

L. William Pearce
Vice President

440-280-5382
Fax: 440-280-8029

May 09, 2006
PY-CEI/NRR-2959L

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Perry Nuclear Power Plant
Docket No. 50-440
License No. NPF-58

Subject: Response to Nuclear Regulatory Commission (NRC) Inspection Report
05000440/2006007 – NRC Follow up Inspection of IP 95002 Action Items

Ladies and Gentlemen:

This letter provides the FirstEnergy Nuclear Operating Company (FENOC) response to the NRC Inspection Report 05000440/2006007 for the Perry Nuclear Power Plant (PNPP). The inspection report provided the results of the NRC Confirmatory Action Letter (CAL) follow-up inspection for Inspection Procedure (IP) 95002 action items. The letter, requests that FENOC respond within 30 days of receipt of the letter describing the specific actions that FENOC plans to take to address the issues raised during the inspection. The attached provides the requested response.

There are no commitments contained in this letter. If you have any have questions or require additional information, please contact Mr. Jeffrey Lausberg, Manager, Regulatory Compliance at (440) 280-5940.

Very truly yours,



Attachment

cc: NRC Region III Administrator
NRC Project Manager
NRC Resident Inspector

JEDT

Response to NRC Inspection Report (IR) 05000440/2006007
NRC Follow up Inspection of IP 95002 Action Items

Overall, the inspection team concluded that FENOC had satisfactorily implemented the commitments and action items that they reviewed and therefore, the corrective actions to address maintenance procedure adequacy, Emergency Service Water (ESW) pump coupling assembly, and training were adequate. Notwithstanding this overall conclusion, the team identified some cases where the implementation of these actions was weak, which potentially impacts the overall ability to effectively resolve these issues. These issues are identified in the Findings and Observations of the inspection report.

The following provides the specific NRC Findings and Observations identified in Inspection Report 2006007 followed by the FENOC's response to those Findings and Observations:

SECTION 3.0 PROCEDURE ADEQUACY

1. 3.1.b.1, Technical Content Review Results, states: The inspectors reviewed 19 of the 119 revised maintenance procedures. Overall, the inspectors concluded that the maintenance procedures reviewed were an improvement on the previous revisions, both in content, formatting, and ease of use. However, the following weaknesses were identified:
 - One procedure was identified to contain a significant technical error. GMI-0050, "Residual Heat Removal Pump Overhaul," Revision 0, that was to be utilized for the overhaul of a Residual Heat Removal (RHR) pump, did not include steps to re-insert pump coupling keys that were removed during pump disassembly. Therefore, the pump overhaul activity, if performed as written, would not return the equipment to a condition in which it would properly function, which was considered a significant technical procedure deficiency. However, because this procedure had not actually been utilized, the inspectors considered this procedure deficiency to be of only minor significance.
 - The inspectors noted numerous instances of typographical errors and improper references. While these errors did not significantly impact the ability to implement the procedures, it indicated a lack of attention to detail in the procedure development and review process.

FENOC RESPONSE:

As stated above, during the NRC inspection, an error was identified for procedure GMI-0050, "Residual Heat Removal Pump Overhaul." The error was the omission of specific instructions in the procedure for reassembly of the pump shaft for the placement of keys on the pump shaft keyway sleeve and placement of the split ring. This made the procedure deficient. The missing steps could have caused problems during the reassembly of the pump shaft. When this issue was discovered, GMI-0050 was put on hold pending resolution of the issue and Condition Report (CR) 06-00261 was generated to document the issue. Investigation found that the RHR pumps have not been overhauled using this procedure, but rather in the past the vendor manual had been used with the vendor present on site. Additionally,

the procedure will be reviewed against the vendor manual to verify that no other omission exists.

The upgraded procedures have been categorized into four (4) groups, with prioritization based on frequency of use, scheduled use, and document change request feedback received from users. The procedures will be reviewed for adequacy, starting with Group 1 and progressing through Group 4 (lowest priority). GMI-0050 is scheduled to be updated under Group 4 since it is utilized in a forced or refueling outage. It will not be used until it is updated.

