

August 16, 2007

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

Subject: Duke Power Company LLC d/b/a  
Duke Energy Carolinas, LLC (Duke)  
McGuire Nuclear Station, Units 1 and 2  
Docket Nos. 50-369, 50-370  
Reply to a Notice of Violation, EA-07-130

By letter dated July 17, 2007, the NRC issued the subject Notice of Violation (NOV) to McGuire Nuclear Station. The letter referenced an investigation completed by the NRC's Office of Investigations (OI) on January 30, 2007. The investigation was related to an Operations retest performed on the 1B Residual Heat Removal (ND) pump on October 2, 2005.

Attachment 1 provides the McGuire response to the subject violation.

Questions regarding the subject response should be directed to Kay Crane, McGuire Regulatory Compliance, at (704) 875-4306.



Gary R. Peterson

Attachment

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Attachment 1  
McGuire Nuclear Station  
Reply to a Notice of Violation, EA-07-130

Violation:

Technical Specification 5.4.1(a) requires written procedures to be established, implemented, and maintained covering the activities of Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Appendix a of Regulatory Guide 1.33 states in part that procedures for surveillance tests, inspection and calibrations should be covered by written procedures.

Station Procedure OMP 4-1 (Use of Operating and Periodic Test Procedures), step 5.2 states that procedure users shall be qualified to perform the task. Additionally, OMP 4-1, step 8.5.5.1, requires procedure users to complete an Attachment 9, Procedure Use Worksheet, when marking a non-conditional step N/A.

Contrary to the above, during the performance of PT/1/A/4204/001B, 1B ND Pump Performance Test, Revision 72, on October 2, 2005, steps 8.2 - 8.6, which are designated as "RO" in the signature block, were signed off by a Test Supervisor who was not a licensed operator. In addition, steps 12.35.1 - 12.35.4 were annotated with "N/A", and the procedure user did not complete the Attachment 9, Procedure Use Worksheet form from OMP 4-1 when he marked Step 12.35 at "NA".

McGuire Response:

- 1) Reason for the violation, or, if contested, the basis for disputing the violation or severity level

McGuire does not contest this violation. Because of the lapse of time between the date of the activities in question and the investigation of such activities, and the relatively frequent performance of the procedure in question and its routine nature, the recollection of the individuals involved is incomplete. However, based on the information currently available, McGuire believes the reasons for the violation include the following:

- a) a failure to establish for management and supervision clear standards for administrative procedure use and adherence (PU&A) and their responsibility for implementing such standards,
- b) a failure to appreciate the significance of documenting the initials of the individual who actually performed each procedure step in addition to the initials of the individual documenting its performance,

- c) a failure to carefully determine how the referenced expectations of OMP 4-1 apply when the Test Team Supervisor has dual roles (*i.e.* that of the performer of the procedure and of the Test Team Supervisor),
- d) a failure to recognize the significance of literal compliance with OMP 4-1, an administrative procedure, and
- e) self-imposed time pressure.

It is necessary to view the Test Team Supervisor's actions in the context of the procedures in question to properly understand the reasons for the violation. This context is described below.

#### Signoff in Reactor Operator Signature Block

Section 8 of PT/1/A/4204/001B (1B ND Pump Performance Test) contains checkoff steps designed to verify the calibration of process and test instruments used for the procedure and the presence of prerequisite system conditions. Steps 8.2-8.6 of PT/1/A/4204/001B provide for the verification of prerequisite system conditions, specifically the presence of certain alignments. The Control Room log for October 2, 2005, indicates the 1B ND Pump was started per SO-8 (OP/1/A/6100/SO-8), an Operations Procedure. The appropriate completion of SO-8 in this context would necessarily mean the alignments to be verified by Steps 8.2-8.6 of PT/1/A/4204/001B were in effect and verified by a licensed operator. However, because McGuire's retention policy for completed Operations Procedures provides for retention of only the last completed procedure, that completed procedure was not available at the time of the investigation of this issue. Rather, it had been superseded due to the subsequent performance of the procedure.

As described in the Violation, Steps 8.2-8.6 of PT/1/A/4204/001B contain an "RO" designation below the signature line for each step. OMP 4-1 does not specify how steps containing the "RO" designation are to be treated. However, when a step has such designation, it is generally interpreted as requiring a licensed operator (*e.g.* a Reactor Operator or "RO") to sign off the step. This is true despite the fact that these steps do not involve any plant manipulation or any other activity for which a Part 55 license is required. Therefore, absent the "RO" designation which McGuire elected to include for Steps 8.2-8.6, qualified individuals other than licensed operators could sign off these steps.

