



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

JUN 6 1985

50-354

MEMORANDUM FOR: O. Parr, ASB  
V. Benaroya, CHEB  
J. Kudrick, CSB  
D. Matthews, EPB  
V. Noonan, EQB  
W. Regan, HFEB  
F. Rosa, ICSB  
H. Booher, LQB  
F. Cherny, MEB  
B. D. Liaw, MtEB  
M. Srinivasan, PSB  
B. Sheron, RSB

FROM: Walter Butler, Chief  
Licensing Branch No. 2  
Division of Licensing

SUBJECT: HOPE CREEK SER OPEN/CONFIRMATORY ITEM STATUS - JUNE 1, 1985

In October 1984, the Hope Creek SER was issued. SSER 1 was issued in March 1985. SSER 2 will be issued in late June 1985. The enclosures to this memorandum detail the progress to date in resolving the open/confirmatory items identified in the SER.

Enclosure 1 is an account, by review branch, of the number of open/confirmatory items and their action status. In summary, the number of issues requiring staff action is as follows:

<u>Branch</u>	<u>Open Items - Number Requiring Staff Action</u>	<u>Confirmatory Items - Number Requiring Staff Action</u>
ASB	2 (1 open item, 2 subparts)	0
CHEB	1	0
CSB	0	6
EPB	1	8 (1 confirmatory item, 8 subparts)
EQB	3 (1 open item, 3 subparts)	0
HFEB	1	0
ICSB	1	9
LQB	11 (1 open item, 11 subparts)	0

B506200196 B50606  
PDR ADOCK 05000354  
E PDR

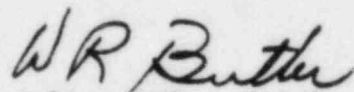
MEB	0	1
MtEB	0	1
PSB	1	3
RSB	0	3 (2 confirmatory items, 1 with 2 subparts)

The above list reflects the project status as of June 1, 1985. Because open/confirmatory items are not considered resolved until DL has received an SER from the appropriate review organization, those items for which SERs are in preparation have not been accounted for in this listing.

Enclosure 2 is a detailed listing of each open/confirmatory item. For each item, the word descriptions from the SER have been excerpted and reproduced within. Also, the reviewer, branch of origin and status of each item are identified. In most cases, the status refers the staff to PSE&G submittals responding to the items.

By letter dated May 22, 1985, PSE&G notified the NRC that the fuel load date for Hope Creek has been accelerated from January 14, 1986 to December 1, 1985. This will place added importance on the staff reviewing PSE&G open/confirmatory item responses in a timely fashion. Accordingly, for those open/confirmatory items identified as requiring staff action, you are requested to review the material referenced in Enclosure 2 and to provide DL the SER(s) for inclusion in the next SSER. The schedule for issuing SSERs is as follows:

<u>Document</u>	<u>Issuance Date</u>	<u>SER Input to PM (Drop-dead date)</u>
SSER 2	June 1985	June 1, 1985
SSER 3	August 1985	August 1, 1985
SSER 4	October 1985	October 1, 1985
SSER 5	November 1985	November 1, 1985

  
Walter Butler, Chief  
Licensing Branch No. 2  
Division of Licensing

Enclosures: As stated

cc: See next page

Branch	Total Outstanding	No. Requiring STAFF Action	No. Requiring PSE&G Action	Comments
ASB	open items 2 conf. items 0	2 0	0 0	SER Open Item #1 consists of many subparts - subparts 3 & 4 require STAFF Action
CHB	open items 1 conf. items 1	1 0	0 1	SER Open Item #7 - review of safe shutdown capability - is ongoing
CSB	open items 0 conf. items 6	0 6	0 0	SER Confirmatory Items #2, #9 → #13 require STAFF Action
EPB	open items 1 conf. items 13	1 8	0 5	SER Open Item #13 requires STAFF Action SER Confirmatory Item #36 consists of 13 subparts - subparts 2, 3, 4, 8, 9, 11-13 require STAFF action
EQB	open items 5 conf. items 0	3 0	2 0	SER Open Item #2 is composed of 6 subparts subparts #3, 5 & 7 require STAFF Action
HFB	open items 1 conf. items 0	1 0	0 0	SER Open Item #15 "Human Factors Engineering" SADS Safety Analysis requires STAFF Action
ICB	open items 2 conf. items 13	1 9	1 4	SER Open Item #6 "Post Accident Monitoring Instrumentation" requires STAFF action SER Confirmatory Items 15, 16, 18, 19, 22, 23, 25, 26 & 27 require STAFF Action
LQB	open items 12 conf. items 0	11 0	1 0	SER Open Item #12 consists of 11 subparts which require STAFF action

