

Nuclear

GPU Nuclear Corporation
Post Office Box 480
Route 441 South
Middletown, Pennsylvania 17057-0191
717 944-7621
TELEX 84-2386
Writer's Direct Dial Number:

(717) 948-8461

4410-85-L-0229
Document ID 0356A

November 12, 1985


TMI Program Office
Attn: Dr. W. D. Travers
Acting Director
US Nuclear Regulatory Commission
c/o Three Mile Island Nuclear Station
Middletown, PA 17057

Dear Dr. Travers:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Resolution of Quality Assurance Issues
Relating to Use of Defueling Canisters

Your letter NRC/TMI-85-086 dated November 8, 1985, granted approval for the use of the initial four filter canisters (F401-404). Additionally, you granted approval for use of the remaining defueling canisters contingent upon GPU Nuclear compliance with certain requirements set forth in your letter. GPU Nuclear is complying with these requirements, as described in Attachment 1, and plans to use the remaining defueling canisters subject to final receipt inspection and acceptance by GPU Nuclear Quality Assurance.

Sincerely,


F. R. Standerfer
Vice President/Director, TMI-2

FRS/RDW/eml

Attachments

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PDR ADOCK 05000320
PDR

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11

NRC Provision 1

Submittal to NRC of independent verification of catalyst loading in both upper and lower heads of all defueling canisters.

GPU Nuclear Response

As of November 7, 1985, the Bechtel Supplier Quality Representative (SQR) at NES had independently verified the presence of catalyst in sixty-eight (68) upper heads and two hundred fifty (250) lower heads. To the best of our understanding and belief, this represents a 100% verification of all catalyst loaded to date at NES. Since this date, a witness point, which is being upgraded to a hold point, has been added to the Quality Assurance Surveillance Program at NES to require the SQR to independently verify the presence of catalyst in all canister heads loaded at NES.

At B&W and the Joseph Oat Corporation, the verification of the presence of catalyst in the upper and lower heads is currently a Procurement Supplier Quality Department (PSQD) witness point per the surveillance plan; thus verification is being upgraded to a hold point. At the Joseph Oat Corporation, verification of the presence of catalyst has been confirmed for the six (6) fuel canisters (i.e., D-136 through D-141) released for shipment. Objective evidence of verification is available for review. Per the surveillance plan, visual inspections are currently ongoing and will continue for all remaining heads assembled at both the Joseph Oat Corporation and B&W.

NRC Provision 2

Submittal to NRC of independent verification of all poison (B_4C) tube loading and installation for all filter and knockout canisters.

GPU Nuclear Response

As indicated in NRC letter dated November 8, 1985, radiographic examinations were performed by NES to verify the presence of poison pellets in the first four filter canisters (i.e., F-401 through F-404). The NRC staff has reviewed the results of these radiographic examinations and determined that they provide adequate assurance of the presence of the poison pellets.

To date, the Bechtel SQR at NES has independently verified, by witnessing, the loading of approximately one-third (i.e., 33.4%) of the 467 poison tubes loaded at NES and no deficiencies were noted. This sample provides a greater than 96% statistical confidence level that poison pellets were loaded in each tube based on Mil Standard 105 D, "Sampling Procedures and Tables for Inspection by Attributes." Therefore, GPU Nuclear has determined, on the basis of this sample, that sufficient assurance exists to conclude that the loading of the poison tubes at NES, to date, has been properly performed.

Currently, the surveillance plans for NES, B&W and the Joseph Oat Corporation, include a witness point, which is being upgraded to a hold point, requiring the SQR to witness and verify all loading of the B4C poison material into the poison tubes. Additionally, the surveillance plans for NES, B&W, and the Joseph Oat Corporation contain a hold point for insertion of the poison tubes into the filter and knockout canisters. With the exception of the first four filter canisters (F-401 through F-404) previously noted, the SQR at NES has witnessed all installations of poison tubes, to date. To date, no poison tubes have been loaded at either B&W or the Joseph Oat Corporation.

NRC Provision 3

Completion of action items and commitments established in GPU Nuclear letter 4410-85-L-0206 dated October 23, 1985.

GPU Nuclear Response

Section II of the attachment to our letter of October 23, 1985, described the GPU Nuclear/Bechtel Quality Assurance Surveillance Program for B&W and the Joseph Oat Corporation. The controls listed in this section have been implemented, including the Quality Verification Document Requirements (G 321-V), with one exception; the audit of the implementation of the Quality Assurance Program at B&W has been rescheduled for the week of November 11, 1985, as result of the recent severe flooding conditions in that area.

Section III of the attachment of GPU Nuclear letter 4410-85-L-0206 listed the following hold and/or witness points that were added to the Quality Surveillance Programs at B&W and the Joseph Oat Corporation as a result of the deficiencies identified at NES:

- o Verify the presence, through visual inspection, of catalyst in the upper and lower heads of each defueling canister.
- o Verify that all poison tubes are packed in accordance with the supplier's procedures and drawings. This hold/witness point has been incorporated into the inspection plan for B&W and the Joseph Oat Corporation.

As indicated in our response to NRC provisions 1 and 2 above, GPU Nuclear has verified the implementation of the above actions which will continue throughout the canister manufacturing process at all three vendor sites.

