

#### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

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October 11, 1979

CHAIRMAN

The Honorable John Meyers United States House of Representatives Washington, D. C. 20515

Dear Congressman Meyers:

This is in reply to your letter of August 1, 1979 expressing concern about a complete work stoppage at the Marble Hill Nuclear Power Station site.

To provide you with some background related to the NRC actions to date on this project, Enclosure 1 outlines chronologically most of the major actions that have taken place. The most significant action taken has been the issuance of an Order Confirming Suspension of Construction on August 15, 1979. The Order requires that the halt in safety-related construction announced by Public Service Company of Indiana on August 7, 1979, continue until there is reasonable assurance that such construction will be conducted in accordance with NRC quality assurance regulations. A copy of the Order is provided as Enclosure 2.

In looking for the reasons why deficiencies in construction occurred, we have identified several examples that indicate problems in construction project management. Continuation of construction under the licensee's current organization and method of operation was unacceptable to us in view of the potential for further defective construction. We are of the opinion that the best approach to the observed problems was for the licensee to cease safety-related construction activities pending a comprehensive review of (1) that work which has already been completed, including identification of any necessary corrective actions, and (2) their quality assurance program for safety-related activities, including implementation of necessary corrective.

We are mindful of the social and economic hardships that can occur as a result of suspension of certain construction activities. In the case of Marble Hill, employment of construction workers at the site has dropped by about a thousand men as a result of the suspension of safety-related construction. We do not know at this time how much the construction schedule will be delayed or the ultimate economic impact. However, we must give priority to our responsibilities to ensure the continued protection of the health and safety of the public and will take whatever actions are prudent and necessary in seeing that the plant is properly built. Only in this way can we be assured that the plant can be safely operated when construction is completed.

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The Honorable John Meyers - 2 -

Current information on NRC activities with respect to Marble Hill can be obtained by a telephone call to Mr. Jerry Wilson, NRC Licensing Project Manager for this case, on 492-4808.

Sincerely,

Joseph M. Hendrie

Enclosures: As stated

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## MARBLE HILL CHRONOLOGY

4/3-6/79 Inspection conducted (Report No. 50-546/79-03)

Item of Noncompliance found dealing with poor inspection of concrete activities:

- a. Rebar dirty and not tied down.
- b. Poor cleanup and QC inspector signed off.
- c. QC engineer also signed off.
- d. QC inspectors failed to identify honeycomb areas in the containment and auxiliary buildings.
- c. Honeycomb repairs not properly repaired.

4/30-5/3/79 Inspection conducted (Report No. 50-546/79-04)

Item of Noncompliance found dealing with poor inspection of concrete activities - cleanup:

- a. Reb properly secured.
- b. Lo d pieces, tie wire, duct tape, and other generation debris.
- c. Stand water.
- d. Embedded wood in a horizontal construction joint within the pour area.
- e. Unacceptable cleanliness of formwork.

Item of Noncompliance found dealing with curing of containment No. 1 wall not proper.

- 5/8/79 Charles E. Cutshall former Newberg employee made sworn statement with an agreement that it would not be released for 30 days.
- 5/15/79 Management meeting at corporate office of PSI to discuss findings of the last two inspection reports. NRC requested PSI to evaluate in-place Auxiliary Building concrete through nondestructive methods on a selective basis, to provide confidence that no internal voids or honeycomb are present in the completed structure. (Report No. 50-546/79-05)

In addition, NRC requested PSI to review the activities of the QC groups and to make necessary changes to eliminate the deficiencies observed during recent inspections of concrete placement.

6/12/79 Thomas M. Dattilo (attorney for SAVE THE VALLEY) sent a letter to Harold R. Denton (NRR Director) requesting the hearings of Marble Hill be reopened. With that letter was the 23 page sworn statement made by C. E. Cutshall.