Branch	open Items conf. Items	Total Outstanding	No. Requiring STAFF Action	No. Requiring PSE&G Action	Comments
MEB		0	0	0	SEE Confirmatory Item #2 "PURE", requires STAFF action
		4	1	3	
MEB		1	0	1	
		1	1	0	SEE Confirmatory Item #8 "R vessel studs & fasteners" requires STAFF action
PXB		1	1	0	SEE open Item #7 requires STAFF Action
		3	3	0	SEE Confirmatory Items #28, 29 & 30 require STAFF action
PXB		1	0	01	
		0	0	0	
PAB		0	0	0	
		3	0	3	
PXB		0	0	0	
		3	3	0	SEE Confirmatory Items #14(2 parts) & #37 require STAFF action



SER Open Items

---

(1) Riverborne missiles

2.4.5, 2.4.10,  
3.4.1, 3.5.1.4,  
3.5.2, 9.2.1

---

Part 1

As cited in Section 3.4.1 of this report, the applicant has not indicated that the doors can withstand the impact of a floating missile (i.e., barge, or ship) propelled by winds and waves associated with a hydrologic event that floods plant grade. This is an open issue (see Section 3.4.1).

2.4.5 2-17

Jachowski, EHEB

see Part 3, below

Part 2

As indicated in Section 2.4.5, the applicant has been asked to provide documentation that the doors can withstand combined effects of the static and dynamic loadings associated with hurricane surge and flooding levels and waterborne missile impact. This remains an open item (see Section 3.4.1).

2.4.10 2-19

Jachowski, EHEB

see Part 3, below

Part 3

The applicant has not provided the results of an analysis which shows that all penetrations, including the submarine doors and doors from safety-related structures to nonsafety-related structures will maintain their leaktightness against the static and dynamic effects of the probable maximum flood, including wave runup.

3.4.1 3-6

Ridgely, ASB

STAFF Action

PSE&G provided responses by letters dated 1.31.85, 2.22.85 and 5.8.85

Part 4

Additionally, the applicant has not verified that the static and dynamic effects of the PMF, including wave runup, have been considered in the design of the seals between the service water pump wet pits and the service water intake structure.

3.4.1 3-6

Ridgely, ASB

STAFF Action

see PSE&G response to Question 410.69(d) in the FSAR

Part 5

The applicant has not addressed the staff's concern associated with the structural integrity of the safety-related structures during the design-basis flood and the effects of "floating" missiles. Because the Delaware River is a navigable waterway with refineries and a naval shipyard in Philadelphia, the applicant must address the effects of ships and boats with a draft of less than 12 ft hitting the walls and penetrations of safety-related structures.

3.4.1 3-6  
Ridgely, ASB

see Part 3

Part 6

However, the applicant should verify that the safety-related structures afford protection from the impact of ships and boats with a draft of less than 12 ft since the probable maximum flood could inundate the site up to 12.3 ft above plant grade. (Refer to Section 3.4.1 of this SER for a complete discussion of flood protection from external events.)

3.5.1.4 3-17  
Ridgely, ASB

see Part 3

Part 7

However, the adequacy of the design of structures and barriers to withstand postulated externally generated missiles (riverborne missiles) without damage to safety-related equipment has not been demonstrated by the applicant.

3.5.2 3-18  
Ridgely, ASB

see Part 3

Part 8

The applicant has not provided documentation to verify that the SSMS is protected from riverborne missiles generated during the probable maximum hurricane (see Section 3.4.1 of this report).

9.2.1 9-13  
Ridgely, ASB

see Part 3

Part 1 Seismic and Dynamic Qualification of Seismic Category I Mechanical and Electrical Equipment

3.10 3.46

Lee/Jackson, EQB

Part 2 Environmental Qualification of Mechanical and Electrical Equipment

3.11 3.49

Craig, EQB

### EQ TOPICS

1. PVORT (J. Jackson) : PSE&G Action ; staff awaiting response on PVORT action items
2. SQRT (A. Lee) : PSE&G Action ; staff awaiting response on SQRT action items
3. II.E.4.2 (R. Wright) : STAFF Action : Staff's 11.21.84 RAI addressed by PSE&G letter of 2.1.85
4. II.D.1 (R. Wright) : No Action : Closeout SER dated 5.6.85 received from EQB
5. II.K.3.28 (J. Lombardo) : STAFF Action : staff's 1.25.85 RAI addressed by PSE&G letter of 3.27.85
6. DEEP DRAFT PUMPS (A. Lee) : included with PVORT
7. ENVIRONMENTAL QUAL. (GREG) : STAFF Action : Staff's 11.21.84 RAI addressed by PSE&G letter of 2.1.85. Staff is reviewing informal (but PDR available) submitted of EQ Qualification Summary

---

(3) Preservice inspection program

5.2.4, 6.6

---

Input will be completed after the applicant

The SER

5.2.4.3 5-10

see Part 2 below

HUM, MTEB

Part 1

(1) docket an acceptable resolution of RAI items 1 and 2 (letter dated October 23, 1984)

(2) submits all relief requests with a supporting technical justification

The staff considers the review of the Hope Creek PSI program an open issue subject to the applicant providing the above items.

completed after the applicant.

