UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

October 4, 2018

IA-18-031

Mr. Ben Welch
[NOTE: HOME ADDRESS DELETED
UNDER 10 CFR 2.390]

SUBJECT: NRC INVESTIGATION REPORT 4-2017-030

Dear Mr. Welch:

This refers to the investigation completed on May 23, 2018, by the U.S. Nuclear Regulatory Commission (NRC) Office of Investigations at the Comanche Peak Nuclear Power Plant. The investigation was conducted, in part, to determine whether you, a reactor operator assigned to Vistra Operations Company LLC (licensee), at Comanche Peak Nuclear Power Plant, Units 1 and 2, willfully documented inaccurate information in a required record regarding the filling of the refueling water storage tank on April 28, 2017. A factual summary of the investigation, as it pertains to your actions, is provided as Enclosure 1.

Based on the information acquired during the investigation, an apparent violation was identified and is 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 apparent violation, as documented in Enclosure 2, is Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.5(a)(2) which prohibits employees from deliberately submitting information to the NRC or a licensee that the person submitting the information knew to be incomplete or inaccurate in some respect material to the NRC. Your actions also appeared to have caused the licensee to be in violation of 10 CFR 50.9 as described in Enclosure 3.

In addition, based upon your position within the licensee's organization, the lack of actual safety consequences, and your cooperation during the investigation, an Order banning you, in part or in whole, from NRC licensed activities, or other requirements imposed by an Order, does not appear warranted.

Before the NRC makes its enforcement decision, we are providing you an opportunity to: (1) respond in writing to the apparent violation in Enclosure 2 of this letter within 30 days of the date of this letter; or (2) request a predecisional enforcement conference (PEC); or (3) request alternative dispute resolution (ADR). If a PEC is held, 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 John Kramer at 817-200-1121 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.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

If you choose to provide a written response, it should be clearly marked as a "Response to Apparent Violation, NRC Investigation Report 4-2017-030; IA-18-031" and should include for the 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 U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Director, Division of Reactor Projects, U.S. Nuclear Regulatory Commission, Region IV, 1600 E. Lamar Blvd., Arlington, TX 76011-4511. 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.

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 PEC 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 request ADR with the NRC in an attempt to resolve this issue. Alternative dispute resolution 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 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 ADR program can be obtained at http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html, as well as NRC brochure NUREG/BR-0317, "Enforcement Alternative Dispute Resolution Program" Revision 2 (Agencywide Documents Access and Management System (ADAMS) Accession ML18122A101). The Institute on Conflict Resolution at Cornell University has agreed to facilitate the NRC's program as a neutral third party. Please contact the Institute on Conflict Resolution 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.

Because this letter references and encloses information addressing NRC's review of an apparent enforcement action against an individual, this letter and its enclosures will be maintained by the Office of Enforcement in an NRC Privacy Act system of records, NRC-3, "Enforcement Actions Against Individuals." This system, which is not publically-accessible, includes all records pertaining to individuals who are being or have been considered for enforcement action, whether such action was taken or not. The NRC-3 system notice, which

provides detailed information about this system of records, can be accessed from our web site at http://www.nrc.gov/reading-rm/foia/privacy-systems.html.

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.

If the NRC concludes that enforcement action should be issued to you, this letter, and your response, if you choose to submit one, will be made publicly available either electronically for public inspection in the NRC Public Document Room or from the NRC's ADAMS, accessible from the NRC's website at http://www.nrc.gov/reading-rm/adams.html. However, you should be aware that all final NRC documents, including the final Office of Investigations report, are official agency records and may be made available to the public under the Freedom of Information Act, subject to redaction of certain information in accordance with the Freedom of Information Act. To the extent possible, any response which you provide should not include any personal privacy or proprietary information so that it can be made available to the public without redaction.

If you have any questions regarding this matter, you may contact John Kramer, Senior Enforcement Specialist, at 817-200-1121.