In regards to the administrative errors that were found in the upgraded maintenance procedures (e.g., typographical errors, inconsistent formatting, missing references, etc.), FENOC has generated CR 06-00418 to address the issue. This CR will collectively address the issue and capture the lessons-learned as well as address the necessary re-verification and revalidation of the upgraded maintenance procedures. Corrective Action 06-00418-02 was developed to track the Maintenance Department re-review of the 119 procedures to correct the following potential discrepancies:

Typographical errors
Formatting inconsistencies
Proper step sequencing
Redundant steps
Deficient direction
Faulty references
Missing technical information
Proper use/identification of critical steps

Additional resources are being brought in to help complete the reviews. Discrepancies identified during the review process will be documented via the Corrective Action Program and addressed, as required, to support procedure use/plant operation/scheduled maintenance activities. Overall results of the review will be documented in the closure of Corrective Action 06-00418-02.

2. 3.1.b.2, Identification of Missing "Critical" Procedure Step Designation, states: The inspectors identified numerous maintenance procedure steps that warranted identification as critical steps in these procedures, but had not been properly identified as such. Specific examples included:
 - CMI-0016, "Division I and II Emergency Diesel Generator Starting Air Valve Repair," Revision 3, did not identify measurement and evaluation of cap bore and piston diameter as a critical step although an improper clearance could result in a failure of the emergency diesel generator to start.
 - PMI-0040, "Division III Air Start Motor Maintenance," Revision 4, did not identify a rotation check of the air starter during air start motor reassembly as a critical step although improper rotation could result in damage to the component or a slow start.

- GMI-0002, "Maintenance of the Control Rod Drive Pumps," Revision 2, did not identify the measurement of run out clearances as a critical step although improper clearances could lead to premature bearing failure.

MAI-0507 also prescribed that if possible, Critical Steps should be identified and mitigated by using one of the following methods:

- Add a step for breakpoint review.
- Add independent verification.
- Add a step for peer-check.
- Add a step to contact the supervisor.
- Add a step to contact the Control Room to verify a condition before continuing to the next action.

However, contrary to MAI-0507, no examples of mitigation strategies for critical steps could be found in any of the revised procedures. These mitigation strategies were intended to provide additional assurance of proper step completion. Follow up discussions with work management personnel indicated that these strategies were intended to be added during the work package development process. However, only one example was identified in which a mitigation strategy was included with a work order containing a critical step. The inspectors concluded that the licensee had not adequately implemented this procedural requirement. However, since the inspectors did not identify any instance where the omission of a mitigating strategy had resulted in improper procedure implementation, the inspectors concluded the issue was of only minor significance.

FENOC RESPONSE:

FENOC acknowledges that inconsistencies exist in application of the critical steps in the upgraded maintenance procedures. When this issue was identified, several condition reports were generated to document the issues (i.e., CR 06-00181, 06-00276 and 06-00418). Condition Report 06-00418 documents the investigation summary and provides the corrective action to address the issue going forward. Since the CR was generated, MAI-0507, "Maintenance Procedures Writer's Guide," has been superseded by a new technical procedure guide PAP-0500, "Perry Technical Procedure Writer's Guide," Revision 0, that provides improved guidance for mitigation and application of critical steps.

The investigation found that the inconsistencies in the application of the critical steps in the upgraded maintenance procedures were due to less than adequate oversight and participation by Perry personnel during the procedure upgrade process. The initial maintenance procedure upgrade project was mainly supported by outside contract personnel utilizing a format obtained from another site that did not meet FENOC standards. Additionally, when the maintenance procedure upgrade project was initiated in late 2004, the maintenance procedure writer's guide, MAI-0507 was not issued yet, which contributed to the issue.