The review will be

6.6.3 6-44

HUM, MTEB

Part 2

(1) docket an acceptable resolution to the RAI items identified above

(2) submits all relief requests with a supporting technical justification

The staff considers the review of the Hope Creek PSI program an open issue subject to the applicant's providing the above items.

PSE&G Action

Staff issued status report to PSE&G by letter dated 3-1-85. PSE&G will respond to comments made.

---

(4) GDC SI compliance

6.2.7

---

The staff requests that the applicant in the matter of Hope Creek consider making a commitment to an augmented ISI program, which will include inspection of the outer and inner valve body surfaces at the first refueling outage and at other times when the valve is disassembled for maintenance. This is an open item.

6.2.7

6-31

ELLIOT, MEB

No Action

Closeout SER received  
from MEB dated  
4.8.85



---

(5) Solid-state logic modules

7.3.2.5

---

The staff concludes that the implementation of the systems/devices as discussed above is acceptable with the exception of the Bailey 862 SSLMs. The staff is currently reviewing the application of these modules in the Hope Creek design with particular emphasis being placed on the common manual and automatic initiation capability. This is an open item.

7.3.2.5 7-32

MAUCK, ICSB

PSE#6 Action  
Meeting held with  
PSE#6 on 2/15/85.  
PSE#6 needs to  
respond to comments  
identified in meeting  
summary.

---

(6) Postaccident monitoring instrumentation

7.5.2.3

---

FSAR Table 7.5-1 has been revised to present safety-related display instrumentation categorized by variable type as recommended in RG 1.97. The staff is currently reviewing the applicant's response to determine the degree of compliance to the regulatory guide and the adequacy of the postaccident monitoring instrumentation. This is an open item.

7.5.2.3 7-48

MAUCK/Joyce, ICSB

STAFF Action

PSE#6 provided  
response to staff's

3.26.85 RAT by  
letter dated 5.14.85

(7) Minimum separation between non-Class 1E conduit  
and Class 1E cable trays

8.3.3.3.3

Non-Class 1E Conduit Separated From Class 1E Tray by a Minimum of 1-in.

8.3.3.3.3 8-16

KNOX, PSB

will be reviewed with  
Part 2, below

Part 1

The applicant indicated that non-Class 1E conduits (containing only control, instrumentation, or 120-V ac/125-V dc power cables) are located with 1-in. minimum separation between Class 1E cables. The applicant further stated that the above testing performed by Franklin Institute Research Laboratories for Toledo Edison Company and Wyle Test Report No. 56719 (forwarded by PSE&G letter dated August 30, 1984) performed for Susquehanna Steam Electric Company demonstrated that the rigid steel conduit is an effective barrier for protection of any cabling. The staff disagrees. The report demonstrates the acceptability of separation between two steel conduits. Separation between one steel conduit and cables located in an open cable tray was not addressed. Justification for this separation will be pursued with the applicant, and the results of the staff review will be reported in a supplement to this SER. This is an open item.

Metal-Clad Cable Separated From Class 1E Raceways by a Minimum of 1 in.

8.3.3.3.3 8-17

KNOX, PSB

STAFF Action

PSE&G responded by  
letter dated 4.4.85

Part 2

Metal cladding with respect to protection of cables has been considered and accepted by the staff as being equivalent to rigid steel conduit. Thus, the justification for 1-in. separation for metal-clad cable will be addressed with Item (2) above.

---

(B) Control of heavy loads

9.1.5

---

Part 1

The staff cannot conclude that the overhead heavy load handling systems are in compliance with the Phase I and Phase II criteria contained in NUREG-0612 until the applicant provides an acceptable response to the guidelines. The overhead heavy load handling systems do not meet the acceptance criteria of SRP Section 9.1.5. This is an open item. The staff will report resolution of this item in a supplement to this SER.

9.1.5

9-12

RIDGELY, ASB

No Action  
closed in SSER #1

Part 2

The applicant must provide a discussion of the effects of a failure of a shield plug while it is being removed before refueling.

9.1.5

9-11

RIDGELY, ASB

No Action  
closed in SSER #1

Safe Shutdown Capability

The staff's review of safe shutdown capability is ongoing and will be addressed in a supplement to this SER. Safe shutdown capability and alternate shutdown capability are considered open items.

Alternate or Dedicated Shutdown Capability

The staff's review of alternate or dedicated shutdown capability is ongoing and will be addressed in a future supplement to this SER. Safe shutdown capability and alternate shutdown capability are considered open items.