Sincerely,

Anton Vegel, Director
Division of Reactor Projects

Enclosures:
1. Factual Summary
2. Apparent Violation
3. Letter to Comanche Peak Nuclear Power Plant

FACTUAL SUMMARY
OFFICE OF INVESTIGATIONS REPORT 4-2017-030

On May 23, 2017, the U.S. Nuclear Regulatory Commission (NRC), Office of Investigations (OI), Region IV, initiated an investigation to determine, in part, whether you, while employed by Vistra Operations Company LLC (licensee) at the Comanche Peak Nuclear Power Plant, willfully provided inaccurate information to the licensee. The investigation was completed on May 23, 2018.

Based on information obtained during the investigation, it appears that you deliberately provided inaccurate information to the licensee. During an interview with OI, you admitted to OI that you provided incomplete or inaccurate information to licensee personnel on a number of occasions regarding an evolution to fill the refueling water storage tank on April 28, 2017. Specifically, you stated that you believed that valve 2-FCV-110B, reactor coolant system makeup to charging pump suction isolation valve, was closed as required by procedure. However, during the evolution, when the volume control tank began losing water level you realized that you had not closed valve 2-FCV-110B and immediately closed the valve. You stated that you were overwhelmed with work, and that you were hesitant to ask for help because you feared doing so would reflect poorly on you. You did not alert the control room staff of your action and when others assumed the valve was leaking by, you did not correct them. You also admitted that you knowingly submitted a written statement where you indicated that the valve had been closed and reported the same in Condition Report CR-2017-005788 that you drafted. Based on the evidence, it appears that you deliberately provided inaccurate information to the license. This appears to have caused you to be in violation of 10 CFR 50.5(a)(2) and the licensee to be in violation of 10 CFR 50.9.

APPARENT VIOLATION

Based on the results of an NRC investigation completed on May 23, 2018, an apparent violation of NRC requirements was identified. The apparent violation is listed below:

10 CFR 50.5(a)(2) requires, in part, that any employee of a licensee may not deliberately submit to a licensee information that the person submitting the information knows to be incomplete or inaccurate in some respect material to the NRC.

Contrary to the above, on April 28, 2017, you, a licensed reactor operator, deliberately submitted to the licensee information that you knew to be incomplete and inaccurate in some respect material to the NRC. Specifically, you initiated Condition Report CR-2017-005788 which you knew contained incomplete and inaccurate information, stating that there were suspected valves leaking during performance of Procedure SOP-104B, "Reactor Make-up and Chemical Control System," Section 5.2.7. The condition report did not accurately reflect the events leading to the transient where you failed to complete a procedural step which resulted in a valve remaining open when it should have been closed. The information in the condition report was material to the NRC because it is subject to NRC inspection and informs the NRC's review of and response to incidents such as the underlying procedure violation.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

October 4, 2018

EA-18-064

Ken J. Peters, Senior Vice President
and Chief Nuclear Officer
Attention: Regulatory Affairs
Vistra Operations Company LLC
P.O. Box 1002
Glen Rose, TX 76043

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 1 AND 2 – NRC INSPECTION REPORT 05000445/2018011; 05000446/2018011 AND NRC INVESTIGATION REPORT 4-2017-030

Dear Mr. Peters:

This letter refers to the investigation completed on May 23, 2018, by the U.S. Nuclear Regulatory Commission (NRC) Office of Investigations at the Comanche Peak Nuclear Power Plant. The investigation was conducted, in part, to determine whether a reactor operator assigned to Vistra Operations Company LLC, at Comanche Peak Nuclear Power Plant, Units 1 and 2, willfully documented inaccurate information in a required record regarding the filling of the refueling water storage tank on April 28, 2017. Enclosure 1 provides a factual summary of the basis for the NRC's concern that willfulness was associated with an apparent violation in this case. The issue was discussed with Mr. T. McCool, Site Vice President, and other members of your staff during a telephone conversation on September 10, 2018.

Based on the information acquired during the investigation, one apparent violation was identified and is 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 apparent violation is against Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.9 which requires, in part, 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. Further details regarding this apparent violation are documented in Enclosure 2 to this letter.