- 6/12/79 3:15 p.m.: RIII notified by °SI that during an "on camera" interview by Louisville TV station, PSI was given one page of the 23 page statement and asked if these allegations were true.
- 6/12-6/14/79 Special inspection team of the National Board of Boiler and Pressure Vessel Inspectors on site for an unannounced inspection (NRC not aware of this inspection until 7/25/79).
- 6/13/79 3:00 p.m.: Received a barely readable telecopy of sworn statement from PSI. Asked for a clear copy.
- 6/14/79 Clear copy obtained and distributed to all affected parties.
- 6/14/79 Attempted to contact C. E. Cu shall, talked to his mother who confirmed he was in Texas. Asked her to have him call RIII.
- 6/15/79 T. H. Dattilo called and said he was acting as the attorney for C. E. Cutshall. He suggested that NRC bring C. E. Cutshall back from Texas. He also wanted to know what we were going to do about his 6/12/79 letter to Denton. He was informed NRR would handle that and that we did not have a copy of that letter. He sent RIII a copy.
- 6/15/79 Decision made to try to bring C. E. Cutshall to the site.
- 6/18-20/79 Contacted Dattilo several times to work out details on bringing C. E. Catshall back to the site. Attempts unsuccessful.
- 6/21/79 PSI reported that defective patches were found at the site. NRC Region III dispatched one inspector and one investigator to the site to investigate concrete allegations.
- 6/22/79 Team on site and PSI confirmed they would not repair or chip out any more of the defective areas at this time.
- 6/25/79 Inspector and investigator met with Dattilo and talked via telephone to C. E. Cutshall.
- 6/26/79 NRC Region III Director and staff visited site. Discussed terms of an Immediate Action Letter (IAL). Namely PSI will:
  - 1. Stop safety-related concrete work.
  - Conduct NDT of concrete structures using a statistical sample of congested and non-congested areas.
  - 3. Identify and evaluate repaired areas for adequacy.
  - Apply QA/QC controls to non-safety related concrete work as if it is safety related.

- Not resume safety-related concrete work until NRC is satisfied that the upgraded QA/QC programs and process controls are adequate.
- Upon resumption of safety-related concrete work, PSI will provide 100% overview of all safety related concrete activities at the site.
- That PSI will stop work on any safety-related concrete activities if any significant deficiencies are found and immediately inform NRC.
- 6/27/79 Team of 5 NRC inspectors Hayes, Konklin, Jablonski, Hughes and Williams dispatched to the site on Wednesday evening to inspect concrete and QA/QC control improvements.
- 6/28/79 Team arrives on site and joins another NRC inspector and investigator.
- 6/28/79 IAL telecopied to PSI at 9:55 a.m.
- 6/28/79 3:30 p.m.: 2 NRC Headquarters staff members met with Congressman Deckard and he told them about new allegations that mostly concern concrete testing activities. Deckard would not give NRC a copy of the allegations. Also, he taped the meeting.
- 6/29/79 Congressman Deckard was contacted to update him on RIII activities and to ask for a copy of the allegations. Congressman Deckard declined the request at this time.
- 6/29/79 10 CFR 2.206 request from the Sassafras Audubon Society for suspension and revocation of the CP and to reopen the safety hearings.
- 7/1/79 RIII investigator finally contacted C. E. Cutshall and he agreed to come to the site on Saturday or Sunday.
- 7/2/79 RIII investigator talked with C. E. Cutsnall and he indicated he may want Dattilo to go to the site with him.
- 7/3/79 PSI (QA Manager) gave a letter to inspectors describing PSI overview program and "Hold Points" as described in a June 28, 1979, letter from Newberg to PSI.
- 7/5/79 Thornburg letter to Keppler about the conversations with Congressman Deckard.
- 7/6/79 NRC present on site full time during a 26 hour, 4100 cubic yard, concrete pour for the Unit 2 Turbine Building.
- 7/7/79 Safety related pours allowed to resume following approximately one week on-site inspection by team.

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C. E. Cutshall brought in from Texas. At the Louisville airport Dattilo asked C. E. Cutshall to sign a statement that said Dattilo represents him. C. E. Cutshall declined to sign. Dattilo declined the chance to go to the site and departed.