9.5.1.4 9-37

~~STAFF~~ CHEB  
Kubicki

STAFF Action

Review of safe shutdown  
capability is ongoing.  
Alternate shutdown  
capability will be closed  
out in SSER #2

---

(10) Delivery of diesel generator fuel oil  
and lube oil

9.5.4.2

---

9.5.4.2 9-61

GIARDINA, PSB

No Action  
Closed in SSER #1

Part 1

Assuming the emergency fill connection must be used to refill the fuel oil storage tanks, describe how fuel oil will be delivered to the site during flood conditions and describe the procedures that will be used in refilling the storage tanks during flood conditions and nonflood conditions. The procedures should include fuel hose routing and fire watches.

9.5.7 9-80

GIARDINA, PSB

No Action  
Closed in SSER #1

Part 2

The applicant was requested to identify the sources where diesel quality lube oil will be available and the distances required to be traveled from the source(s) to the plant, as well as discuss how the lube oil will be delivered on site under extremely unfavorable environmental conditions. In Amendment 4 to the FSAR, the applicant responded to the staff's concerns. The applicant stated that lube oil would be available from the same vendor as the fuel oil should the onsite quantity be inadequate. Delivery of fuel oil (and lube oil) under extremely unfavorable environmental conditions is discussed in Section 9.5.4.2 of this SER.



---

(11) Filling of key management positions

13.1.1.3

---

The staff intends to follow the implementation of the proposed organization, including the assignment of individuals to key managerial positions not already filled. The staff considers the filling of positions as an open item and will report on the implementation of this organization, and the filling of these positions, in a supplement to this SER.

13.1.1.3 13-4

ALLENSPACH, LQB

PSE#G Action

(12) Training program items

(a) Initial training program

13.2.1.1

Part 1

The applicant, in response to RAI Item 630.7(f) concerning this course, has not provided the details of observation training at an operating BWR. The staff is aware that the applicant is in the process of developing or conducting training for shift supervisor candidates at an operating BWR; however, the applicant has not provided this information. When the applicant submits this phase of the program, the staff will provide its response in a supplement to this SER.

13.2.1.1 13-10

Busy, LQB

STAFF Action

Response provided in PSE#6 letter dated 1.7.85

Part 2

The applicant has not provided the details of observation training at an operating BWR to meet the cold-license eligibility requirements outlined in Generic Letter 84-10, "Administration of Operating Tests Prior to Initial Criticality," and Generic Letter 84-16, "Adequacy of On-Shift Operating Experience for Near Term Operating License Applicants." The staff is aware that the applicant has instituted a program to meet the requirements of Generic Letter 84-16; however, the applicant has not addressed Generic Letter 84-10.

13.2.1.1 13-11

Busy, LQB

STAFF Action

Response provided in PSE#6 letter dated 1.7.85

Part 3

The staff has reviewed the applicant's submittal contained in FSAR Appendix 13.J and finds that it lacks the detail for an evaluation at this time. In addition, the applicant, in Amendment 4, RAI 630.11, indicated that the Hope Creek simulator training would consist of a 10-week program. The staff cannot provide an evaluation until the applicant resolves the apparent conflict in the two amendments. Furthermore, the applicant has not identified mitigating core damage in this phase of the program. As information is received, the staff will review the details and present its findings in a supplement to this SER.

(b) Requalification training program

13.2.1.2

The applicant has indicated that a requalification training program conducted for licensed reactor operators and senior reactor operators will be developed and implemented as required by 10 CFR 50.54(i-1). The applicant also has committed that the program will meet the requirements as specified in 10 CFR 55, Appendix A, and NUREG-0737. The applicant has stated that the specific requalification program will not be available until late 1984; therefore, the staff will review the program at that time and report its findings in a supplement to this SER.

13.2.1.1 13-12

Buzy, LQB

STAFF Action

response provided in PSE&G  
letter of 1.7.85

13.2.1.2 13-12

Buzy, LQB

STAFF Action

response provided in  
PSE&G letters of  
12.28.84 & 1.7.85

(c) Replacement training program

13.2.1.3

The applicant will develop training for replacement personnel who require NRC licenses, and, as a minimum, the applicant states the training will meet the requirements in 10 CFR 55; applicable NUREG reports; the H. R. Denton letter of March 28, 1980; NUREG-0737; and applicable training requirements of ANSI/ANSI 3.1-1981. The staff will review these programs as they become available.

13.2.1.3 13-12

Buz, LQB

STAFF Action

response provided in PSEG letter of 1.7.85

(d) TMI issues I.A.2.1, I.A.3.1 and II.B.4

13.2.1.4

I.A.2.1 Immediate Upgrading of Reactor Operator and Senior Reactor Operator Training and Qualifications

13.2.1.4 13-12

Buz, LQB

STAFF Action

response provided in PSEG letter of 1.7.85

The applicant's training program includes topics on heat transfer fluid flow thermodynamics (HTFFT) and reactor and plant transients. The applicant has provided the HTFFT training program in Appendices 13.A, C, and F. Training pertaining to reactor and plant transients, which includes simulator training, is contained in Appendix 13.F. On the basis of its review, the staff concludes that the applicant has satisfied the initial requirements of this task of the TMI Action Plan. The applicant will provide additional onsite training, which includes training on a Hope Creek simulator, in Appendix 13.J. When these programs are submitted, the staff will review and provide additional comments in a supplement to this SER.

