CONSULTING ENGINEERS

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September 5, 1980

United States Nuclear Regulatory Commission Region III 799 Roosevelt Road Glen Ellyn, Illinois 60137

Attn: Mr. D. W. Hayes

Technical Support Section Chief

RE: Marble Hill Nuclear Cenerating Station Units 1 and 2

Dear Sir:

Following is a listing of information previously requested but not yet received along with our request for additional information as a result of meetings with Sargent & Lundy, Portland Cement Association, R. A. Muenow, Public Service of Indiana, Newberg Marble Hill and other personnel last week:

- Location and pertinent structural data associated with critical structural safety related concrete areas covering the following items
 - a) Five (5) of the most critical concrete sections in the containment vessel
 - Five (5) of the most critical concrete sections in the auxiliary building
 - c) Three (3) of the most critical concrete sections in the fuel handling building
 - (All of the above a, b, & c to identify the moment, thrust and shear acting at each section along with the relative steel percentage)
 - d) Magnitude and type of loading applied to the section
 - ne) Load factors employed
- 2. Critical biological shielding locations
- Locations of concrete placements which were encountered and/or would reasonably be expected to have a higher probability of having the presence of significant internal discontinuities.
- 4. The quantities and locations with identifications of all of the different concrete mix designs used in all Category I concrete structures (S&L Specification Y2722 467, 67, 57 and heavy weight aggregates, etc.) along with the concrete mix design or designs which were involved in the S&L evaluation of concrete in S&L Report SL-3753.

- 5. Complete information of any investigations performed by S&L during the course of construction in accordance with the provisions of 402.2e2.3 of S&L Specification Y 2722.
- 6. Identification of the areas where 5500 psi grout was substituted for concrete including quantities, locations, dates and placement identifications related thereto.
- 7. Identification of all concrete and the method of consolidation used in each around duct runs and which were placed prior to and subsequent to the insertion of 415.1ff in S&L Specification Y 2722.
- Identifications (previous and present), including locations, dates, etc. of all significant concrete patches and/or repairs which were made using procedure WPN-25 or procedure WPN-35.
- 9. Identification of all concrete repairs which were made in accordance with S&L Specification Y 2722, 416.4, including locations, previous and present identification, dates, etc..
- Identification of corrections, and/or modifications and/or amendments to the S&L Report SL-3753 anticipated and significant dates related thereto.
- 11. Identification of the information relating to the review of the S&L Report SL-3753, Volume II, along with the nature and extent of the review performed by Sargent & Lundy.
- 12. Identification of the nature and extent of the review of both the Test Method For Microseismic Evaluation of Concrete (Pulse Echo Method), TP-4456-4326-1 and Through Transmission Test Method For Pulse Velocity Measurements, TP-4456.4326-3 which was performed by Sargent & Lundy.
- 13. Identification of all "suspect areas" and the test locations and areas related thereto which were found during the non destructive testing performed.
- 14. Identification of the criteria which determined whether a discontinuity was acceptable and unacceptable (excessive).
- 15. What are the quantities of acceptable and questionable categories of discontinuities found and what are the test locations of the questionable discontinuities?
- 16. Which test locations had some form of discontinuity in the 24 of 60 areas investigated?
- 17. What is the effect on the confidence level and reliability considering the human factor which existed in the determination of explainable discontinuities?

- 18: Identification and data regarding non destructive tests and any other pertinent data outside of the 60 reported tests related to S&L Report SL-3753.
- 19. Identification of witnesses attending each of the non destructive performed by Muenow, and the nature and extent of their participation.
- Copies of all review notes taken by all parties who participated in any discussions relating to explainable discontinuities.
 - 21. A complete full size set of all the reference drawings shown on all the SKCT-Detail Drawings in Volume II of S&L Report SL-3753.
 - 22. A copy of a full size print of Sheet A-9 (Area 8) of Volume II of S&L Report SL-3753.
 - 23. A complete set of all photos taken in the non destructive testing performed and reasons for omission of photos from the S&L Report SL-3753.
 - 24. Copies of all figures showing geometric description of secondary shield walls, containment vessels, reactor refueling pool, reactor cavity, auxiliary building and fuel handling building. (MH-PSAR)
 - 25. Identification of honeycombing and/or voids felt by Sargent & Lundy to be structurally significant.
 - 26. Identification of concrete deficiencies, other than honeycombing and/ or voids felt by Sargent & Lundy to have safety significance.
 - 27. Copies of all ECN's relating to safety related Category I concrete work including specification changes.
 - 28. Copies of all FCR's relating to concrete work.
 - 29. Identification of the 170 and 513 patched areas in Category I structures mentioned in S&L Report SL-3753.
 - 30. Copies of CP and RA log identifying concrete patch and repair areas.
 - 31. Identification of locations of leaching which has occured and an explanation of the path of percolation.
 - 32. Identification of the areas where 3500 psi great was substituted for concrete including quantities, locations, dates and placement identifications related thereto.

The above information is needed to adequately complete our evaluation. We would appreciate your expediting the information requested.

Very truly yours,

Rolland C. Hemm

Rolland C. Hamm, P.E. and Alfred L. Parme C: Parameter, Inc.

Cufus L. Torme