7/7/79 Dattilo met another former Newberg employee, Individual A, and took an affidavit from him. The individual was a concrete finisher's helper working for Newberg. He named a Newberg superintendent, as one who directed concrete finishers to cosmetically cover honeycombs before the honeycombs were to be inspected.

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7/7/79

C. E. Cutshall identifies to RIII 19 areas on concrete surfaces at the site which he said were improperly patched. Some of the areas had not been identified by PSI during their 100% visual examination of existing concrete structures. Some had been tested by PSI and determined to be good (by tapping them with a hammer) but were found to be bad when tested by NRC. Other patches of the group of 19 which appeared to be good when tapped with a hammer were found to be bad upon destructive testing. All but 1 of the 19 areas which have been tested to date have been bad.

- 7/8/79 Dattilo met another former Newberg employee, Individual B, and took an affidavit from him. Individual was a concrete finisher working at Marble Hill for G. K. Newberg. The individual stated that his foreman had ordered him to coverup honeycombs improperly. He related other problems where work was done improperly such as: concrete being dropped 30 feet from the conveyer belt to the pour area; pour being made too quickly for the vibrator operators to keep up and properly vibrate the concrete.
- 7/8/79 Dattilo met with another former Newberg employee, Individual C, and took an affidavit from him. The individual was a concrete finisher working for G. K. Newberg at Marble Hill, who stated that a Newberg superintendent advised him personally to coverup honeycombs cosmetically before the inspectors saw them. He was ordered to coverup a 6 inch by 12 foot wide expansion joint that should have been 2 inches by 12 feet. QC admitted to him that it was a mistake but to coverup the mistake. The individual has observed testing personnel at Marble Hill testing concrete in a sheltered area while a concrete pour was being made in a steady heavy rain. Other concerns are detailed in the affidavit.

7/9/79 Contact with Dattilo provided the substances of the two affidavits taken on 7/8/79. This telephone conversation was recorded.

7/10/79 Public Service of Indiana corporate management came to RIII to discuss progress of site activities and the IAL.

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- 7/10/79 Verbal signoff on N-line wall pour in the Auxiliary Building by Newberg QC when the area was not properly cleaned up. Both PSI and NRC identified that the preplacement clean up was improper.
- 7/10/79 Letter from the National Board of Boiler and Pressure Vessel Inspectors to PSI regarding the adverse findings of the special inspection team. (NRC was not aware of this until 7/25/79).
- 7/11-13/79 Heavy rains prevented more safety-related concrete pours.
- 7/13/79 RIII letter telecopied to PSI to document the outcome of the meeting at the site on 6/29/79, 7/7/79 and also the meeting at RIII on 7/10/79.
- 7/13/79 U. S. Army, Waterways Experiment Station contacted and requested to perform an independent inspection of the concrete testing activities performed at the site starting on 7/24/79.
- 7/13/79 PSI requested by RIII to wait until Tuesday, 7/17/79, to make any safety-related pours so that NRC inspector could be present. PSI agreed to reschedule their pours to make this possible.
- 7/16/79 PSI president met with RIII director at the RIII office to discuss site activities and IAL.
- 7/17/79 Newberg QC completed their preplacement inspection and accepted a containment exterior wall pour area as ready to pour. PSI and NRC found many problems.
- 7/17/79 Newberg QC completed their preplacement inspection and accepted the N-line wall pour in the Auxiliary Building as ready to pour. PSI and NRC found many problems.
- 7/18/79 The containment exterior wall pour area was cleaned up and the pour was made. Two N-MH QC inspectors were at the placement area during the pour and 4 to 5 PSI QC inspectors were present. Many problems were found by PSI and NRC during the placement.
- 7/20/79 RIII director and staff met with PSI corporate management at the site. Confirmation was made that PSI would not allow the placement of concrete for safety-related structures until PSI presents a comprehensive program which is acceptable to the NRC for additional controls over this activity by its subcontractors to minimize future occurrences of the problems which have been experienced to date. Further, that the proposed program is to be designed such that implementation of those controls will not compromise the overview of PSI for other construction activities currently in progress or planned for the future.
  - 7/23/79 The understandings of the 7/20/79 meeting were documented in an IAL which was telecopied to PSI at 2:57 p.m.
  - 7/25/79 Corps of Engineers on Marble Hill site to conduct inspection of concrete testing activities.

