



U.S. Nuclear Regulatory Commission  
Page 2

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ENCLOSURE 1

WATTS BAR NUCLEAR PLANT UNIT 1  
SUPPLEMENTAL RESPONSE TO NRC'S MAY 14, 1993 LETTER TO TVA  
VIOLATION 390/93-27-01

As discussed in TVA's letter dated June 14, 1993, a review of Significant Corrective Action Report (SCAR) WBSA930068 was conducted. Three additional occurrences have been added to Significant Corrective Action Report (SCAR) WBSA930068, which documented the original vendor information issue from the violation. They are as follows:

- (1) Breakers were installed using vendor directions to a torque value of 12-15 in-lbs instead of snug tight without that torque value being specified by design output documents. This condition had been documented in Problem Evaluation Report (PER) WBP930096.
- (2) A plant work order used an unapproved vendor drawing. In addition, a SCAR recurrence control action required adding the vendor drawing to three vendor manuals to correct the problem with the work order. This recurrence control action was not completely effective, because vendor drawings added to vendor manuals are for information only and still could not be used in a work order. This condition had been documented in Problem Evaluation Report WBP920259.
- (3) Contrary to the requirement of Maintenance Administrative Instruction (MAI) 3.3, "Cable Terminating, Splicing, and Testing For Cables Rated Up To 1500 Volts," Appendix D, termination screws and top cover screws of non-Q Namco limit switches on valves 1-FCV-63-167 (open and close) and 1-FCV-63-186 (open and close) were tightened snug tight and not torqued per the Vendor Technical Document WBN-VTD-N007-0030. This condition had been documented in Problem Evaluation Report WBP9300138.

REASON FOR THE ADDITIONAL OCCURRENCES

The cited violation (Example 1), had occurred because the work order writer did not adhere to the requirements of SSP-2.10 and SSP-6.02. Also, the writer was not trained to SSP-2.10, which describes how to process vendor information.

For the occurrences (1) and (3), interviews with personnel involved with the discrepant breakers and Namco limit switches (as well as review of the Cause of Condition developed in the referenced PERs) indicated that involved individuals did not clearly understand the requirements for dealing with vendor supplied criteria when modifying or installing equipment originally supplied to TVA by a vendor. Involved personnel had been trained to either or both of the following procedures:

- SSP-6.02, "Maintenance Management System"
- SSP-7.53, "Modification Workplans"

Both procedures reference SSP-2.10 for program requirements regarding the use of vendor requirements. However, a review of Modifications Training Matrixes found that the following categories of personnel did not have training to Site Standard Practice (SSP)-2.10, "Vendor Manual Control" specified on their Training Matrix:

- Field Engineering Manager
- Electrical Field Engineer
- Mechanical/Civil/I&C Field Engineer
- Workplanning Electrical
- Workplanning Mechanical/Civil/I&C
- Workplanning Supervisor
- Modifications Work Order Planners
- Startup Support personnel

For occurrence (2), Problem Evaluation Report WBP920259 indicated that personnel failed to follow the procedure in that they were unclear in understanding the vendor manual and drawing uses. Discussions with the Maintenance Planning Section personnel, review of a sample of previously generated workorders, and the research conducted during the development of SCAR WBSA930068 Corrective Action support the conclusion that this was a limited occurrence. Review of the corrective action and recurrence control developed by the PER found them to be adequate for the extent of condition. The corrective action was to include the vendor drawing in the Nuclear Engineering approved drawing system. The recurrence control was to train the Maintenance Planners in the use of vendor manual drawings in maintenance packages. No further action is necessary.

#### CORRECTIVE ACTIONS

In addition to the corrective action previously defined in TVA's response dated June 14, the following additional corrective actions have been developed as a result of the additional occurrences:

1. The vendor instruction in occurrence (1) will be evaluated by TVA for inclusion into a vendor manual. Nuclear Engineering will evaluate the as-installed condition of the subject breakers and the original processing of vendor requirements. If it is determined that the vendor instruction of torquing the breakers to 12-15 in-lbs is not acceptable, Modifications will rework the breakers and perform a sample of additional workplans/work orders which installed/modified breakers of the type addressed in this SCAR to verify that the procedural requirements were properly implemented.
2. Namco limit switches on valves 1FCV-63-167 and 1-FCV-63-186 will be reworked in accordance with approved vendor criteria.
3. TVA will perform a select sample of workplans and work orders which installed or modified Namco limit switches of the type addressed the SCAR to verify that the vendor requirements were properly implemented.
4. TVA will perform a sample of completed and vaulted workplans and work orders to verify the correct utilization of vendor criteria.

## CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATIONS

The following recurrence control actions have been developed as a result of the additional occurrences:

1. As an interim recurrence control, TVA issued a memorandum to field engineers and workplan writers to emphasize the requirement that only engineering approved vendor information is to be included in workplans.
2. Modifications organizations with responsibility for generating/revising/implementing work documents (e.g., workplan writing, field engineering, etc.) will develop a training class which addresses the requirements/guidelines for the use/implementation of vendor supplied criteria.
3. Training matrices for the following categories of personnel will be revised to include a requirement for classroom training which will address the requirements/guidelines for the use/implementation of vendor supplied criteria and for self-study of SSP-2.10.
  - Field Engineering Manager
  - Electrical Field Engineer
  - Mechanical/Civil/I&C Field Engineer
  - Workplanning Electrical
  - Workplanning Mechanical/Civil/I&C
  - Workplanning Supervisor
  - Modifications Work Order Planners
  - Startup Support personnel
4. Modifications will develop a checklist for workplan/work order development which will include an attribute for review of vendor manual criteria and for verifying that any vendor information utilized has been approved by Engineering in accordance with SSP-2.10.
5. Modifications will hold training sessions with workplanners and field engineers to train them in the SSP 2.10 requirements for utilizing vendor supplied criteria and when it is necessary to refer to vendor manuals during the planning/replanning process.

## DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

The corrective actions discussed above will be completed by November 12, 1993.

ENCLOSURE 2  
WATTS BAR NUCLEAR PLANT UNIT 1  
SUPPLEMENTAL RESPONSE TO NRC'S MAY 14, 1993 LETTER TO TVA  
VIOLATION 390/93-27-01

LIST OF COMMITMENTS

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  - Field Engineering Manager
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  - Modifications Work Order Planners
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7. Modifications will develop a checklist for workplan/work order development which will include an attribute for review of vendor manual criteria and for verifying that any vendor information utilized has been approved by Engineering in accordance with SSP-2.10.
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