

EDO Principal Correspondence Control

FROM: DUE: 03/05/08

EDO CONTROL: G20080093
DOC DT: 02/07/08
FINAL REPLY:

Sandra Gavutis
C-10 Research & Education Foundation

TO:

Chairman Klein

FOR SIGNATURE OF :

** GRN **

CRC NO: 08-0076

Weber, NMSS

DESC:

Transnuclear NUHOMS-32PT Casks - Seabrook
Refueling (EDATS: SECY-2008-0086)

ROUTING:

Reyes
Virgilio
Mallett
Ash
Ordaz
Cyr/Burns
Miller, FSME
Collins, RI

DATE: 02/12/08

ASSIGNED TO:

CONTACT:

NMSS

Weber

SPECIAL INSTRUCTIONS OR REMARKS:

EDATS

Electronic Document and Action Tracking System

EDATS Number: SECY-2008-0086

Source: SECY

General Information

Assigned To: NMSS

OEDO Due Date: 3/5/2008 5:00 PM

Other Assignees:

SECY Due Date: NONE

Subject: Transnuclear NUHOMS-32PT Casks - Seabrook Refueling

Description:

CC Routing: FSME; Region I

ADAMS Accession Numbers - Incoming: NONE

Response/Package: NONE

Other Information

Cross Reference Number: G20080093, LTR-08-0076

Staff Initiated: NO

Related Task:

Recurring Item: NO

File Routing: EDATS

Agency Lesson Learned: NO

Roadmap Item: NO

Process Information

Action Type: Letter

Priority: Medium

Signature Level: NMSS

Sensitivity: None

Urgency: NO

OEDO Concurrence: NO

OCM Concurrence: NO

OCA Concurrence: NO

Special Instructions:

Document Information

Originator Name: Sandra Gavutis

Date of Incoming: 2/7/2008

Originating Organization: C-10 Research and Education Foundation

Document Received by SECY Date: 2/12/2008

Addressee: Chairman Klein

Date Response Requested by Originator: NONE

Incoming Task Received: Letter



C-10 Envisions A Clean, Safe, Sustainable,
Non-nuclear Energy Future

Feb. 7, 2008

**The Honorable Dale Klein
Chairman, Nuclear Regulatory Commission
1 White Flint North
11555 Rockville Pike
Rockville, Maryland 20852**

Dear Chairman Klein;

The C-10 Research and Education Foundation is requesting an immediate NRC audit to verify that all Transnuclear NUHOMS-32PT casks to be used and loaded with spent fuel during Seabrook Station's refueling this April, 2008 have verified certificates of performance. Also, all required Q/A must be done and verified well BEFORE these casks are loaded with fuel. We are requesting your commitment to conducting the audit and sending us the results before Seabrook's refueling occurs in April 2008.

As I am sure you are aware, a recent NRC Event Report (Event Number 43666) revealed Transnuclear supplied casks which were loaded with spent fuel at Surry and Dominion in unqualified casks. Our research has revealed that Transnuclear has had repeated NRC violations of inadequate fabrication records resulting in a nonconforming condition relative to the possibility of undocumented Temporary Weld Attachments (TWA) to the confinement boundary of LOADED NUHOMS 32PTH dry cask canisters.

Our review of NRC inspection and event reports has revealed repeated violations of Transnuclear's NRC-approved quality assurance program and failure to conform to fabrication activities and the requirements under 10 CFR Parts 21 and 72. Transnuclear has continued to demonstrate lack of compliance and failure to instill corrective actions since 2003. Your most recent event report which was reported by Transnuclear to the NRC in November 2007(but not released by the NRC to the public until December 21st 2007) identified that the fabricator of the NUHOMS 32 PT Dry Shielded Canisters (DSC) had not provided documentation for 1) use of qualified workers 2) approved welding procedures, 3) approved weld filler materials, 4) approved base materials, 5) and a lack of required penetrant surface examination report subsequent to Temporary Weld Attachment removal. The exact

same violation of NRC federal codes for manufacturing quality assurance has been repeated in several NRC cited violations since 2003. (* See attached: TN-NRC Violation Time-line).

Unfortunately, unqualified casks were utilized at Surry and Dominion and we will not allow this to occur at the Seabrook nuclear reactor in New Hampshire. Therefore, we are requesting that an NRC audit be done of all fabrication records and certificates of performance and the serial numbers verified for all casks to be used at Seabrook BEFORE they are loaded with spent fuel. We request the audit results be sent to us in advance of the April refueling.

The C-10 Research and Education Foundation is a non-profit public safety advocacy group based in Newburyport, Massachusetts. C-10 Foundation established a real-time radiological monitoring network in 1991 to monitor emissions from the Seabrook nuclear reactor for use in assessing the impact on health and the environment. We are currently under contract with the Massachusetts Emergency Management Agency (MEMA) to track elevated radiation levels in the Massachusetts communities within the ten mile EPZ.

One of our missions is to research and advocate for upgraded safety and security at the Seabrook nuclear reactor. A primary goal of this mission is to advocate for the safest possible interim storage of Seabrook's on-site spent fuel nuclear waste.