The applicant has stated that the Hope Creek training program for licensed personnel will include the use of installed equipment and systems to control or mitigate accidents in which the core is severely damaged. The Hope Creek operator training for mitigating core damage is under development and will include classroom presentation, simulator performance, and in-plant demonstrations. Procedures and simulator training modules are expected to be developed and available by January 1985. The staff will review this task of the TMI Action Plan and present its findings in a supplement to this SER.

I.A.3.1 Revised Scope and Criteria for Licensing Exams

Part 2

Results of the staff review will be included in a supplement to this SER.

13.2.1.4 13-14

Buzy, LQB

STAFF Action

response provided in PSE#6  
letter of 1.7.85

II.B.4 Training for Mitigating Core Damage

Part 3

The applicant has not included STAs or the plant manager or personnel in the operating chain in his response; therefore, the staff finds this does not meet the training requirements contained in Item II.B.4. When the programs are developed, the staff will report its findings in a supplement to this SER.

13.2.1.4 13-14

Buzy, LQB

STAFF Action

response provided in PSE#6  
letter of 1.7.85

(e) Nonlicensed training programs

13.2.2

Part 1

The applicant has not identified specific TSSP or other training courses for each management position identified in FSAR Section 13.1.2.

13.2.2 13-15

Buzy, LQB

STAFF Action

response provided in PSE#6  
letter of 1.7.85

Part 2

Because much of the site-specific training for licensed personnel is under development, the STA program is still incomplete. When the staff receives this information, it will provide its evaluation in a supplement to this SER.

13.2.2 13-15

Buzy, LQB

STAFF Action

response provided in PSE#6  
letter of 1.7.85

Part 3

The staff also reviewed the applicant's fire brigade training program and finds that it does not contain all the elements in Branch Technical Position CMEP 9.5-1.

13.2.2 13-15

Buzy, LQB

STAFF Action

response provided in PSE#6  
letter of 1.7.85

---

(13) Emergency dose assessment computer model

13.3.2.9

---

Before the staff can complete its evaluation in this regard, the applicant must provide a description of the emergency dose assessment computer model or the alternate computer support to be used. This is an open item.

13.3.2.9 13-28

PERROTTI, EPB

STAFF Action

response provided in  
PSE#6 letters of  
1.7.85 & 1.16.85



(14) Procedures generation package

13.5.2.2,  
13.5.2.3

Part 1 The PGP will be based on the BWR Emergency Procedure Guidelines prepared by General Electric and the BWR Owners Group, which have been reviewed by the staff and approved by Generic Letter 83-05 dated February 8, 1983. The results of the staff review of the PGP will be included in a supplement to this SER. Until this review is completed, Task Action Plan Item I.C.1 remains open, as discussed in Section 13.5.2.3.

13.5.2.2 13-40

GOODMAN, PSRB

Part 2 The PGP is scheduled for submittal in January 1985, which is acceptable to the staff. The PGP is considered an open item.

13.5.2.3 13-41

GOODMAN, PSRB

The staff will review the PGP for compliance with Supplement 1 to MUREG-0737. Its review must be completed before the operating license is issued and will be addressed in a supplement to this SER. Item I.C.1 will be reviewed once the PGP is received.

PSEG Action

Staff issued RAI  
dated 5.14.85

Part 1

The applicant submitted the DCRDR Summary Report by letter dated August 15, 1984. On the basis of an assessment of that report, the staff has decided that a preimplementation onsite audit is required. The preimplementation onsite audit will be held in November 1984. As part of this audit, the staff will review the applicant's compliance with TMI Item II.K.3.27 (NUREG-0737).

18

18-2

RAWLEY-SMITH, HFEB

No ActionAudit results  
presented in SSER #1

Part 2

The HRC staff will review the applicant's SPDS safety analysis and implementation plan to confirm (1) the adequacy of the plant parameters selected for display to detect critical safety functions, (2) that means are provided to ensure that the data displayed are valid, (3) the adequacy of the design and installation of the system from a human-factors-engineering perspective, and (4) the adequacy of the verification and validation program to ensure a reliable SPDS. The SPDS safety analysis was to be submitted in September 1984; however, by letter dated August 29, 1984, the applicant indicated that the SPDS safety analysis would not be available for staff review until December 1984.

18

18-2

LIPINSKY, HFEB

STAFF ActionSPDS Safety Analysis  
submitted by PSE#6  
letter dated 4.10.85

The human factors engineering review of the Hope Creek Generating Station control room is considered an open item.

