



December 12, 2008
E-27488

U. S. Nuclear Regulatory Commission
Director of the Office of Nuclear Material Safety and Safeguards
Attn: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

Subject: TN Response to NRC Approval of ASME Code Alternative Request Regarding
Temporary Welded Attachment Records, Docket 72-1030

References: 1. Transnuclear Letter E-25967 to U. S. Nuclear Regulatory Commission,
ASME Code Alternative Request Temporary Welded Attachment Records
Docket 72-1030, dated 12/27/07.
2. U. S. Nuclear Regulatory Commission letter to Transnuclear, ASME Code
Alternative Request, Temporary Welded Attachment Records, Docket 72-
1030 (TAC L24163), dated 1/9/08.

To Whom It May Concern:

In Reference 1 Transnuclear (TN) requested NRC approval for a limited use of a proposed ASME Code alternative to the requirements of the ASME B&PV Code, Section III, Subsection NB, Paragraph NB-4435 for Temporary Welded Attachments. The alternative was sought for Temporary Welded Attachments (TWAs) made to the confinement boundary of certain NUHOMS® HD 32PTH Dry Shielded Canisters (DSCs) which involved incomplete documentation. TN provided justification that the proposed alternative provided an acceptable level of quality and safety. The alternative request was approved by the NRC in Reference 2 which also required that TN submit a corrective action plan to ensure that loss or omission of required documentation does not recur.

TN has performed an investigation of the cause(s) for the loss or omission of documentation and/or missed inspections associated with TWA applications, and implemented appropriate actions intended to prevent recurrence. As requested, the applicable details of that investigation and preventive actions are provided herein, including those actions taken by our fabricator GE-Hitachi (GEH) and internally within TN.

GEH had issued a corrective action report which indicated a contributing cause to the condition was that the process for which TWAs were controlled and documented was external to the routine fabrication traveler process. Although the correct requirements were specified in the non-traveler process, the implementation of such represented an off-normal method which was apparently not universally understood by the GEH staff. Therefore, the affected fabrication travelers and applicable procedures have been revised to incorporate the appropriate controls and documentation requirements for TWA applications. Since TN's review of the final documentation package for completed products is primarily driven off the activities documented in the fabrication traveler, the incorporation of this information into the

TRANSNUCLEAR INC.

7135 Minstrel Way • Suite 300 • Columbia, MD 21045
Tel: 410-910-6900 • Fax: 410-910-6902
www.transnuclear.com

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traveler will enable TN to confirm the completeness of the documentation package and thereby identify any future documentation omissions and/or missed inspections relative to TWAs.

GEH also conducted a shop stand-down for all production shifts to inform supervision, production and inspection personnel of the TWA issue and to reinforce the NDE and documentation requirements for TWAs, including the importance of verbatim compliance with all procedures. TN has and will continue to monitor procedural compliance for activities performed at GEH during in-process surveillance and documentation package reviews.

Regarding preventive actions specific to TN's management of fabrication, three TN quality program components were identified which are designed to preclude such deficiencies, but were ineffective in preventing this specific occurrence. Those are;

- prefabrication review process,
- oversight of in-process fabrication activities, and
- final documentation package review for completed products.

Any one or a combination of these program constituents provided TN an opportunity to have prevented the subject condition from occurring, as discussed below.

Prefabrication Review Process

The applicable requirements for TWAs had been imposed in the TN procurement specification, and our fabricator GEH had submitted a compliant procedure for performing and documenting such activities. Had TN been more concerned with the effectiveness of the implementation process, at that time we could have specified that the TWA activities be included in the fabrication traveler and/or imposed TN witness points for the applicable inspection attributes. However, such actions most likely would have been deemed unnecessary since it would have been apparent that implementation of the TWA procedure on past projects at GEH had provided acceptable results. In order to prevent recurrence, TN is revising our generic procurement specifications to require that routine TWA activities be included in fabrication travelers, consistent with those corrective actions implemented at GEH.

Oversight of In-process Fabrication

TN evaluated our fabrication oversight processes and determined that improvements were warranted. Therefore, TN has endeavored to focus on enhancing our capability to proactively identify performance issues at the earliest practical time when corrective measures can be most easily taken and, more importantly, to reinforce accountability on the part of our fabricators so that performance problems can be prevented. These actions include,

- (a) Performance of an independent assessment of our fabrication oversight processes to evaluate areas for improvement in audit and surveillance planning, and integration of verification activities performed at project and programmatic levels.
- (b) Performance of programmatic surveillances at major fabricators to ensure continued compliance with their TN-approved QA Programs.

Item (a) is pertinent to preventive actions for the TWA issue since TN had not previously specified a witness point or other oversight process to monitor production and inspection activities associated with TWAs. This was due in part to the fact that GEH's program permitted implementation of TWAs at the discretion of their production

staff, such that TN approval for TWA applications was not required. Furthermore, TN's oversight of in-process fabrication activities was primarily implemented via witness and hold points specified in the fabrication traveler. Therefore, our oversight personnel were not required to be notified for any TWA activities, nor were they necessarily aware of in-process TWA activities since the performance and documentation of such was not specified within the fabrication traveler.

Item (b) provides diversification to TN's vendor oversight program by performing periodic programmatic surveillances in addition to the previously established witness and hold point program. This will enable TN to broaden the scope of our vendor oversight program, resulting in earlier detection and identification of potential programmatic deficiencies at TN fabricators.

Final Documentation Package (FDP) Review and Acceptance Process

Historically, TN has relied primarily on our fabricator's quality organization to assemble a complete and comprehensive documentation package, as required by typical project contract. TN reviews FDPs for basic content and compliance to our procurement specification which delineates the documentation requirements for the FDP. Although the FDP review process ultimately exposed the TWA documentation deficiency, the identification of such was untimely and therefore ineffective from an oversight perspective, since prior affected DSCs had already been certified, delivered and loaded with spent nuclear fuel.

TN did not perform FDP reviews to the degree necessary to consistently identify at the earliest opportunity an omission of documentation specified external to the fabrication traveler process. Furthermore, without prior knowledge that a specific TWA application had been implemented, the void of TWA documentation would lead the reviewer to conclude that no TWA operations had been performed. Equipped with the knowledge of which TWA applications are to be routinely expected and the documentation of such within the fabrication traveler, TN is now performing a more in-depth review regarding the details and content of final documentation packages generated by GEH to the extent necessary to confirm that all of the required documentation is included within the package. More importantly, GEH has instituted a document checklist and enhanced awareness training regarding FDP assembly and content verification.

Based on the above, TN believes that appropriate preventive action has been implemented, intended to preclude further omission of required documentation for quality related products fabricated at GEH and our other major fabricators.

If the NRC staff has any questions regarding this submittal, please do not hesitate to contact Mr. Peter Quinlan at 410-910-6895 for technical questions or Mr. Tom Hoppe at 410-910-6886 for other inquiries.

Sincerely,



Tara Neider
President, Transnuclear