We would appreciate your immediate attention to this request and a reply as soon as possible.

Sincerely Yours,



Sandra Gavutis
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C-10 Foundation
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*KSM
NMB*

cc. Robert J. Lewis, NRC
Jennifer Davis, NRC
Congressman John F. Tierney
Congresswoman Carol Shea-Porter
Representative Michael Costello



C-10 Envisions A Clean, Safe, Sustainable,
Non-nuclear Energy Future

Transnuclear's NUHOMS-32PT Dry Storage Casks – Timeline of Temporary Weld Attachment (TWA) Violations

On March 24, 2003 the NRC issued five Severity Level IV violations of NRC requirements to Transnuclear from two on-site NRC Inspection Team at Transnuclear's fabricators in Japan.. One of the violations cited by the NRC inspection team noted under "Temporary Attachment Welds" that ASME code sections NB 4321, 4322.1 and 4435 require that temporary attachment welds be made by qualified welders and records of the joints welded be maintained and were not done on all canisters. *See Attachment A.*

The NRC published a Final Rule (68 FR 49683: **August 19, 2003**) to add to their "List of Approved Spent Fuel Storage Casks" the NUHOMS-32PT dry storage canister. The NRC indicated that if it received "significant adverse comments" on the proposed rule, the NRC would withdraw the final rule and publish a document that addressed those comments and then subsequently publish a final rule that addressed comments made on the proposed rule. The NRC believed that some of the issues raised by one commenter were "significant adverse comments", therefore on **October 30, 2003** withdrew the direct final rule.

- In comment 12: "The commenter stated that he was greatly concerned about the clear absence of critical structural welds in the fuel basket in the -32PT DSC. The commenter manually circled areas in the drawing details released to the public that showed an absence of welds in the fuel basket at critical load transfer locations under a horizontal drop condition." The NRC stated in response that in the "proprietary drawing NUH-32PT-1004, Rev 0 Sheet 2 of 2 all required critical locations are welded together. Section M.1.2.1.of Amendment 5 on page M.1-4 of the non-proprietary version provides a verbal description of the basket assembly. The commenter was unable to evaluate the critical stress analyses as it was not in the nonproprietary copy. The NRC assumed that the commenter "believes that there are no welds between the various cells of the basket assembly and that the finite analysis was conducted in a model that represented a continuum or structural integrity across the interfaces among the cells". The NRC denied identifying any erroneous assumptions in the finite element models utilized.

On January 7, 2004 the NRC issued in the Federal Register a Final Rule that NUHOMS-32PT DSC was added to the NRC "list of Approved Spent Fuel Storage Casks" (Accession # ML003688624)

On July 10, 2006 a special NRC Inspection Team conducted (between June 5 through June 16 2006) an inspection of the fabrication activities of the Transnuclear dry storage casks made in Japan to determine if they performed in accordance with the requirements of 10 CFR Parts 21 and 72, the applicable certificates of compliance, and the NRC-approved quality assurance program. The team identified one violation of NRC requirements involving the failure of HMC to follow procedures that required a thickness inspection after removal of temporary attachment welds of dry storage canisters. They were not done in all cases. The violation was uncovered at the Hitachi Zosen Mechanical Corporation(HMC) in Ariake Japan on June 12-16th 2006.

- In the corrective action statement, the fabricator(HMC) committed to 1) retaining of personnel to assure understanding of current requirements and 2) review of TAW inspection records prior to basket insertion to verify performance of thickness inspections of all TAW removal areas.

On December 21, 2007 an NRC Event Report (43666) was made public. The NRC was notified by Transnuclear in Columbia Maryland of the event on **September 26, 2007**. Transnuclear reported that their fabricator, GE-Hitachi Nuclear Energy Americas (GHNEA) had provided inadequate fabrication records resulting in a “nonconforming condition” relative to the possibility of undocumented Temporary Weld Attachments (TWAs). The event identified that their fabricator of the NUHOMS 32TH Dry Shielded Canisters(DSC) had not provided documentation for 1) use of qualified welders, 2) approved welding procedures, 3) approved weld filler materials, 4) approved base material, 5) and a lack of required liquid penetrant surface examination report subsequent to TWA removal.). *See attachment B.*

*******The significance of this NRC event is that some of the undocumented NUHOMS-32 PT casks are already loaded with spent fuel at Surry and Dominion. Neither Transnuclear nor the NRC discovered that the Q/A was not done completely until well after the casks were loaded onto the ISFI's. Each cask serial # must have a certificate of performance before the cask is loaded on-site...should happen before it leaves Japan...and Transnuclear should have checked this certificate of performance from their fabricator and the NRC should know it is completed....it should be audited BEFORE the fuel is loaded.***

Seabrook must have this Q/A signed off n and verified each step of the way by the fabricator, Transnuclear and the NRC. We want all three.

NRC NUHOMS-32PT DSC Quality Assurance Program. *See attachment C.*

NRC Requirements for 32 PTH DSC Welds – (3.2.3)Welds. *See attachment D.*