SER Confirmatory Items

In a letter dated August 15, 1984, the applicant provided a description of the analysis of the feedwater isolation check valves. This analysis is to ensure that the feedwater isolation check valves can perform their function following a postulated break of the feedwater lines outside containment. The applicant stated that the analysis will include

- (1) a thermal hydraulic analysis to determine the peak pressures upstream and downstream of the valve disk as well as the maximum disk angular speed
- (2) a sensitivity analysis to determine the break location and feedwater check valve selection that yield the most conservative results
- (3) an elastic or inelastic analysis of the feedwater check valves including valve internals.

The results of this analysis will be provided in November 1984. Provided the final results meet the applicable allowable limits and design criteria of the feedwater check valves, the staff considers this approach acceptable and will report its final evaluation in a supplement to this SER.

3.6.2 3-21

Li, MEB

PSEG Action  
Staff awaiting response

Part 1

The plant-unique analyses for the BWR Mark I safety/relief valve (SRV) and LOCA hydrodynamic loads are being reviewed as part of Unresolved Safety Issue A-7, "Mark I Containment Long-Term Program". See Section 6.2.1.7 of this report for more information. The staff will report the results of that review in a supplement to the SER.

3.9.3.1 3-39

SHAW, MFB

STAFF Action

PUAR submitted. See  
PSEG letter of 1.8.85

Part 2

The applicant has submitted a plant-unique analysis report (PUAR) on the pool dynamic loads for the Mark I containment. This report provides a description of the specific application of the generic Mark I pool dynamic loads and methods for the plant-unique loads used in assessing the capability of the containment and components to accommodate the pool dynamic loading phenomena.

6.2.1.7 6-13

RUTH, CSB

STAFF Action

See PSEG letter of  
1.31.85

Brookhaven National Laboratory (BNL) has been reviewing the PUAR to determine compliance with the staff's acceptance criteria and to evaluate the acceptability of any proposed alternative load specification.

On the basis of a preliminary evaluation of the PUAR, the staff finds the applicant's analysis reasonably conservative and in conformance with NUREG-0661. Therefore, the staff considers closure of this item to be confirmatory.

A summary of the BNL review and status for each of the pool dynamic loads will be presented in a supplement to this SER.

---

(3) Inservice testing of pumps and valves

3.9.6

---

The inservice testing program of pumps and valves will be developed from the preservice testing program taking into account any changes required to conform to the Technical Specifications. The completed inservice testing program will be submitted to the staff 6 months before fuel loading. The Technical Specifications are scheduled to be reviewed by the staff before this submittal date. This program will include any requests for relief from the testing requirements of ASME Code, Section XI. The staff will report the results of its review of this program in a supplement to this SER. The inservice testing of pumps and valves is considered a confirmatory item.

3.9.6 3-44

Li, MEB

PSE#6 Action

Staff awaiting PSE#6  
response



---

(4) Fuel assembly accelerations

4.2

---

Because bounding analyses of other similar BWRs (e.g., Susquehanna and Shoreham) have previously shown no cladding defect during the seismic-and-LOCA event, the staff considers that the mechanical fracturing is a confirmatory issue pending the applicant's submittal of the fuel assembly accelerations.

4.2 4-2

WJ, CPB

No action

SER dated 4.26.85

received from CPB

---

(5) Fuel assembly liftoff

4.2

---

Because results for other similar BWRs (e.g., Susquehanna and Shoreham) have shown that liftoff is within the design limit, the staff considers that the fuel assembly structural damage from external forces is a confirmatory issue pending the applicant's submittal of the amount of fuel assembly liftoff.

4.2

4-2

Wu, CPB

No Action

SER dated 4.26.85  
received from CPB

The staff's review of the differences between those codes and addenda used in the construction of RCPB components and the codes and addenda required by 10 CFR 50.55a indicated that there are two areas that require upgrading to the later code and addenda. These are (1) compliance with Article NA-3260, "Review of Stress Report," and (2) compliance with the fracture toughness requirements for older plants as defined in Branch Technical Position (BTP) MTEB 5-2, which is incorporated in SRP Section 5.3.2 (see Section 5.3.2 of this report). It is the staff's position that other attempts to update the application to meet the requirements of 10 CFR 50.55a would not be compensated by an increase in the level of safety. The staff, therefore, approves the applicants request for relief, and acceptance of the ASME Code, Section III and addenda and the ASME Nuclear Pump and Valve Code and addenda applied in the construction of the RCPB components identified above. However, the staff requires the applicant to comply with Article NA-3260 of the 1971 Edition of Section III of the ASME Code. This is a confirmatory item. Fracture toughness requirements defined in BTP MTEB 5-2, which is incorporated in SRP Section 5.3.2, have been satisfied (see Section 5.3.2).

