

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

PDR 50-546/

Docket Nos. STN-50-546 STN-50-247 (10 CFR 2.206)

MAR 1 8 1981

Thomas M. Dattilo, Esq. 311 East Main Street Madison, Indiana 47520

Dear Mr. Dattilo:



On May 23, 1980, the Commission referred two documents, entitled "Save the Valley Comments Regarding the Consideration of the Reopening of Marble Hill" (docketed May 7, 1980) and "Save the Valley Additional Comments to Commissioners Concerning Resumption of Work at Marble Hill" (docketed May 14, 1980), to the NRC staff for consideration under 10 CFR 2.206 of the Commission's regulations. You had filed these documents with the Commission on behalf of Save the Valley. In these documents, you provided information on which you based your request that the Commission take certain actions related to construction quality and site suitability of the Marble Hill project. Your requests concerning site suitability matters were denied in a decision issued by Harold R. Denton, the Director of the Office of Nuclear Reactor Regulation, on September 2, 1980. DD-80-27, 12 NRC 381 (1980). These site suitability matters will not be considered further in this letter.

Under 10 CFR 2.206, a request for Commission action must set forth the action requested by the petitioner and the facts that constitute the basis for the requested action. As I understand your filings, Save the Valley requested that the Commission take three basic actions in determining whether construction should be resumed on the Marble Hill project:

- Take steps to assure that Public Service Company of Indiana (PSI) and its contractors conduct material receipt inspection in a proper manner (May 7th document, at 3);
- Take into account affidavits submitted by Save the Valley in determining whether PSI has "properly rehabilitated" its quality assurance and control program (May 14th document, at 5); and
- Permit an independent examination of concrete in the Marble Hill project (May 7th document, at 5).

In support of Save the Valley's request for these actions, you submitted a number of affidavits by workers on the Marble Hill project. I note that all of these documents had been received by the NRC and have been considered in the NRC continuing investigation into deficiencies in construction of the Marble Hill project. Mr. Cutshall's deposition was specifically mentioned in the Order which formally suspended construction at the site. Investigation of the allegations of your client, Mr. Henry, required issuance of a Commission subpoena and pursuit of its enforcement in Federal court before we were able

to more fully investigate Mr. Henry's allegations. The NRC Region III office acknowledged receipt of Mr. Hutsell's affidavit in a letter to you dated August 28, 1979.

In my view, we have essentially taken the actions that you requested in Save the Valley's two documents. As you know, construction of the Marble Hill project was formally suspended by an Order confirming suspension of constuction that I issued on August 15, 1979. The Order confirmed PSI's suspension of safety-related construction and barred resumption of construction pending satisfaction of certain conditions. Issuance of the Order was based on NRC investigation of construction practices at Marble Hill. The investigation included inspections at the site as well as inquiry into workers' allegations and PSI's own findings regarding construction practices on the project. The results of the NRC investigation substantiated instances of improper repair of defective concrete, use of untrained personnel, improper placement of concrete, and improper testing, which were alleged in the affidavits you provided. Many of these findings are documented in Investigation Report No. 50-546/79-08.

NRC inspections and investigations continued after the Order was issued. These efforts included investigation of Mr. Henry's allegations. NRC inspectors were finally able to interview Mr. Henry in June 1980. The results of this investigation are discussed in Investigation Report No. 50-546/80-04.

As a result of the seriousness of the breakdown in PSI's quality assurance and quality control program, which was confirmed by NRC investigations and workers' allegations, I determined that any resumption of construction at Marble Hill should be permitted only in a gradual fashion to assure that PSI's corrective actions and revised quality assurance program were effective and effectively implemented. Accordingly, after briefing the Commission in early May 1980, I issued on May 15, 1980 a "Graduated Rescission of Order Dated August 15, 1979." This plan permits gradual, step-wise resumption of construction activities with review by the NRC at appropriate stages. Before construction may resume in its entirety, PSI and its contractors must satisfy the items listed in the rescission document. This process of graduated rescission incorporates steps to assure that PSI and its contractors have revised and adjusted their quality assurance programs and have prepared themselves adequately for resumption of construction. These are basically the actions that you requested in Save the Valley's filings before the Commission.

To date, I have issued three letters under the rescission program that permitted PSI or its contractors to resume certain activities:

- July 7, 1980: I found that PSI had developed a satisfactory quality assurance program and had completed the prerequisites for PSI's resumption of receipt inspection;
- November 13, 1980: I found that PSI's contractors, Cherne Contracting Corporation (CCC) and Commonwealth-Lord J.V. (CLJV), had completed the prerequisites necessary to resume receipt inspection; and

 December 5, 1980: I found that CCC and CLJV had satisfied the prerequisites to partially resume mechanical, piping and electrical work.