As a result of the issues discussed above, the upgraded maintenance procedures will be reviewed for the consistent application of critical steps, formatting and consistency. Corrective actions will be taken to address issues found during the reviews. As stated above, this action is being tracked as CA 06-00418-02.

3. 3.1.b.3, Weaknesses in the use of Placekeeping Tools and Human Factoring, states: The inspectors confirmed that the licensee added placekeeping blocks to the revised procedures and had reformatted the procedures to address human factoring considerations. The inspectors supplemented this review with in-field observations of the implementation of the revised maintenance procedures. The inspectors noted performance of one procedure with improper use of placekeeping techniques:

- During hydramotor work, the inspectors noted that technicians performed multiple steps in rapid succession without using proper placekeeping.
- In the same procedure, the technicians performed several steps multiple times without using placekeeping for each *Performance* of the step. By procedure, a step may be performed multiple times, but each *Performance* requires separate placekeeping.

In addition, the inspectors noted multiple instances of poorly worded steps that hampered the maintenance worker's ability to successfully complete the procedure. For example:

- The inspectors observed the performance of a motor-operated valve (MOV) maintenance activity. Although the maintenance procedure utilized for this activity had been previously performed more than 100 times on other valves, the workers stopped several times to obtain clarification on the requirements of the procedure.
- The inspectors reviewed a completed work package that utilized maintenance procedure GEI-0009, "ABB Low Voltage Power Circuit Breaker Types K-600 and K-600S Through K-3000 and K-3000S Maintenance." The inspectors identified that workers had incorrectly N/A'd a section of the procedure. The inspectors noted that the procedural directions regarding performance of that section of the procedure were unclear. (Section b.4)

The inspectors observed the performance of maintenance procedure ICI-B12-001, "ITT NH90 Series Milliampere Proportional/On-Off Hydramotor Actuator Calibration." During implementation of the procedure, maintenance workers failed to remove all required access covers to the hydramotor. The inspectors noted that the procedure did not specifically identify the covers to be removed. (Section b.5)

FENOC RESPONSE:

The issue with improper use of placekeeping during the hydramotor work activity is addressed in Item 5 below. This observation was noted during calibration check of a Division III EDG Exhaust Air Damper using procedure ICI-B12-0001, "ITT NH90 Series Milliampere Proportional/On-Off Hydramotor Actuator Calibration" and is being addressed in CR 06-01765.

The issue with poorly worded steps in the maintenance procedure that hampered the maintenance worker's ability to complete the MOV maintenance procedure is related to the issue raised in Item 2 above. This issue is being addressed as part of CR 06-00418.

The issue with incorrect use of "N/A" during the performance of maintenance activity for ABB low voltage circuit breakers is addressed in Item 4 below. This issue was observed during the review of completed maintenance work package that utilized maintenance procedure GEI-0009, ABB Low Voltage Power Circuit Breaker Types K-600 and K-600S Through K-3000 and K-3000S Maintenance" and is being addressed in CR 06-00283.

4. (a) 3.1.b.4, Inappropriate Use of Not Applicable (N/A) in Procedure Steps, states: The inspectors identified that many of the revised maintenance procedures applied to multiple different styles of components. As a result, these procedures required that maintenance workers determine the applicable steps of the procedure to be performed since all steps may not apply to a particular component. When a step was not performed, the worker would mark the step N/A [not applicable]. Based on the procedures reviewed, the inspectors concluded that the typical number of N/As required during the implementation of a procedure represented a potential human performance trap. During the inspection, the inspectors identified the following specific example in which a procedure step was inappropriately N/A'd for which the Enforcement section is restated here for the example "Failure to Perform Required Steps Prescribed by Procedure GEI-0009".