5.2.1.1 5-2

Kirkwood, MEB

PSEG Action

Need statement  
from PSEG that they  
have reviewed stress  
report & it is acceptable

The basis for acceptance in the staff review has been the Code cases found acceptable in RG 1.84, "Code Case Acceptability - ASME Section III, Design and Fabrication," and RG 1.85, "Code Case Acceptability - ASME Section III, Materials," and the Code cases previously found acceptable by the staff for plants similar to Hope Creek before publication of RGs 1.84 and 1.85. The staff concludes that compliance with the requirements of these Code cases will result in a component quality level that is commensurate with the importance of the safety function of the RCPB. This constitutes an acceptable basis for satisfying the requirements of GDC 1 and is therefore, acceptable. Acceptance is contingent on the applicant complying with all those conditions that are imposed in addition to those conditions specified in each Code case identified in RGs 1.84 and 1.85 as conditionally acceptable. By a letter dated August 13, 1984 (forwarding FSAR Amendment 7), the applicant indicated additional information will be provided in October and November 1984. This is a confirmatory item.

5.2.1.2 5-3

KIRKWOOD, MEB

No Action  
SER dated 4.18.85  
received from MEB

---

(B) Reactor vessel studs and fasteners

5.3.1.5

---

The reactor vessel studs and fasteners satisfy most of the recommendations of RG 1.65, "Materials and Inspections for Reactor Vessel Closure Studs." The PSAR does not discuss the nondestructive examinations of the bolts and nuts, and the applicant needs to confirm that the Code-specified inspections were performed. This is a confirmatory issue.

5.3.1.5 5-18

SMITH, M+EB

STAFF Action

response provided by  
letter dated 5.24.85

---

(3) Containment depressurization analysis

6.2.1.4

---

The staff has examined the worst-case assumptions and initial conditions and finds them acceptable, pending its confirmatory analysis. This is a confirmatory item.

6.2.1.4 6-9

RTH, CSB

STAFF Action

---

(10) Reactor pressure vessel shield annulus analysis

6.2.1.5.1

---

On the basis of its review of the applicant's analysis, the staff finds that the pressures in the RPV shield annulus have been conservatively calculated and finds them acceptable, pending completion of the staff's confirmatory analysis.

In addition to the subcompartment differential pressure analysis, the applicant has performed force and moment calculations on the RPV from the asymmetric loads calculated in the subcompartment analysis. The peak net force calculated was 1.8 million pounds on the vessel from the recirculation line break. The NRC staff has reviewed the applicant's method of determining forces from the differential pressure results and finds these methods acceptable, pending completion of the staff's confirmatory analysis.

Pending completion of the confirmatory analyses described above, the RPV shield annulus analysis is considered a confirmatory item.

6.2.1.5.1 6-10

RUTH, CSB

STAFF Action



---

(11) Drywell head region pressure response analysis

6.2.1.5.2

---

The staff has reviewed the applicant's choice of breaks, mass and energy release rate data, nodalization scheme, and initial conditions for the drywell head region subcompartment analysis and finds them acceptable, pending completion of the staff's confirmatory analysis. This is a confirmatory item.

6.2.1.5.2 6-11

RUTH, CSB

STAFF Action

---

(12) Drywell-to-wetwell vacuum breaker loads

6.2.1.7

---

The Mark I Owners Group has submitted a generic methodology to be used in the analysis and/or qualification of Mark I wetwell-to-drywell vacuum breaker valves. The staff is currently reviewing this methodology and expects to complete its review in the second quarter of 1985. Once the generic effort has been completed, the applicant will be required to assess the design capability of the vacuum breakers installed at Hope Creek against the generic methodology. The staff will report its findings on this issue in a supplement to the SER. This is a confirmatory issue.

6.2.1.7 6-14

RUTH, CSB

STAFF Action

The applicant has recently committed to provide a piping cross-tie on the feedwater line fill network. This cross-tie will permit the fill network to perform its intended safety function following a single active failure and will ensure the sealing function of this system for at least 30 days following a LOCA. The applicant has also committed to perform a confirmatory analysis to demonstrate that during the initial portion of a LOCA, water in the feedwater system piping downstream of the No. 3 feedwater heater will flash to steam and continue to flow toward the reactor pressure vessel until the feedwater line decreases to the containment pressure, at which time the isolation valves will be manually closed. The intent of this analysis will be to verify that pressure in the feedwater system piping will be sufficient to prevent the outward leakage of radioactive contaminants through the isolation valves during the approximately 1-hour period after the accident, until the water seal is reestablished between the isolation valves via the fill system. Thus, no bypass leakage of the feedwater system is expected to occur. The staff finds this acceptable, pending receipt of the applicant's short-term analysis for the feedwater system. This is a confirmatory item.

