



**SMCI Division**

4121 Drane Field Road • Lakeland, FL 33811  
Office: (863)644-8432 • Fax: (863)647-5372  
E-Mail: Dan.Grannan@MetalTek.com

November 29, 2015

United States Nuclear Regulatory Commission  
Attn: Document Control Desk  
Mechanical Vendor Inspection Branch  
Division of Construction Inspection and Operational Programs  
Office of New Reactors  
Washington, DC 20555-001

Subject: Follow-up Response to Notice of Nonconformance  
NRC Inspection Report No. 99901439/2015-201

Reference: Letter from Edward Roach (NRC) to Dan Grannan (MetalTek International),  
U.S. Nuclear Regulatory Commission inspection Report No. 99901439/2015-  
201 and Notice of Nonconformance, dated September 17, 2015.

Dear Mr. Roach,

In response to the NRC Response Letter and associated Notice of Nonconformances (NON), MetalTek International SMCI Division (SMCI) provides the enclosed follow-up response. This Response addresses questions and comments made by the NRC in regard to SMCI's response to the two (2) NONs. This response was revised to update the Westinghouse letter for NON 99901439/2015-201-01.

This letter is submitted based on our phone conversation on 10 November 2015 requiring clarification of a step in procedure QP 9.0.

Formatted: Font color: Auto

SMCI understands the feedback received from the NRC in response to our initial response. We take that feedback very seriously; we recognize that the utmost attention to this feedback is the necessary response and provide the additional requested information.

Sincerely,

Dan Grannan

IED9  
NMS5



Quality Director

MetalTek International, SMCI Division

Enclosure: SMCI Follow-up Response to Notice of Nonconformance 99901439/2015-201-01  
AND 99901439/2015-201-02



**SMCI REPLY TO NOTICE OF NONCONFORMANCE 99901439/2015-201-01 AND 99901439/2015-201-02**

This is the SMCI Reply to the Notice of Nonconformance identified in NRC Inspection report No. 99901439/2015-201, dated July 24, 2015.

**NONCONFORMANCE 99901439/2015-201-01**

Question:

With respect to your response to NON 99901439/2015-201-01:

- a. Section 3.8.3.6.2, "Nondestructive Examination," of Revision 19 of the AP1000 design certification document (DCD), which is incorporated in the Combined License (COL) for Vogtle Electric Generating Plant (VEGP) Units 3 and 4 and Virgil C. (VC) Summer Generating Station, Units 2 and 3 states, in part, that "partial joint penetration (PJP) welds shall be visually inspected for 100 percent of their length," and "PJP welds shall also be inspected by magnetic particle or liquid penetrant examination for 10 percent of their length." Provide objective evidence that SMCI adequately incorporated the general notes concerning NDE requirements from the Westinghouse Electric Company (WEC) design specification drawings, which are derived from the requirements from Section 3.8.3.6.2 of the AP1000 DCD. As discussed during the NRC inspection of SMCI, this objective evidence could be in the form of a letter documenting WEC's official position from its structural design engineering and welding engineering representatives stating that the PJP is not required to be VT and MT examined, and that it still meets WEC's design stress requirements, including the requirements in Revision 19 of the AP1000 DCD, which is incorporated in the COL for VEGP and VC Summer.
  
- b. Currently, SMCI does not perform a VT and MT examination of the PJP weld, which provides the majority of weld strength, and therefore represents a larger load carrying capacity than the reinforcing fillet weld in meeting the design stress requirements. Since SMCI currently only performs a VT and MT examination of the reinforcing fillet welds, and not the PJP welds, this leaves the quality of the PJP welds to be indeterminate, and therefore, affects how these welds would meet their design stress requirements and would perform their intended safety. Provide the extent of condition for not performing the inspections of the PJP welds.

Response:

Westinghouse letter in response to this finding is provided as an attachment to this letter. The letter indicates this condition is satisfactory as performed and the extent of condition is not applicable.



**NONCONFORMANCE 99901439/2015-201-02**

With respect to your response to NON 99901439/2015-201-02, clarify your response as follows:

Question:

- a. The response did not address the NON in regards to providing objective evidence that there was adequate weld filler metal control. Specifically, as detailed in the NRC inspection report No. 99901439/2015-201, dated July 24, 2015, the NRC inspection team noted the following:
  - 1. Welders 121 and 140 were not issued any welding filler metal for the following:
    - i. Welds on embed plates on October 8, 2014, for traveler 926-CA01-01156 for the CA-01 module for VEGP Unit 3 performed by welder 121.
    - ii. Welds on embed plates on October 8, 2014, for traveler 926-CA01-01162 for the CA-01 module for VC Summer Generating Station Unit 2 performed by welders 121 and 140.

Response:

Weld filler metal log sheets were located and are attached showing issuance for welders 121 and 140 on 8 October, 2014.

Question:

- 2. Welder No. 72 used filler metal MI-15709, Heat/Lot No. 95138 to weld the beam seat as documented on traveler 926-CA01-00774, contrary to the filler metal he was issued and required to use (issued filler metal MI-15765, Heat/Lot No. 10285) for welding on module CA-01 (steam generator and refueling canal module) for VC Summer Generating Station Unit 2, on September 29, 2014.