In addition to the above, Section III listed four (4) "lesson-learned" actions which were being implemented at B&W and the Joseph Oat Corporation. These actions and their status are listed below:

- o The resident SQRs at B&W and the Joseph Oat Corporation witness the unloading and receipt inspection of any defueling canister material received from NES.

Status: SQRs at B&W and the Joseph Oat Corporation currently are witnessing unloading and receipt inspection of material received from NES as required by the relevant surveillance plans.

- o A Quality Verification Program has been instituted which supplements the normal hardware surveillance. This program consists of the resident SQR's review of the implementation of specific elements of the supplier's Quality Assurance Program and is designed to identify the existence of programmatic deficiencies. The Quality Verification Program has been deemed not to be necessary for NES due to the implementation of the canister checklist program.

Status: GPU Nuclear has verified that the above program is in-place and functional at both B&W and the Joseph Oat Corporation.

- o The Procurement Supplier Quality Department (PSQD) Supervisor participated in the initial meeting with the resident SQRs and vendor personnel. The purchase order and the specification and inspection requirements were discussed. The findings of the joint GPU Nuclear/Bechtel Quality Assurance Audit at NES and the results of the NES inspection by the Vendor Inspection Branch, NRC Office of Inspection and Enforcement, also were reviewed.

Status: This action was completed as stated above.

- o As a result of previous concerns related to NES submittals of non-required Supplier Deviation Disposition Requests (SDDR's), TMI-2 Project Design Engineering is planning to conduct instructive briefings and indoctrination training on the correct processing of SDDR's. The resident SQRs will attend these briefings.

Status: As a result of the recent audit conducted at the Joseph Oat Corporation, Bechtel Quality Assurance has determined that the current method of processing SDDR's at this vendor is satisfactory and specific training for vendor personnel and the SQR is not required. Training on the correct processing of SDDR's is scheduled at B&W on November 14, 1985. The SQR at B&W will attend this training.

Finally, the following is a status of these actions listed in Section IV of the attachment to the referenced GPU Nuclear letter which are required prior to the use of the defueling canisters.

- o GPU Nuclear Quality Assurance has performed and will continue to perform onsite receipt inspections, in accordance with the established receipt inspection plan, for each defueling canister received at TMI.

- o On November 4, 1985, the GPU Nuclear Quality Assurance Manager transmitted a memorandum to the Office of the Director TMI-2, stating that the first four filter canisters have been released for unrestricted use. The GPU Nuclear Quality Assurance Manager will continue to notify the Office of the Director, TMI-2, in writing, of the acceptability of each defueling canister for which a checklist is completed.
- o On November 8, 1985, EG&G Idaho transmitted a memorandum (Attachment 2) to the Office of the Director, TMI-2, accepting the initial four filter canisters manufactured by NES and the initial two fuel canisters manufactured by the Joseph Oat Corporation. EG&G Idaho will accept future NES canisters on a case-by-case basis.

NRC Provision 4

Notification to NRC of any planned reduction of your augmented QA review program for NES supplied canisters.

GPU Nuclear Response

GPU will notify your staff of any planned reduction in the augmented Quality Assurance review program for NES supplied canisters.



ATTACHMENT 2
(4410-85-L-0229)

bcc: A. E. Bradford
J. B. Colson
J. R. Cox
G. R. Hayes
G. J. Quinn
R. C. Schmitt
K. G. Therp
D. L. Uhl
Central File

November 8, 1985

Mr. F. R. Standerfer
GPU Nuclear Corporation
Director, TMI-2
P. O. Box 480
Middletown, PA 17057

EG&G QUALITY ACCEPTANCE OF CANISTERS - Hmb-195-85

- Ref: (a) A. Smith ltr to W. Petty, Catalyst Loading, September 7, 1985
(b) P. Bradbury ltr to R. C. Schmitt, 43005-85-0340, EG&G Acceptance of TMI-2 Canisters, November 5, 1985
(c) H. M. Burton ltr to F. R. Standerfer, Hmb-205-85, Acceptance of TMI-2 Canisters, October 24, 1985

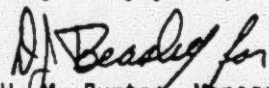
Dear Mr. Standerfer:

EG&G Idaho, with DOE-ID's concurrence, provides the following on acceptance of canisters from a quality standpoint.

Based on the information in Reference (a), other quality data available to us, and the stated intent in Reference (b) to resolve concerns for future canisters, EG&G Idaho accepts the fabrication documentation for NES filter canisters F-401 through F-404 and Joseph Oats fuel canisters D-136 through D-141.

Future NES canisters will, by necessity, continue to be accepted on a case-by-case basis until the steps indicated in Reference (b) correcting concerns are discernible. All of the previous agreements in Reference (c) remain in place; i.e., first article inspection of each canister type at each vendor followed by a reduced checklist for subsequent canisters of the type.

Very truly yours,


H. M. Burton, Manager
TMI-2 Programs

RCS:po

cc: W. W. Bixby, DOE-TMI
T. L. Bonnough, DOE-ID
C. A. Mozzer, DOE-ID
W. R. Young, DOE-ID
J. O. Zane, EG&G Idaho



EG&G INC.

P.O. Box 1625

Idaho Falls, ID 83415