Enforcement: Technical Specification 5.4, "Procedures," required, in part, that written procedures be implemented covering applicable procedures recommended by Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation), "Revision 2, dated February 1978. Regulatory Guide 1.33, Appendix A, paragraph 9a, stated, "Maintenance that can affect the *performance* of safety-related equipment should be properly pre-planned and performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances." Contrary to this requirement, on January 19, 2006 [it was determined that], licensee personnel failed to perform required steps in procedure GEI-0009, "ABB Low Voltage Power Circuit Breaker Types K-600 & K-600S Through K-3000 & K-3000S Maintenance," Revision 17. Specifically, licensee personnel failed to perform minimum operating voltage testing on the safety-related EF1A05 breaker that provided power to Division 1 Motor Control Center (MCC), Switchgear (SWGR), and Battery Room Supply Fan A. However, because of the very low safety significance and because the issue has been entered into the licensee's corrective action program (CR 06-00283), the issue is being treated as a non-cited violation (NCV) consistent with Section VI.A. 1 of the NRC Enforcement Policy (NCV 05000440/2006007-01).

FENOC RESPONSE:

During a review of work order (WO) 200038182, the NRC inspector identified that step 5.2.3, "Minimum Operating Voltage and Anti-Pump Verification," of procedure GEI-0009, "ABB Low Voltage Power Circuit Breaker Types K-600 & K-600S through K-3000 & K-3000S Maintenance," was marked N/A and not performed during the voltage testing of the non-safety related breaker that provides power to the condensate transfer pump A. When the issue

was raised during the inspection, CR 06-00283 was written to document and to investigate the issue. The investigation revealed that step 5.2.3 of GEI-0009 was incorrectly marked N/A and not performed as required. The anti-pump functional verification was performed by a subsequent step within the procedure. Step 5.16, "Breaker Anti-Pump," requires that the functionality of the breaker be verified before it is restored to an operable condition. From an equipment perspective, the anti-pump feature on the breaker was verified to be acceptable before it was installed and placed in service. There are no hardware issues associated with this breaker pertaining to the NA'd step 5.2.3. The maintenance work performed on this breaker satisfied the purpose of procedure GEI-0009 yet, as stated above, was not performed in full compliance with the requirements. The breaker was installed and placed in service on September 9, 2005 and there have not been any operational issues since that time. This breaker is presently scheduled for refurbishment in June 2006 (with a maximum due date of June 2007). Additionally, an immediate investigation was performed to determine if any other safety related, electrically operated breakers had been installed during 2005 without verification of their anti-pump feature. The investigation determined that the safety-related breakers overhauled during 2005 adequately met the steps 5.2.3 and 5.16 of procedure GEI-0009 for proper breaker operation. Individual performance issues associated with this condition were referred to line management for appropriate actions in accordance with the FENOC Performance Management System.

It is noted that for the safety related breaker that provides power to the division 1 motor control center (MCC), switchgear (SWGR) and battery room supply fan A, step 5.2.3 was left blank on the data sheet. However, since this breaker failed as-found, CR 05-04796 was written and the replacement breaker function was verified as acceptable.

(b) 3.1.b.4, In addition to this example, the inspectors observed a nonsafety-related air-operated valve (AOV) rebuild activity during which maintenance workers improperly N/A'd a step that prescribed a valve stem inspection.

FENOC RESPONSE:

During performance of changing the packing for feedwater heater drain valve, 1N25F0290A, step 5.3.2 of the valve packing instruction per procedure GMI-0061, "Valve Packing Instruction," was marked not applicable (N/A). The step states: "IF damage is found, THEN DETERMINE where information is available in Valveman Data Program or Order." The Valveman datasheet provides the information that addresses the packing configuration to be used. This step was incorrectly marked N/A while it was applicable. Step 5.3.2 was subsequently performed satisfactorily. This issue was documented in CR 06-00269. The investigation revealed that the individuals, although qualified to perform the task, had not performed the task regularly. Since the procedure was of a new format, the individuals misunderstood the steps and requirements of the datasheet.