Response:

Based on our review of the traveler and the issuance log, it would appear that the welder entered the incorrect weld wire. This is most likely because he entered what was entered for the weld listed above his. The weld filler metal listed and that issued are of the same classification and safety class as the wire required by contract, only a different lot number. Certified Material Test Reports (CMTRs) for both weld filler metal types attached. Both filler metal types are designated for this project. Weld filler material was controlled as evidenced by the weld wire issue log and the return dates documented in the log for September 29, 2014 for each filler material discussed.

Question:



Provide objective evidence that the correct filler metal was used for each of the above welds, and that there was adequate control of the welding filler metal, since use of the incorrect welding filler metal or a contaminated welding filler metal (if not adequately controlled) on safety related components that are not qualified may reduce the strength of the welds affecting the components' ability to perform its intended safety function.

Response:

SMCI conducted training with QC, welding and management personnel on the usage and importance of the issuance logs. Objective Evidence in the form of training attendance records are attached.

All retrievable weld wire issuance logs are scanned and available in the EPDM Vault. Objective evidence is attached in the form of a record from the vault.

Procedure QP-9.0 was revised to reflect new log retention requirements. Procedure is attached.

Question:

- b. At the conclusion of the inspection on June 12, 2015, the NRC inspection team found that weld filler metal was not recorded on form WCIL-001 for the time period of June 28, 2014 through July 11, 2014, as required by Section 5.3.8 of QP-9.0. However, your response states that during the period the NRC inspection team was at SMCI, a search was conducted for the missing weld wire issue logs and all logs except for those dated July 7-9 were located. Confirm that after the NRC inspection team completed its inspection, SMCI located the missing weld logs (form WCIL-001). In addition, provide these recovered weld logs (form WCIL-001) for this time period of June 28, 2014 through July 11, 2014.

Response:

Missing weld filler issue log pages are attached for June 28 to July 6 and July 10 to 11.

Logs for July 7, 8 and 9 are not reproduceable/reproducible. The objective evidence required by the contract for these safety related components is the CMTR, Traveler (work instruction) and the Inspection reports. These documents provide evidence of proper material type used, including the weld filler wire documented by heat/lot number on the traveler and the final NDE verifying specifications are met.

Question:

- c. The corrective action that will be taken for this NON is only to clarify the retention period of the weld consumable issuance log. However, the issue concerning NON 99901439/2015-201-02 was not the retention period for the Weld Consumable Issuance Logs, but the lack of control of filler metal by not following the procedure for issuance and controlling filler metal to ensure that it is used for its intended purposed and does not get contaminated. Therefore,



provide the corrective action taken concerning the lack of filler metal control for welders identified on the applicable travelers.

Response:

Weld wire issue log pages were located and information verified for welders 121 & 140. Weld wire written down by welder 72 verified to be of the same classification and safety class as the wire required by contract. Training conducted with QC, Welding and management personnel on filler metal issuance & traceability. Objective evidence to support these two items are previously attached.

Question:

- d. There is no action specified in the response to avoid future non-compliance associated with this NON, which is not following the filler metal issuance procedure for ensuring control of filler metal by providing traceability and accountability of filler metal so that it is used as intended. Therefore, provide the corrective actions that will be taken to avoid future non-compliances concerning filler metal control.

Response:

Training conducted with QC, Welding personnel and management personnel on filler metal issuance & traceability. Objective evidence to support this is previously attached.

Question:

- e. Clarify and explain how long a welder can keep weld filler metal once issued, since the response is not clear whether filler metal can be kept out past a welders shift.

Response:

SMCI practice is to return filler metal at the end of the activity or end of shift whichever is earlier. Revision 8 of QP 9.0 was unclear and changed to reflect this practice.

QP 9.0 Rev 98 States:

- 5.7 Return of Weld Filler Metal
  - 5.7.1 Weld filler metal not consumed shall be returned to the appropriate weld filler metal control box by Quality.
  - 5.7.2 Unused weld filler metal is checked prior to storage at the end of each shift, or earlier.

This revision was not active in June but the verbiage from this section was edited for clarification from the -version inforce during the NRC inspection in June 2015.



Question:

- f. Explain what the specific change will be for procedure QP-9.0 in addressing this NON<sub>1</sub> since this was not addressed in the response.

Response:

QP 9.0 was changed to clarify the requirement to return weld filler metal issued by the end of each shift or earlier. The revised procedure is attached. The traceability of material is maintained as part of the fabrication traveler.

Question:

- g. Explain what objective evidence exists that a welder uses a particular filler metal as issued, since based on your response, the welder does not sign for each date that actual welding has been performed. The welder only signs when the joint is complete, as specified in your response; which could actually involve several days of welding or work.

Response:

Welders log the weld filler metal information and their initials & weld ID number into the fabrication traveler at the time of actual welding occurring. The only item on the traveler not filled in is the date block, which is completed when the entire weld is completed and ready for QC inspection.

SMCI is in the process of implementing a new electronic ERP system, Job Boss. This will allow employees to scan into and out of activities on the traveler (work instruction) as they complete all or part of the step, which will automatically link the weld wire to a welder and track which welding operations were conducted by the welder.