PUBLIC
SERVICE
INDIANA

S. W. Shields
Senior Vice President -
Nuclear Division

SVP-0023-83

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Docket Nos.: STN 50-546
STN 50-547
Construction Permit Nos.:
CPPR - 170
CPPR - 171

Marble Hill Nuclear Generating Station - Units 1 and 2
Application for Licenses
Amendment Number 24

Dear Mr. Denton:

Public Service Company of Indiana, Inc. (PSI) and Wabash Valley Power Association, Inc. (WVPA) hereby amend their application for construction permits and operating licenses for the Marble Hill Nuclear Generating Station, Units 1 and 2, by submittal of Amendment 24.

The responses to the requests for additional information related to the Final Safety Analysis Report (Enclosure 2 of February 23, 1983 letter from Mr. D. G. Eisenhut to Mr. S. W. Shields) are included in Amendment 24. The respective pages of the Final Safety Analysis Report (FSAR) that were changed as a result of our responses are also provided in this amendment. Three signed originals and fifty-seven copies of these FSAR changes are submitted for your use.

Amendment 24 also includes Supplement 1 to the Environmental Report-Operating License Stage (ER-OL). ER-OL Supplement 1 provides responses to the requests for additional information related to the Environmental Report (Enclosure 3 of February 23, 1983 letter from Mr. D. G. Eisenhut to Mr. S. W. Shields) and contains the respective pages of the ER-OL that were changed as a result of our responses. Three signed originals and thirty-eight copies of these ER-OL changes are submitted for your use.

The current status of the NRC staff concerns that have been raised in your review of other pending OL applications (Enclosure 4 of February 23, 1983 letter from Mr. D. G. Eisenhut to Mr. S. W. Shields) is provided in Attachment 1 to this letter.

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If you have any questions please contact me at your convenience.

PUBLIC SERVICE COMPANY OF
INDIANA, INC. for itself and
as agent for WABASH VALLEY
POWER ASSOCIATION, INC.

By S. W. Shields
S. W. Shields
Senior Vice President-Nuclear Division

SWS/GAS/bak

cc: J. R. Schapker
D. G. Eisenhut
T. M. Novak
B. J. Youngblood
P. W. O'Conner

STATE OF INDIANA)
) SS:
COUNTY OF JEFFERSON)

Subscribed and sworn to before me this 21 day of April, 1983.

Judy K. Spillman
( ) Notary Public

My Commission Expires:

12-16-85

My County of Residence:

Jefferson

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the matter of	)	Docket Numbers: STN 50-546
	)	STN 50-547
PUBLIC SERVICE COMPANY	)	Construction Permit Numbers:
OF INDIANA, INC. AND	)	CPPR - 170
WABASH VALLEY POWER	)	CPPR - 171
ASSOCIATION, INC.	)	
(MARBLE HILL NUCLEAR	)	
GENERATING STATION -	)	
UNITS 1 AND 2	)	

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Indianapolis, Indiana 46204

* The number in parenthesis denotes number of copies served, if more than one. This list has been revised to reflect distribution changes requested by the agencies.

PUBLIC SERVICE COMPANY OF
INDIANA, INC. for itself and
as agent for WABASH VALLEY
POWER ASSOCIATION, INC.

By S. W. Shields
S. W. Shields
Senior Vice President-Nuclear Division

STATE OF INDIANA)
) SS:
COUNTY OF JEFFERSON)

Subscribed and sworn to before me this 21 day of April, 1983.

(Judy K. Spillman) Notary Public

My Commission Expires:

12-16-85

My County of Residence:

Jefferson

ATTACHMENT 1

RESPONSE TO ENCLOSURE 4

OF THE

MARBLE HILL ACCEPTANCE LETTER

DATED FEBRUARY 23, 1983

RESPONSE TO ENCLOSURE 4 ITEM (1)

Enclosure 4, Item 1, refers to Enclosure 5 which requests additional information regarding safety-related structures, systems and components controlled by the QA program for Diablo Canyon. The base plant responded to a similar request by responding to Byron Question 421.22. The Marble Hill response to this question will be provided during the fourth quarter of 1983.

RESPONSE TO ENCLOSURE 4 ITEM (2)

Preliminary discussions with the NRC staff have outlined the scope of information needed to address this issue. PSI is compiling this information. Upon agreement between the NRC staff and PSI this information will be forwarded to the NRC.

RESPONSE TO ENCLOSURE 4 ITEM (3)

Information on instrumentation for detection of inadequate core cooling (TMI Action Item II.F.2 in NUREG-0737) is found in Appendix E item E.31 to the Marble Hill Final Safety Analysis Report. The Marble Hill position and information will be provided during the third quarter of 1983.

RESPONSE TO ENCLOSURE 4 ITEM (4)

The PSI preservice/inservice inspection program is in preparation. This program using the guidance provided in Enclosure 7 will be submitted 18 months prior to fuel loading.

RESPONSE TO ENCLOSURE 4 ITEM (5)

The PSI preservice/inservice inspection program is in preparation. This program will be submitted 18 months prior to fuel load. The preservice examination of snubbers will be included in this program.