The use of training along with the procedure provides the individuals with sufficient information needed to perform the task. Had the individuals

followed the procedure they would have discovered the data was contained in the Valveman data package. This was a human performance issue rather than a procedure deficiency. Individual performance issues associated with this condition were referred to line management for appropriate actions in accordance with the FENOC Performance Management System.

Elimination of human performance issues, including "procedure traps," has been given a high priority. The Maintenance Training Review Committee (TRC) is tracking actions for the maintenance organization to complete "Procedure Use And Adherence" classroom and laboratory training. At the end of March, 2006, the classroom portion had been completed by all maintenance supervisors and worker personnel. Laboratory practical training has been captured as an action that is scheduled to be completed next. The lesson material specifically includes training on "when procedure steps do not apply."

5. 3.1.b.5, Failure to Perform Required Steps Prescribed by Procedure ICI-B12-0001, states: Technical Specification 5.4, "Procedures," required, in part, that written procedures be implemented covering applicable procedures recommended by Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation), "Revision 2, dated February 1978. Regulatory Guide 1.33, Appendix A, paragraph 9a, stated, "Maintenance that can affect the performance of safety-related equipment should be properly pre-planned and performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances." Contrary to this requirement, on January 10, 2006, during a calibration check of a Division III EDG Exhaust Air Damper, licensee personnel failed to perform required steps prescribed by procedure ICI-B12-0001, "ITT NH90 Series Milliampere Proportional/On-Off Hydramotor Actuator Calibration," Revision 4. However, because of the very low safety significance and because the issue has been entered into the licensee's corrective action program (CR 06-00125), the issue is being treated as a non-cited violation (NCV) consistent with Section VI.A. 1 of the NRC Enforcement Policy (NCV 05000440/2006007-02).

FENOC RESPONSE:

On January 10, 2006, the NRC inspector observed the implementation of upgraded maintenance procedure ICI-B12-0001, "ITT NH90 Series Milliampere Proportional/On-Off Hydramotor Actuator Calibration," Revision 4, during a calibration check of a Division III Emergency Diesel Generator Exhaust Air Damper Hydramotor. This procedure was categorized as Step-by-Step Use and in accordance with procedure NOP-LP-2601, "Procedure Use and Adherence." During the performance of ICI-B12-0001, several instances were identified where procedure adherence was not followed in accordance with NOP-LP-2601.

As discussed in the NRC inspection report:

- Step 5.9.2 of ICI-B12-0001 directed the user to verify the subject hydramotor had been full-stroke cycled a minimum of five times. Although procedure steps which prescribe this type of verification permit the re-positioning of plant components, in accordance with

NOP-LP-2601, these actions must be specifically authorized by plant procedures. In this case, and as observed by the inspectors, although this guidance did not exist, personnel performed future procedure steps out-of-sequence in order to accomplish Step 5.9.2.

- Step 5.9.3 of ICI-B12-0001 directed that screw-on covers be removed to support testing. In this case, personnel failed to remove the necessary covers to continue with the proper testing.
- Step 5.9.4 of ICI-B12-0001 directed the connection of a multi-meter to a limit switch in accordance with Attachment 7, Figure 1. Contrary to this, personnel connected the multi-meter in accordance with Attachment 10 and continued with the calibration check. This error was identified by the inspectors observing the test when conflicts were discovered at a later procedure step.
- Steps 5.9.5 through 5.9.9 of ICI-B12-0001 directed the manipulation of the hydramotor actuator for verification and recording of proper valve seating and stem travel. Contrary to procedure use guidance, personnel did not complete these steps via the *read-then-perform* approach. Additionally, NOP-LP-2601 directed that repeated steps shall be provided with "separate documentation" and "placekeeping on the steps". These steps were repeated to satisfy the requirements of Step 5.9.2 without separate documentation and placekeeping annotation.
- Step 5.9.10, 5.9.10.a and 5.9.10.b of ICI-B12-0001 directed the connection of a multi-meter to position switches followed by actuator manipulation until such switches actuate. Contrary to procedure use guidance, steps were marked as complete concurrently without verifying individually that each step had been completed.