The circumstances surrounding the apparent willful violation, the potential significance of the issue, and the need for lasting and effective corrective action were discussed with members of your staff at the inspection exit meeting on September 10, 2018. Additionally, this report documents, in Enclosure 2, one finding of very low safety significance (Green), which involved a violation of NRC requirements. The NRC is treating this violation as non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

Before the NRC makes its enforcement decision, we are providing you an opportunity to: (1) respond in writing to the apparent violation addressed in this inspection report within 30 days of the date of this letter; or (2) request a predecisional enforcement conference (PEC); or (3) request alternative dispute resolution (ADR). If a PEC is held, 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 Mr. Mark Haire, Chief, Project Branch A, at 817-200-1148 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 in NRC Inspection Report 05000445/2018011; 05000446/2018011; EA-18-064" and should include for the 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 U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Director, Division of Reactor Projects, U.S. Nuclear Regulatory Commission, Region IV, 1600 E. Lamar Blvd., Arlington, TX 76011-4511. 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.

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 PEC 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 ADR with the NRC in an attempt to resolve this issue. Alternative dispute resolution 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 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 ADR program can be obtained at http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html, as well as NRC brochure NUREG/BR-0317, "Enforcement Alternative Dispute Resolution Program," Revision 2 (Agencywide Documents Access and Management System (ADAMS) Accession ML18122A101). 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 the apparent violation described in the Enclosure 2 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.

For administrative purposes, this letter and enclosures are issued as NRC Inspection Report 05000445/2018011; 05000446/2018011. The apparent violation will be issued as AV 05000446/2018011-01; and the finding and associated NCV will be issued as NCV 05000446/2018011-02, both as described in Enclosure 2.

If you contest the violation or significance of the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; the Director, Office of Enforcement; and the NRC resident inspector at the Comanche Peak Nuclear Power Plant.

If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; to the Regional Administrator, Region IV; and the NRC resident inspector at the Comanche Peak Nuclear Power Plant.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter, its enclosures, and your responses, if you choose to provide them, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's 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 or proprietary information so that it can be made available to the public without redaction. However, you should be aware that all final NRC documents, including the final Office of

Investigations report, are official agency records and may be made available to the public under the Freedom of Information Act, subject to redaction of certain information in accordance with the Freedom of Information Act.

If you have any questions concerning this matter, please contact Mr. Mark Haire of my staff at 817-200-1148.

Sincerely,

/RA/

Anton Vegel, Director
Division of Reactor Projects

Docket Nos. 50-445; 50-446
License Nos. NPF-87; NPF-89

Enclosures:
1. Factual Summary
2. Inspection Report 05000445/2018011;
   05000446/2018011

FACTUAL SUMMARY
OFFICE OF INVESTIGATIONS REPORT 4-2017-030

On May 23, 2017, the U.S. Nuclear Regulatory Commission (NRC), Office of Investigations (OI), Region IV, initiated an investigation to determine, in part, whether a licensed reactor operator (RO) employed by VISTRA Operations Company LLC (licensee) at the Comanche Peak Nuclear Power Plant willfully provided inaccurate information to the licensee. The investigation was completed on May 23, 2018.

Based on information obtained during the investigation, it appears that an RO deliberately falsified information in a condition report required to be maintained by the NRC's regulations. Specifically, the RO stated that during an evolution to fill the refueling water storage tank on April 28, 2017, he believed that valve 2-FCV-110B, reactor coolant system makeup to charging pump suction isolation valve, was closed as required by procedure. However, during the evolution, when the volume control tank began losing water level he realized that he had not closed valve 2-FCV-110B and he immediately closed the valve. The RO stated that he was overwhelmed with work, and that he was hesitant to ask for help because he feared doing so would reflect poorly on him. The RO did not alert the control room staff of his action and when others assumed the valve was leaking by, he did not correct them. The RO also admitted that he knowingly submitted a written statement where he indicated that the valve had been closed and reported the same in Condition Report CR-2017-005788 that he drafted. Based on the evidence, it appears that the RO deliberately falsified information in the condition report. This appears to have caused the licensee to be in violation of 10 CFR 50.9, "Completeness and Accuracy of Information."