Refer to Table 14.2-54 and Table 14.2-55 and the response to Byron Question 110.37 for the preoperational testing of snubbers.

RESPONSE TO ENCLOSURE 4 ITEM (6)

INTRODUCTION

Section 6.2.2, Appendix A1.82, and Byron question 22.26 of the Marble Hill FSAR describe the design of the containment recirculation sumps. In addition, an outer screen has been added such that the design now complies with Regulatory Guide 1.82, Position C.7. This outer screen is reflected in the Marble Hill FSAR Appendix A, Section A1.82, and has been reviewed and accepted by the NRC on the Byron project as documented in the Byron SER, Subsection 6.2.2. The Marble Hill design replicates Byron in this area.

RESPONSE

This response is keyed to the paragraph numbers of Enclosure 9 to the Marble Hill Acceptance Letter.

1. PSI operation procedures will require that an inspection of the containment and the containment sump area in particular be performed at the end of each shutdown as soon as practical before containment isolation. This procedure should assure "as licensed" cleanliness prior to each startup. Included in this procedure will be the necessity to identify any material which will have the potential for becoming debris and capable of blocking the containment sump when required for recirculation of reactor coolant water.

   Such operational inspection and cleanliness procedures will be developed prior to fuel load.

2. Refer to Appendix A1.82 of the FSAR.

3. As stated in Appendix A1.82, Position 11, the Marble Hill containment recirculation sump is designed such that vortexing should not be a problem and the location of the sump should prevent degrading effects on the pump performance.

   However, PSI will develop and implement procedures for the operator which will address both a possible vortexing problem (with consequent pump cavitation) and sump blockage due to debris. These procedures will address likely scenarios, instrumentation available to the operator, possible indications and mitigating actions.

4. No changes are required to the Marble Hill containment recirculation sump design.

5. (1) Appendix A1.82, with the exception of Position 7 as noted in the introduction, provides an evaluation of the design with the Regulatory Guide 1.82 recommendation.

(2) The location of the recirculation sumps relative to other containment structures is shown in FSAR Figure 1.2-6.

(3) (a) The recirculation sump inner screens are 3/16 inch mesh, 14 gauge Type 304 stainless steel. The minimum dimension of the containment spray nozzles is 1/4 inch. There are no other components through which recirculation sump water will flow with minimum dimensions less than 1/4 inch.

(b) The design of the recirculation sump outer screens complies with the flow rate requirements of Regulatory Guide 1.82 assuming 50 percent blockage.

(c) There are two types of insulation material that will be used in the Marble Hill containment structures. Responses are provided separately for each type.

Metallic Reflective Insulation

(i) Metallic reflective insulation is entirely fabricated from a welded stainless steel cover with differing numbers of stainless steel foils in each piece of insulation. Since this insulation is nonhomogeneous, the density cannot be provided.

(ii) The insulation is fabricated by Transco, Inc. There is no brand name.

(iii) The insulation is attached by self-locking latches that are integral with each piece of insulation.

(iv) This information will not be provided as question (v) below is not applicable to this type of insulation.

(v) This question is not applicable to this type of insulation.

Flexible Elastomeric Insulation

Flexible elastomeric insulation is used as an anti-sweat insulation on cold water lines inside containment.

(i) The exact type of material and its density will be provided after the insulation has been purchased.

(ii) The manufacturer and brand name will be provided after the insulation is purchased.

(iii) The insulation is wrapped around each pipe and sealed together with the manufacturers recommended adhesive.

(iv) This information will be provided after the insulation is purchased.

(v) This information will be provided after the insulation is purchased.

(d) This estimation will be provided after the flexible elastomeric insulation is purchased. This question is not applicable to the metallic reflective insulation.

RESPONSE TO ENCLOSURE 4, ITEM (7)

The information requested in this item is not provided in the FSAR. Information requested in this enclosure will be provided in a Seismic Qualification Review Report. This report will contain a list of all equipment important to safety (GDC 2 and 4) and will be prepared along with summaries of the status of their seismic and dynamic qualification as specified in the NRC enclosure 10, attachment 1 and 2. Forms containing specific information on equipment will be selected for audit. They will be provided to the seismic qualification review team (SQRT). A finalized version of these forms will be presented to SQRT at the audit.

When requested by the NRC, the utility and the NRC staff will coordinate the SQRT audit.

RESPONSE TO ENCLOSURE 4, ITEM (8)

The development of emergency operating procedures for a station blackout event (Generic Letter 81-04) is awaiting additional input from the Westinghouse Owners Group (WOG). The input will be in the form of a revision to the existing WOG generic guidelines on loss of all ac power. The emergency operating procedures to be written include the following: (a) loss of ac power; (b) loss of ac power without safety injection required; and (c) loss of ac power with safety injection required. These procedures are expected to be finalized during the first quarter of 1984. Training for a station blackout emergency will consist of both formal classroom and simulator exercises. Training on the abnormal and emergency procedures will be conducted. Where such cases present themselves, a transient analysis will be included and the worst case basis considered in the instruction.