As part of the immediate corrective action, personnel stopped the work activity and revised ICI-B12-0001 to clarify the requirements in Section 5.9 of the procedure. A second attempt was made to calibrate the hydramotor, but the procedure needed another revision to the steps. The procedure category was also revised from "Step-by-Step" to "In-Field Reference," a more appropriate category for this procedure. Upon completion of the second procedure revision, the calibration was completed satisfactorily and the hydramotor was returned to service.

Condition reports 06-00125 and 06-01765 address the above inspection report issues as follows:

The first example of Step 5.9.2 of ICI-B12-0001 directed the user to verify that the hydramotor had been run through full stroke at least five times. Per NOP-LP-2601, the performer is allowed to reposition this hydramotor if authorized by plant procedures. The approval to stroke this valve was authorized by the order which was released by operations to allow calibration of the hydramotor. Note: The act of stroking the hydramotor is a skill that is obtained by a qualified technician during their on-the-job training/task performance evaluation (OJT/TPE) training.

Step 5.9.3 of ICI-B12-0001 directed the removal of control and electrical screw on covers for the PCD actuator. The technicians were working to calibrate the position limit switches instead of the travel limit switch so the correct cover was not removed. The technician made an error in not removing all of the covers needed for this calibration.

Step 5.9.4 of ICI-B12-0001 directed the connection of a multi-meter to an actuator travel limit switch shown on attachment 7, but went to attachment 10 (this issue was addressed solely by CR 06-00125). The error was failure to follow the procedure. The procedures were revised, the calibration completed, the hydramotor was returned to service, and the potential limiting condition for operation (PLCO) cleared.

Steps 5.9.5 through 5.9.9 of ICI-B12-0001 directed the manipulation of the hydramotor actuator for verification and recording of proper valve seating and stem travel. The steps were all performed and then signed off which violates procedure NOP-LP-2601 for use of a step-by-step procedure. Also, as the steps were repeated, the technicians failed to provide the separate documentation and placekeeping as required by NOP-LP-2601. Although this may be accomplished by different methods, the performers must follow the procedure requirements. These were human performance errors.

Steps 5.9.10, 5.9.10a, and 5.9.10b of ICI-B12-0001 directed the connection of a multi-meter to position switches followed by actuator manipulation until such switches actuate. The steps were performed concurrently and then signed off after completed which is contrary to the requirements of NOP-LP-2601 for a Step-by-Step procedure.

The roll-up of these issues again emphasizes the failure to follow proper procedure use and adherence expectations. This issue was addressed in CR-06-00125. I&C, Electrical, Mechanical and Services sections of Maintenance have completed a procedure use and adherence class. The requirements and the expectations for procedure use and adherence were emphasized during the class.

As discussed above, procedure adherence and quality of the procedure contributed to this issue. Corrective actions were taken in accordance with the FENOC Performance Management Process.

6. 3.2, Commitment Item 1.b/DAMP Item B2.2.3.2, states: The inspectors concluded that NQI-1001, Revision 5, appropriately incorporated the consideration of failure history, risk significance, and failure probability in assigning QC inspection hold points. However, the inspectors identified that the methods identified and in use did not take full advantage of all site programs. In particular, the procedure did not prescribe the review of the maintenance rule database, which collects pertinent component failure data, nor did it integrate the probabilistic risk assessment (PRA) model, which provides component-specific risk information.

FENOC RESPONSE:

To address the above observations, CR 06-00366 was generated. It should be noted that NQI-1001 was superseded by Nuclear Operating Procedure NOP-LP-2018, "Quality Control Inspection of Maintenance and Modification Activities," on December 19, 2005. The CR investigation was focused on addressing the following enhancement actions to procedure NOP-LP-2018:

- Assignment of hold/witness points to procedure steps that are identified as "critical steps."
- Use of Probabilistic Safety Assessment (PSA) risk significance for component level equipment and non-safety risk significance equipment.
- Use of Maintenance Rule database for the identification of repeat failure items for potential assignment of hold/witness points.