U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Numbers:	05000445, 05000446
License Numbers:	NPF-87, NPF-89
Report Numbers:	05000445; 05000446/2018011
Enterprise Identifier:	I-2018-011-0049
Licensee:	Vistra Operations Company, LLC
Facility:	Comanche Peak Nuclear Power Plant, Units 1 and 2
Location:	Glen Rose, Texas
Inspection Dates:	July 1, 2018, to September 10, 2018
Inspectors:	R. Alexander, Senior Project Engineer A. Athar, Project Engineer J. Josey, Senior Resident Inspector
Approved By:	Mark S. Haire Chief, Project Branch A Division of Reactor Projects

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an inspection at Comanche Peak Nuclear Power Plant, Units 1 and 2, 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. NRC-identified and self-revealed findings, violations, and additional items are summarized in the table below.

List of Findings and Violations

<table>
<tr><td colspan="4">Failure to Maintain a Quality Record Complete and Accurate in All Material Respects</td></tr>
<tr><td>Cornerstone</td><td>Significance</td><td>Cross-cutting Aspect</td><td>Inspection Procedure</td></tr>
<tr><td>Not Applicable</td><td>Apparent Violation
AV 05000446/2018011-01
Open
EA-18-064</td><td>Not Applicable</td><td>71153 – Follow-up of Events and NOED</td></tr>
<tr><td colspan="4">The inspectors identified an apparent violation of 10 CFR 50.9, in that the licensee appears to have failed to maintain information required by the Commission's regulations that was complete and accurate in all material respects. Specifically, following equipment manipulation and an unanticipated loss of inventory in a portion of the reactor coolant system, the licensee appears to have failed to maintain complete and accurate information in condition report CR-2017-005788 relative to the cause of the loss of inventory event and the identified condition adverse to quality in the corrective action program.</td></tr>
</table>

<table>
<tr><td colspan="4">Failure to Follow a Quality Procedure Associated with the Reactor Makeup and Chemical Control System</td></tr>
<tr><td>Cornerstone</td><td>Significance</td><td>Cross-cutting Aspect</td><td>Inspection Procedure</td></tr>
<tr><td>Initiating Events</td><td>Green
NCV 05000446/2018011-02
Closed
EA-18-064</td><td>H.12 – Avoid Complacency</td><td>71153 – Follow-up of Events and NOED</td></tr>
<tr><td colspan="4">The inspectors reviewed a self-revealed, Green, non-cited violation of Technical Specification 5.4.1.a for the licensee's failure to follow a quality procedure associated with the reactor makeup and chemical control system which resulted in an unanticipated loss of inventory from the volume control tank in the reactor coolant system. Specifically, on April 28, 2017, a reactor operator failed to complete step 5.2.7.G in quality procedure SOP-104B, "Reactor Make-up and Chemical Control System," which would isolate the volume control tank from the chemical and volume control system, prior to directing a nuclear equipment operator to complete subsequent steps 5.2.7.K and 5.2.7.L, which opened isolation valves to the refueling water storage tank. These actions resulted in the unanticipated loss of inventory from the volume control tank into the refueling water storage tank.</td></tr>
</table>

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71153—Follow-up of Events and Notices of Enforcement Discretion

Personnel Performance (1 Sample)

The inspectors evaluated an unanticipated loss of inventory from the volume control tank in the reactor coolant system and the licensee's performance in response to the transient on April 28, 2017.

INSPECTION RESULTS

Failure to Maintain a Quality Record Complete and Accurate in All Material Respects			
Cornerstone	Significance/Severity	Cross-cutting Aspect	Inspection Procedure
Not Applicable	Apparent Violation AV 05000446/2018011-01 Open EA-18-064	Not Applicable	71153 – Follow-up of Events and NOED
The inspectors identified an apparent violation of 10 CFR 50.9, in that the licensee appears to have failed to maintain information required by the Commission's regulations that was complete and accurate in all material respects. Specifically, following equipment manipulation and an unanticipated loss of inventory in a portion of the reactor coolant system, the licensee appears to have failed to maintain complete and accurate information in condition report CR-2017-005788 relative to the cause of the loss of inventory event and the identified condition adverse to quality in the corrective action program.			
Description: On April 28, 2017, following an attempt to fill the refueling water storage tank (RWST) that resulted in a lowering level in the volume control tank (VCT), a licensed reactor operator (RO) admitted that he provided incomplete or inaccurate information to licensee personnel on a number of occasions. Specifically, the RO stated that after he realized that valve 2-FCV-110B, reactor coolant system makeup to charging pump suction isolation valve, was not aligned properly he did not alert the control room, and when others assumed the valve was leaking by he did not correct them. The RO also admitted that he knowingly submitted a written statement where he indicated that the valve had been closed and reported the same in Condition Report CR-2017-005788 that he drafted, which was not accurate. As a result, the NRC has identified an apparent willful violation of 10 CFR 50.9, "Completeness and Accuracy of Information."			

