance with regulatory requirements.

Enforcement Action: This violation is being treated as an apparent violation (AV) pending a final significance (enforcement) determination.

**FACTUAL SUMMARY**  
**OFFICE OF INVESTIGATIONS REPORT NO. 2-2018-004**

On March 18, 2019, the Nuclear Regulatory Commission's (NRC) Office of Investigations (OI) completed an investigation at the Duke Energy's H.B. Robinson Nuclear Plant. The purpose of the investigation was to determine if assigned Inside Auxiliary Operators (IAO) at Robinson Nuclear Plant deliberately failed to conduct fire watches and operator rounds as required by procedure and deliberately falsified records.

Based on information provided by NRC inspectors, Duke Energy conducted an internal investigation. As part of the investigation, Duke Energy pulled records for all card readers associated with fire watch and operator rounds from July 1, 2017 to October 31, 2017. Duke Energy's investigation determined the following:

- Four IAOs assigned the duties of an hourly fire watch failed to perform their assigned rounds for the A and B Emergency Diesel Generator Rooms on nine separate occasions.
- Four IAOs failed to perform their assigned rounds in the Spent Fuel Pool Heat Exchanger Room.
- Seven IAOs failed to complete fire watch rounds in the required time interval on 25 occasions.

IAOs were tasked with performing fire watch duties in accordance with Duke Procedure AD-EG-ALL-1522, Duties of a Fire Watch, Revision 3, dated August 21, 2017. In accordance with this procedure, fire watches are tasked with visually watching or inspecting the assigned location for the required duration of the fire watch for visible signs of fire, unauthorized fire hazards, changing conditions that could contribute to increased fire risk, and housekeeping practices. This procedure requires the completion of assigned fire watches to be logged on Attachment 5, Fire Watch Log.

IAOs were tasked with performing operator rounds in accordance with Duke Procedure AD-OP-ALL-1000, Conduct of Operations, Revision 8, dated June 29, 2017. In accordance with this procedure, IAOs are tasked, in part, with monitoring local plant conditions, system and equipment operation, and detecting actual or potential problems that could hamper safe plant, system, or component operation. This procedure requires IAOs to log the completion of assigned rounds.

During transcribed interviews with NRC OI, eight IAOs stated that they had a clear understanding of the procedural requirements for performing fire watch and operator rounds. None of the eight IAOs interviewed could explain why they missed a fire watch, missed an operator round, or missed a fire watch grace period. Some IAOs implied they did not have a clear understanding of fire watch grace periods.

The preponderance of evidence appears to indicate that four Robinson IAOs willfully missed fire watches and falsified fire watch records; and four IAOs willfully failed to complete operator rounds and falsified recorded data. This appears to have caused Duke Energy to be in violation of 10 CFR 50.9, 10 C.F.R. 50.48(a)(2)(i), and H.B. Robinson Nuclear Plant Technical Specification 5.4.1(a).