The investigation determined that use of the Maintenance Rule database as a means to identify additional QC hold/witness points is not an optimum method. Since the condition reports drive the maintenance rule evaluation through the corrective actions, historical failure data can be obtained through the review of condition reports for those components that are considered to be a maintenance rule failure. Therefore, historical data from the condition reporting system will be used for the identification of repeat failures items for potential assignment of hold/witness points.

The following enhancements were added to procedure NOP-LP-2018:

- Use of pre-established "Critical Steps" as a factor when assigning QC Hold/Witness points.
- Use of risk significance assessment tool at a component level as a factor when assigning Hold/Witness points.
- Use of Risk Significance (PSA), Maintenance Rule, Critical Components, and Maintenance Modifications as factors that the QC supervisor will utilize when assigning process monitoring.

SECTION 5.0 TRAINING

5.3, Review of Human Performance Tools to Reinforce Human Performance Under Stress, states: While observing the rebuild of a fire protection deluge valve, a procedure step in the work package required the inspection of valve internals to evaluate the condition of the valve, including the condition of internal moving parts. When questioned about the presence of moving parts, licensee personnel were unsure if the valve contained moving parts. Despite this lack of knowledge, licensee personnel signed off the step as complete. Upon further review, the inspectors determined that the work package was incorrect and referenced a section of the technical manual for a valve that contained moving parts although the valve inspected did not contain moving parts.

However, since this error had no actual adverse impact on the deluge valve inspection results, the inspectors concluded the issue was of only minor significance.

FENOC RESPONSE:

To address the above observation, FENOC generated CRs 06-00178 and 06-01764. CR 06-00178 investigated the issue concerning the communication that took place between the inspector and responsible system engineer (RSE) during inspection of the fire protection deluge valve.

The inspector questioned what moving parts were inspected for the valve in accordance with the work order and whether a vendor manual was reviewed during the valve inspection. The RSE's initial response was that the valve did not have the same spring arrangement like the other valves being inspected. This was confirmed by the maintenance personnel during the inspection. The proper response should have been that the valve flapper was inspected during the valve internal inspection and there was no spring arrangement for this particular valve model. This communication issue was subsequently clarified with the inspector. The investigation determined that the initial response by the RSE to the inspector's question was not clearly communicated.

Condition report 06-01764 investigated the issue with potential for lack of knowledge and incorrect work package. During the initial inspection of the deluge valve, the RSE examined the valve internals to include flapper, seating surfaces, and body conditions. After inspection of the valve, the RSE confirmed by way of the maintenance personnel that this model valve did not have a spring. When questioned by the inspector as to what moving parts were inspected, the RSE identified that the internals and seating surface were inspected. The RSE went on to explain that this model did not contain a spring. The inspector asked if the vendor manual had been reviewed. The RSE responded no (note that this was the fourth deluge valve inspected by the RSE with some models containing the spring while others do not). In the subsequent meeting with the inspector, the RSE was more precise in specifically identifying that the flapper (moving part) was inspected and indicated that he had a conversation with the mechanic regarding this particular model not having a spring. The inspector was not aware of the conversation between the RSE and the maintenance personnel during the inspection. The work order package issue was associated with one of the two models with the manual/drawing (model without spring) not being in the package. The order was for the inspection of multiple deluge valves that consisted of both models. The SAP data for the valve being inspected at the time of this event did not identify the valve correctly and the proper vendor manual section/drawing was not provided. The package only contained a vendor manual/drawing of the model with a spring. This oversight was corrected by adding the appropriate manual section/drawing to the package and changing the SAP data base model number. Therefore, this issue is not a result of lack of RSE knowledge, but rather less than effective communications and an issue with the work package.