Corrective Action(s): The licensee entered the apparent violation into the corrective action program, and initiated actions to evaluate the reasons for the apparent violation and the effectiveness of the corrective actions taken for the initial event in April 2017.

Corrective Action Reference(s): CR-2018-006118

Enforcement:

Severity: The ROP's significance determination process does not specifically consider willfulness in its assessment of licensee performance. Therefore, it is necessary to address this apparent violation which involves willfulness using traditional enforcement to adequately deter non-compliance. The severity of this apparent violation will be determined in accordance with the Enforcement Policy pending a final enforcement determination.

Apparent Violation: Title 10 CFR 50.9 requires, 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.

Title 10 CFR Part 50, Appendix B, Criterion XVII, requires, in part, that sufficient records shall be maintained to furnish evidence of activities affecting quality. The licensee established three quality related procedures STA-422, "Corrective Action Program," STI-421.01, "Initiation of Issue Reports," and STI-421.02, "Issue Report Reviews," in part, to implement the station's problem identification and resolution process, including the identification and documentation of conditions adverse to quality. Further, the licensee's procedures above define a "condition adverse to quality," in part, as an undesired condition which impacts a system, structure, or component, including but not limited to failures, malfunctions, deviations, deficiencies, defective material and equipment, and non-conformances.

However, on April 28-29, 2017, the licensee appears to have failed to maintain information required by the Commission's regulations that was complete and accurate in all material respects. Specifically, following equipment manipulation and an unanticipated plant transient, the licensee appears to have failed to maintain complete and accurate information in condition report CR-2017-005788 relative to the cause of the transient and the identified condition adverse to quality in the corrective action program. As part of the corrective action program, the information in the condition report was material to the NRC because it is subject to NRC inspection and informs the NRC's review of and response to incidents such as the underlying procedure violation.

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

Failure to Follow a Quality Procedure Associated with the Reactor Makeup and Chemical Control System			
Cornerstone	Significance	Cross-cutting Aspect	Inspection Procedure
Initiating Events	Green NCV 05000446/2018011-02 Closed EA-18-064	H.12 – Avoid Complacency	71153 – Follow-up of Events and NOED

The inspectors reviewed a self-revealed, Green, non-cited violation of Technical Specification 5.4.1.a for the licensee's failure to follow a quality procedure associated with the reactor makeup and chemical control system which resulted in an unanticipated loss of inventory from the volume control tank in the reactor coolant system. Specifically, on April 28, 2017, a reactor operator failed to complete step 5.2.7.G in quality procedure SOP-104B, "Reactor Make-up and Chemical Control System," which would isolate the volume control tank from the chemical and volume control system, prior to directing a nuclear equipment operator to complete subsequent steps 5.2.7.K and 5.2.7.L, which opened isolation valves to the refueling water storage tank. These actions resulted in the unanticipated loss of inventory from the volume control tank into the refueling water storage tank.

Description: On April 28, 2017, while Unit 2 was shutdown and in Mode 5, a reactor operator (RO) was tasked with filling the refueling water storage tank (RWST) from the chemical and volume control system using Procedure SOP-104B, "Reactor Make-up and Chemical Control System," Section 5.2.7, "Makeup to RWST." The procedure Step 5.2.7.G directed the RO to close valve 2-FCV-110B, reactor coolant system makeup to charging pump suction isolation valve, and therefore, isolate the volume control tank (VCT) from the chemical and volume control system prior to initiating fill of the RWST. However, the RO directed a nuclear equipment operator (NEO) to complete Steps 5.2.7.K and 5.2.7.L, to open the isolation valves to the RWST, before the RO had isolated the VCT. When the NEO opened the isolation valves, the VCT level began lowering because the RO had failed to perform his procedure step. Another operator in the control room promptly identified the rapidly lowering VCT level and the operators initiated actions to arrest the loss of inventory from the VCT and identify the cause of the transient.