- 7/25/79 RIII informed of National Board of Inspectors recommendation to suspend PSI ASME Owner's Certificate based on inspection findings dealing with material control systems.
- 7/26/79 RIII initiates a special site inspection of management controls team effort.
- 8/1/79 RIII informed Newberg issued stop work order to American Bridge and Iron for work related to weldings of clip angles to structural steel.
- 8/1/79 PSI management in RIII to discuss Marble Hill construction activities.
- 8/3/79 Special site inspection concluded.
- 8/7/79 PSI stops safety-related work at Marble Hill site until management controls are upgraded to satisfaction of PSI and NRC. PSI held press cc erence on this matter.
- 8/15/79 Director, OIE issued an Order Confirming the Suspension of Construction, stopping all safety-related work on Marble Hill.

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# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

In the Matter of

PUBLIC SERVICE COMPANY OF INDIANA (Marble Hill Nuclear Generating Station, Units 1 and 2) Docket Nos. 50-546 50-547

## ORDER CONFIRMING SUSPENSION OF CONSTRUCTION

I

The Public Service Company of Indiana (PSI or licensee) is the holder of Construction Parmits, Nos. CPPR-170 and CPPR-171, issued on April 4, 1978. These permits authorize in accordance with their provisions construction of the Marble Hill Nuclear Generating Station, Units 1 and 2. Over the past few months, serious problems have been identified at the Marble Hill facility concerning the adequacy of the licensee's quality assurance program and, in particular, the adequacy of concrete placement which requires escalated enforcement action.

II

As a result of an inspection conducted on April 3-6, 1979, a Notice of Violation was issued to the licensee on May 4, 1979. One item in the Notice identified noncompliance with Criterion X of Appendix B to 10 CFR Part 50 related to poor control of the quality of concrete placement activities at the site. During another inspection conducted on April 30 through May 3, 1979, additional items of noncompliance were identified. Another Notice of Violation was issued on May 29, 1979, which included an additional citation against Criterion X related to inadequate control of the quality of concrete placement activities as well as a citation agains:

Part SC on the basis of improper curing

On June 12, 1979, Thomas Dattilo, a

DUPLICATE DOCUMENT

Entire document previously entered into system under:

ANO No. of pages:

JOHN T. MYERS 7TH DISTRICT, INDIANA

APPROPRIATIONS COMMITTEE

SUBCOMMITTEES AGRICULTURE AND RELATED AGENCIES PUBLIC WORKS



2448 RAYBURN BULDING WASHINGTON, D.C. 20515 TELEPHONE: 202-225-5805

107 FEDERAL BUILDING TERRE HAUTE, INDIANA 47808 TELEPHONE: 812-238-1619

# Congress of the United States House of Representatives Bashington, D.C. 20515

August 1, 1979

Mr. Joseph M. Hendrie, Chairman U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Dear Chairman Hendrie:

This letter is to express my concern about any move by the NRC to stop all construction at the Marble Hill Nuclear Power Station site near Madison, Indiana. While I share your desire to examine potential safety problems and resolve them where necessary, I do not support a complete work stoppage. The economic and energy consequences of such an action would be severe, considering the employment level and completion schedule at Marble Hill.

It is my understanding that NRC's investigation and evaluation of the management of construction activities by Public Service Indiana will conclude this week. I applaud your efforts to determine the roots of any problems and hope that they will be expeditiously and satisfactorily answered before any additional workers are forced off the job.

I would appreciate being kept informed of your activities with respect to Marble Hill. Your decisions will be very important to Indiana and to the Nation.

Best wishes.

incerely, ohn Myers

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