With respect to renewed receipt inspection, NRC inspectors have found that PSI's corrective actions have generally been effective and that PSI has taken appropriate measures to correct deficiencies in the conduct of the receipt inspection program. PSI has employed additional personnel to conduct surveillance of the program and to monitor storage of safety-related equipment. NRC will continue its independent inspection of PSI's activities.

As the graduated rescission program makes clear, confidence that PSI's quality assurance program and that of its contractors is, in your words, properly "rehabilitated" depends on a gradual process through which PSI must demonstrate that its program is effectively implemented before construction resumes in its entirety. In this way, my determination that PSI's program has been brought into conformance with the Commission's requirements is not based on a single finding at one point in time, but is based instead on a series of findings, many of which are yet to be made, that PSI can properly conduct construction of the Marble Hill project. Through this gradual process, I believe that NRC has taken action to satisfy your requests to assure PSI's appropriate conduct of receipt inspection and a revised quality assurance program. NRC will continue its inspection and review of PSI's construction program. I also emphasize that NRC will take appropriate enforcement action if we find that PSI or its contractors fail to adequately implement the quality assurance program or otherwise fail to adhere to the Commission's requirements during construction of Marble Hill.

Save the Valley also asked that the Commission permit an independent examination of concrete in the Marble Hill project by a qualified third party. You first suggested such an examination during the public meeting on the Marble Hill project held in Madison, Indiana, on March 25, 1980. Because we believed that an independent examination of the in-place concrete would assist NRC in reviewing information concerning the integrity of existing structures, NRC agreed that independent consultants would be contracted to conduct this examination. While your May 7th filing speaks in terms of "an independent examination of concrete by Save the Valley," it is my understanding that you agreed that selection of the consultant from a pool of qualified candidates would satisfy your concern that an independent examination of concrete be conducted. The NRC staff consulted with you in the selection process. Mr. Alfred L. Parme, a consulting engineer from San Diego, and Mr. Roland C. Hamm of Hamm Engineers, also from San Diego, were selected for the task.

On a related matter, NRC also asked the U.S. Army Corps of Engineers to conduct an independent review of the testing program of U.S. Testing. Results of this review are documented in Inspection Report No. 50-546/79-16. Mr. Henry, whose affidavit was included with your documents, had made allegations of improper construction practices by U.S. Testing. PSI has terminated its contract with U.S. Testing and has assumed direct responsibility for that work. PSI must demonstrate to the satisfaction of NRC that its concrete testing program is adequate before concrete work may be resumed. We will consider the assessments by the independent consultants before permitting further concrete placement.

As a basis for your request that NRC permit an independent examination of concrete, which was granted as described above, you raised a number of matters regarding a Sargent and Lundy evaluation of in-place concrete. In the remainder of this letter, I would like to respond to those concerns. The methodology used in the statistical evaluation of concrete, which formed the basis for selection of test locations in Sargent and Lundy's evaluation, is described in the Sargent and Lundy report. The test locations were selected randomly, but with a deliberate inclusion of greater volumes of concrete in areas with greater congestion of reinforcing steel and embedments. Such areas often pose greater difficulty in the proper placement of concrete. We see no basis to categorically reject the judgment and explanations by the Newberg personnel that contributed to the conclusions made in the Sargent and Lundy report. Moreover, 25% of the path analysis tables that you questioned in your May 7th filing were verified by coring the concrete to examine the nature of any internal discontinuities. No discrepancies were found between the coring samples and the prior reports of sonic examination.

With respect to inaccessible concrete areas, the following information highlights the methodology and time frame for PSI's evaluation of inaccessible areas. The inaccessible areas comprise a relatively small portion of the concrete that is to be evaluated. PSI plans to inspect or evaluate such areas when it is permitted by the NRC to conduct such activities under PSI's construction program. There are two categories of inaccessible concrete surfaces:

- Inaccessible owing to engineered backfill: Accessible concrete patches and unrepaired concrete imperfections, which have been identified through section 5.0 (SSP-5) of PSI's Construction and Material Verification Program, will be evaluated. Based on the results of this evaluation, PSI will determine the extent to which inaccessible surfaces in this category are acceptable or require repair.
- Inaccessible owing to temporary construction equipment or in-place formwork: PSI intends to remove the obstructions, then evaluate and repair these surfaces as necessary under section 5.0 (SPP-5) of its Construction and Material Verification Program.