Corrective Action(s): In addition to closing valve 2-FCV-110B in the control room, the RO also directed the NEO to close the two isolation valves in the field, which terminated the inventory loss from the VCT. The licensee documented the inventory transient in the corrective action program and began an investigation to determine the cause of the transient. Subsequently, the licensee documented the performance deficiency in the corrective action program and initiated actions to evaluate the reasons for the procedural violation and effectiveness of the corrective actions to address the initial issue when it occurred in April 2017.

Corrective Action Reference: CR-2017-005788; CR-2018-006115

Performance Assessment:

Performance Deficiency: The failure of the RO to follow a quality procedure associated with the reactor makeup and chemical control system was determined to be a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it adversely affected the human performance attribute of the Initiating Events cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the RO's failure to follow the procedure resulted in loss of reactor coolant system inventory from the VCT to the RWST during a time in which the plant was shutdown in Mode 5.

Significance: The inspectors assessed the significance of the finding using Inspection Manual Chapter (IMC) 0609, Attachment 4, "Initial Characterization of Findings," dated October 7, 2016, and Appendix G "Shutdown Operations Significance Determination Process," dated May 9, 2014, in that the performance deficiency occurred while Unit 2 was shutdown in Mode 5, with residual heat removal providing shutdown cooling. Using the Phase 1 screening criteria in Appendix G, Attachment 1, the inspectors determined that the finding impacted the inventory control safety function of the charging system resulting in a loss of inventory in a portion of the reactor coolant system (i.e., the VCT). Further using the Initiating Event screening questions (IMC 0609, Appendix G, Attachment 1, Exhibit 2), the inspectors determined that (1) the finding did not increase the likelihood of a shutdown initiating event; (2) the loss of inventory event did not result in a leakage such that if undetected and/or unmitigated in 24 hours or less, would have caused the operating decay heat removal method to fail; (3) the loss of inventory event was self-limiting such that leakage would stop before impacting the operating method of decay heat removal; (4) the finding did not impact the transient initiators; and (5) the finding did not increase the likelihood of a fire or internal/external flood that could cause a shutdown initiating event. Therefore, the finding was determined to be of very low safety significance (i.e., Green).

Cross-cutting Aspect: The finding has a cross-cutting aspect in the area of human performance, avoid complacency, because the RO failed to recognize and plan for the possibility of mistakes even while expecting successful outcomes. Specifically, the RO failed to use the error prevention techniques afforded to him and/or request support from other operators when balancing the conduct of several simultaneous activities during the RWST filling evolution [H.12].

Enforcement:

Violation: Technical Specification 5.4.1.a requires, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, "Quality Assurance Program Requirements," Revision 2, Appendix A, February 1978. Regulatory Guide 1.33, Appendix A, Step 3.n, addresses procedures for the chemical and volume control system. Procedure SOP-104B, "Reactor Make-Up and Chemical Control System," Revision 12, implements Regulatory Guide 1.33, Appendix A, Step 3.n. Procedure SOP-104B, Step 5.2.7.G, requires, in part, to close Valve 2-FCV-110B, reactor coolant system makeup to charging pump suction isolation valve, prior to the performance of subsequent steps.

Contrary to the above, on April 28, 2017, a licensed reactor operator failed to perform Procedure SOP-104B, Step 5.2.7.G, and close Valve 2-FCV-110B, prior to the performance of subsequent steps. Specifically, the reactor operator failed to complete Step 5.2.7.G to close valve 2-FCV-110B before a nuclear equipment operator completed Procedure SOP-104B, Steps 5.2.7.K and 5.2.7.L, which resulted in an unexpected lowering level in the volume control tank.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

EXIT MEETINGS AND DEBRIEFS

On September 10, 2018, the NRC staff presented the inspection results to Mr. T. McCool, Site Vice President, and other members of the licensee staff in a telephonic exit meeting. The NRC staff verified no proprietary information was retained or documented in this report.