Section 8.4 of OMP 4-1 allows an individual who is not the performer to sign for the performer of the step, provided both the performer's and the documenter's initials are entered at the step. While in this case the Test Team Supervisor believed he verified that a licensed operator had performed these steps, in the interest of time, he failed to get the licensed operator to sign the procedure steps. He also failed to implement the permitted alternative (*i.e.* to document at each of these steps the initials of the licensed operator in question). Given the passage of time, the routine nature of the step in

question, and the unavailability of the completed SO-8, the Test Team Supervisor was not able to identify the licensed operator who had performed the steps. For the same reasons, licensed operators who potentially performed such steps and may have verified such performance to the Test Team Supervisor were not able to remember whether they had done so or not, though many acknowledge they may have. This situation clearly highlights the significance of documenting at Steps 8.2-8.6 of PT/1/A/4204/001B the initials of the licensed operator who actually performed the steps, as well as the initials of the individual documenting its performance, the significance of which the Test Team Supervisor failed to appreciate in this instance.

#### Marking Non-Conditional Steps as Not Applicable

OMP 4-1, "Use of Operating and Periodic Test Procedures," is not written so as to carefully delineate how certain steps should be completed in the event the Test Team Supervisor is performing the procedure. Step 8.5.3 of OMP 4-1 states "Non-Conditional steps shall **NOT** be NA'd, unless approved." Step 8.5.5.5 which states "To approve, the supervisor (SRO or Test Team Supervisor) shall initial at the step(s) marked NA or on the procedure cover sheet, and ensure that the explanation is documented and appropriate." In this case, the performer was the Test Team Supervisor and he fulfilled the requirements of Step 8.5.5.5. However, to the extent Step 8.5.3 contemplates a separate review and approval when the step is actually performed by the Test Team Supervisor, a separate review and approval did not occur.

PT/1/A/4204/001B (1B ND Pump Performance Test) is used for two purposes: a) to perform quarterly surveillance tests on the 1B ND Pump and b) to verify operability of the 1B ND Pump following maintenance activities. When performing the procedure for the latter purpose, many of the steps in the procedure, including Steps 12.35.1- 12.35.4, are clearly not applicable. The procedure was used on October 2, 2005, for the latter purpose. Consistent with OMP 4-1, Section 8.5.5.4/8.5.5.5, the Test Team Supervisor documented on the cover sheet of PT/1/A/4204/001B the reason for marking Steps 12.35.1- 12.35.4 "N/A." The Test Team Supervisor did not complete OMP 4-1, Attachment 9 – "Procedure Use Worksheet." Attachment 9 to OMP 4-1 is used to communicate to the Procedure Group situations in which non-conditional steps are marked "N/A" or steps are performed out of sequence. Attachment 9 was generally intended as a tool through which procedure users could provide information to the Procedure Group in a consistent format to support its evaluation of whether the procedure should be modified. Because of the broadly recognized inapplicability of these steps when using this procedure to verify operability of the 1B ND Pump following maintenance activities, and potentially because of self-imposed time pressure, the Test Team Supervisor failed to recognize the significance of literal compliance with the expectation of OMP 4-1 to complete Attachment 9.

2) Corrective steps that have been taken and the results achieved

- a) The Test Team Supervisor was coached on PU&A and proper documentation of sign-offs on procedure steps.
- b) OMP 4-1 has been deleted. The steps of OMP 4-1 that addressed approval of non-conditional steps as not applicable (NA) is now set forth in SOMP 04-02. The guidance for approval of non-conditional steps "NA" has been clarified. The expectation to complete Attachment 9 has been deleted.
- c) To improve performance in PU&A, McGuire Operations designated PU&A as its primary focus area for improvement in 2007 and developed an associated plan to accomplish the desired improvement. The plan includes the development of team-specific improvement plans, development and delivery of training on PU&A errors, the new SOMP 04-02 PU&A rules, direct involvement of specified members of management and human performance representatives in error investigations, and methods and standards by which to measure success.

3) Corrective steps that will be taken to avoid further violations

- a) Incorporate lessons learned from this Notice of Violation (EA-07-130) in appropriate site communications
- b) Train management on administrative PU&A. The training will address the regulatory bases for administrative PU&A, the applicable standards, the expectations for management and supervision to set and demonstrate compliance with such standards, and the potential consequences for failing to comply.
- c) Train personnel permitted to complete technical procedures on administrative PU&A. The training will address the regulatory bases for administrative PU&A, the applicable standards, the expectations for compliance, and the potential consequences for failing to comply.
- d) Perform PU&A observations at appropriate intervals to assess effectiveness.

4) Date when full compliance will be achieved

Results from the performance of PT/1/A/4204/001B, 1B ND Pump Performance Test on October 2, 2005, were not affected by the administrative procedural non-compliance described in the Notice of Violation