Finally, you asked whether "through transmissions or reflected ultra sonic tests" were performed on the core samples taken from the concrete and compared with the in situ concrete tests. While such a comparison was not performed, it is not evident to us what value such a comparison would have. The results of the core testing, when compared to the results of the in situ concrete testing program, demonstrated that the concrete was of the quality expected as a result of the in situ tests.

In summary, I believe that the Commission has taken essentially the actions requested by Save the Valley in your filings of May 7 and 14, 1980. This letter will conclude, therefore, the NRC staff's consideration of these filings under 10 CFR 2.206. Copies of the inspection reports referred to in this letter are available for public inspection in the Commission's public

document room in Washington, D.C., and in the local public document room in Madison, Indiana. A copy of this letter will also be placed in these public document rooms.

Thank you for your interest in the Commission's inspection and enforcement efforts at Marble Hill and your contribution to those efforts.

Sincerely,

FL Stiffer for Victor Stello, Jr.J.

Director -

Office of Inspection and Enforcement

cc: Public Service Co. of Indiana ATTN: Mr. S. W. Shields Senior Vice-President Nuclear Division P. O. Box 190 New Washington, Indiana 47162

> Harry H. Voigt, Esq. LeBouef, Lamb, Leiby & MacRae 133 New Hampshire Ave., N.W. Washington, D.C. 20036

BEFORE THE MUCLEAR REGULATORY COMMISSIONERS

IN RE THE PROPOSED MASSLE HILL NUCLEAR POWER PLANT, PUBLIC SERVICE INDIANA, LICENSEE DOCHIET MOS. 50-546,

MAY 7 1980

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SAVE THE VALLEY COMMENTS REGARDING THE CONSIDERATION OF THE REOPENING OF MARBLE HILL

Save The Valley, a non-profit Kentucky Corporation with offices in Indiana, represents the interest of the populace from Kentucky and Indiana who live adjacent to the proposed Marble-Hill Muclear Power Plant. Save The Valley has requested of the Commission Secretary, Mr. Samuel J. Chilk, the right to present relevant comments for the purpose of aiding the Commissioners in determining whether or not the existing quality control level of expertise and actions of PSI and its sub-contractors are consistent with the NRC regulations initially and, secondly, whether or not the NRC staff, particularly the Office of Investigation and Enforcement, is simply noting non-conformances and taking no positive action to correct the flagrant quality control violations that have some to their attention for the past approximate three (3) years.

Save The Valley wishes to briefly discuss two (2) substantial issues in this paper, namely:

- The March 5, 1980 request of Licensee to receipt inspection of safety category materials and components, and,
- 2. The question of an independent examination of concrete by Save The Valley at the Marble-Hill site.

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ISSUE NO. 1: LICENSEE REQUEST TO RECEIPT INSPECTION OF SAFETY CATEGORY MATERIALS AND COMPONENTS.

On March 25, 1980, at a public meeting in Madison called by the NRC, Save The Valley presented one Marion Hudgins as a witness. Mr. Hudgins worked as a quality control inspector for Cherne Contractor Corporation, a sub-contractor at Marble-Hill, from Movember, 1968 to March 30, 1979. Mr. Hudgins observed improper storage of safety category material and components, including large motorized safety valves. Mr. Hudgins noted for a period of more than one (1) month improper controlling of temperature readings in a Marble-Hill warehouse set up specifically to store safety category materials and components.

At no time during his term of employment was Mr. Hudgins able to note that any of his positive suggestions toward proper storage of safety components and materials were ever acted upon either by Cherne or PSI. And at all times the NRC was available supposedly to attempt to correct the situation.

Mr. Hudgins has received copies of non-conformance reports of NRC I & E inspectors from July 20, 1978, to and through March 29, 1978 The common thread of evidence throughout all of these reports manife simply that the NRC can have no confidence that PSI and/or its sub-contractor agents are capable of receiving safety category materials and components at the Marble-Hill site in the near future.

It is our firm opinion that it is simply not enough for the NRC I&E to note one non-conformance after another regarding millions of dollars of equipment which may become pure salvage due to improper receipting and storage; the NRC must effectively see that proper storage actions are immediately being done.

ISSUE NO. 2: INDEPENDENT EXAMINATION OF CONCRETE.

On March 25, 1980, in the aforementioned public meeting, this writer speaking for Save The Valley requested an independent examination of the concrete at Marble-Hill by a qualified Save The Valley representative. This request received a favorable response from Mr. Victor Stello, the head of the NRC Inspection & Enforcement Division At the same time this writer requested copies of the evaluation reports of concrete at Marble-Hill by PSI representatives and by the NRC.

This writer did not receive copies of the Sargent & Lundy report dated November 20, 1979 regarding "Evaluation of In-place Concrete a Marble-Hill" in two (2) volumes and also a copy of the NRC Inspection Report 80-02 concerning same until May 1st. Possibly the Division of the NRC Inspection of the did not wish for Save The Valley to have sufficient time to adequately comment regarding these reports prior to the meeting of the Commissioners on this matter.

Due to a forced speed search of the Sargent & Lundy November 20 report and the NRC Inspection Report 80-02 Save The Valley has saveral relevant comments that should certainly aid the Commissioner in making their determination on the concrete issue.

- 1. There seems to be no way on the basis of the Sargent & Luni November 20, 1979 report and on the basis of the MRC Inspection Reposition 20-02 to determine whether or not the 60 areas chosen by Sargent & Lundy were proper areas for a study of the existing concrete placeme at Marble-Hill;
- 2. There seems to be no way that a competent engineer can determine on the basis of the above-stated studies alone whether or not the explanations given by Newberg personnel regarding damages concrete and rebar or other obstructions were accurate; were such Newberg observations verified by the PCA study team? For example, path analysis, Appendics B, PCA Report, November, 1979, Page 11, Tables B-5-6-7-8-9-10-12-13-14-15-16-17-18-19-21 & 23. These Tables indicate information obtained from Newberg personnel.
- 3. There seems to be no way a competent engineer on the basis the above-cited studies can comment coherently whether or not Sarger. & Lundy has adequately tested the inaccessible areas, namely: underground areas beneath the concrete and the stated voids in the auxiliary building.

4. Were through transmissions or reflected ultra sonic tests performed in cores so that the readings could be compared with IN-SITU test results to determine if cores were representative?

It should be specifically noted that at least 40% of the areas checked in the Sargent & Lundy report manifested documentary evidence of improperly placed concrete and further that all but 13% of these areas were explained away by comments from Newberg and/or PSI representatives.

Regarding the pulse-echo method, several questions may need to be still explained from the report of Sargent & Lundy. However, insufficient time has been given by I&E for Save The Valley to properly and more specifically comment thereon.

It should be noted that Sargent & Lundy has been paid millions of dollars to be PSI's consultant from the inception of this proposes Marble-Hill project. It should be further noted that some questions may arise as to the closeness of that particular relationship; however Sargent & Lundy on the whole has a fine reputation throughout the country in these areas.

A request for an independent examination of the existing place: concrete at Marble-Hil and an execution of it by Save The Valley can only serve to enhance the reputation of the NRC Commissioners.

RESPECTFULLY SUBMITTED, SAVE THE VALLEY

BY:

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2.206 interim re 1""171 . . 1 TES NUCLEAR RECUILARY INVOCATIONS SION WARRING PART D. C 11.05 JUN 2 5 1380 Mr. Thomas Dattilo, Esq. 311 East Main Street Madison, Indiana 47250 Dear Mr. Dattilo: . On May 23, 1980, the Office of the Secretary referred Save the Valley's "Additional Comments to Commissioners Concerning Resumption of Work at Marble Hill" (docketed with the Commission on May 14, 1980) to the NRC Staff for treatment pursuant to 10 CFR 2.215 of the Commission's regulations. This docu ant also incorporates by reference com arts dicketed on May 7, 1930. The Staff will be reviewing these two documents to determine whether additional en or 3 ent easures or other action is appropriate on the basis of 2'e matters raised by the Sale the Valley. The documents raise lasues in two basis categories: (1) deficient construction practices and corrective actions at lamble Hill and (2' seismic features of the Marble Hill site. With respect to hould all it and to determine whether this office should have confidence That Public is vice Company of Indiana's quality assurance and control program is adequately ranabilitated. I note that these affidavits have been previously considered by the Office of Inspection and Enforcement in its investigation and actions on "proble Hill's construction deficiencies. Mr. Cutshall's aiffdavit was aportificantly referenced in my order of August 15, 1979, which confirmed the suspension of safety-relat d construction at Marble Hill. Monotheless, the Staff will review these difficavity and issues raised in Save the Valley's filings to deturnine whether is then ention is warranted regarding construction problems and corrective ressures. The LFC Staff will also receive the issues concerning seismicity of the Marshauffil site. Accordingly, and opriate action will be taken on Sive the Valley's submittals within a reasonable time as provided in 10 CFR 2.206. I enclose for your information a copy of the notice that will be filed for publication with the Diffice of the F Leral Register. Sincarely. Victor Fleilo, Jr. Direct.r Office of Inspection and Enforcement · · · · · · · e: 8007100295 - axt page)

Enclosure: Notice for Federal Register

cc w/enclosure:
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Vice President-Electric System
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Plainfield, Indiana 48168