6.2.3 6-18

RUTH, CSB

STAFF ActionResponse provided by  
PSE#6 letter dated

4.22.85

Part 1

The LOCA analyses reported in the FSAR were for a lead plant representative of Hope Creek. The applicant has committed to supply plant-specific LOCA analyses in a later amendment to the FSAR before fuel loading. The NRC staff will report the results of its review of the plant-specific analyses in a supplement to this SER. This is a confirmatory item.

6.3.5 6-35  
THOMAS, RSB

STAFF Action  
response provided in PSE#6  
letter of 3.1.85

Part 2

11.8.3.31 Plant-Specific Calculations To Show Compliance With 10 CFR 50.46

The applicant has included small-break LOCA calculations in FSAR Section 6.3.3 that were performed for a lead plant representative of Hope Creek. The applicant has committed to supply plant-specific LOCA analyses in an amendment before fuel load. The staff will report on its review of the plant-specific analyses in a supplement to this SER. See Section 6.3.5 of this report.

15.9.3 15-23  
THOMAS, RSB

STAFF Action  
response provided in ASE#6  
letter of 3.1.85

The applicant currently is completing the review for the BOP instrumentation and has committed to provide the results of this review to the staff. Therefore, the staff has concluded that the NSSS portion of the Hope Creek design has provided adequate on-line testing capability for the actuation instrumentation channels, logic, and actuation devices of safety systems and, therefore, is acceptable. The staff will review the results of the BOP system at power testability when they have been completed and provided by the applicant.

The staff will confirm that the results of the applicant's analysis demonstrate that the capability for at-power testability for BOP systems exists or acceptable justification(s) is provided.

7.2.2.3 7-11

MAVCK, ICSB

STAFF Action

PSE#6 letter of  
2.7.85 refers staff  
to FSAR Question  
421.22

---

(16) Instrumentation setpoints

7.2.2.5

---

In response to this request, the applicant stated that he is participating with a number of other utilities and the General Electric Company in generic discussions with the NRC staff concerning the methodology used to establish the Technical Specification trip setpoints and allowable values for the reactor protection system. All of the issues raised by this question are being covered by these generic discussions, and the resulting resolutions of the generic issues will be applied to Hope Creek.

The staff will confirm that the resolutions of the generic issues concerning the setpoint methodology are appropriate and successfully applied to the Hope Creek Technical Specifications.

7.2.2.5 7-12

MAUCK, ICSB

STAFF Action

response provided by  
PSE&G letter of

2.15.85

The staff requested more exact data regarding the maximum credible hot short voltage that could be impressed on the isolation devices. The applicant stated that previous tests included this condition and that this would be verified and the results submitted to the staff.

The staff will confirm successful completion of tests and the adequacy of the isolators used in the Hope Creek design. The test program used to demonstrate the capability of the isolation devices should include the maximum credible fault for its application both line to line and line to ground. The method used to determine the maximum credible fault should be provided. The maximum credible fault should be applied to the output of the device in the transverse mode.

7.2.2.6 7-14

Mauck, ICSB

PSE Action  
response to be submitted  
for staff review by  
7.1.85



The applicant stated that an analysis would be performed to justify separation of less than 6 in. in the neutron monitoring system (NMS) panel (10C608) and in the process radiation monitoring system (RMS) panels (10C635 and 10C636). The applicant provided this analysis in a letter dated September 7, 1984.

On the basis of the review of the applicant's responses and the information provided in the FSAR, the staff concludes that the Hope Creek design satisfies the requirements of IEEE Std. 384-1974 as augmented by RG 1.75, and of 10 CFR 50.55a(h) (i.e., the requirements of IEEE Std. 279) and is acceptable, subject to the staff's verification of the results of the analysis that was performed regarding separation within the NMS and RMS panels.

As a confirmatory item, the staff is currently verifying the results of the applicant's analysis regarding separation within the NMS and RMS panels.

7.2.2.7 7-15

MAUCK, ICSB

STAFF ACTION

---

(19) Reactor mode switch

7.2.2.9

---

On the basis of its review of the information provided, the staff finds the mode switch design acceptable. However, as a confirmatory item the staff is currently verifying the mode switch design and the failure analysis performed. The staff will report its findings in a supplement to this SER.

7.2.2.9 7-16

MAUCK, ICSB

STAFF Action

The staff requires that the applicant submit the revised electrical schematic/elementary diagrams for all safety-related equipment (both NSSS and BOP) that has been modified to prevent its reverting back to its normal (nonemergency) mode after an ESF reset. The staff will confirm that the valves noted above remain in their emergency mode upon an ESF reset, therefore conforming with the recommendations of IE Bulletin 80-06. Additionally, the staff will require preoperational tests to demonstrate that all equipment remains in its emergency mode upon removal of the actuating signal and/or resetting of the various isolating or actuation signals. This is a confirmatory item.

7.3.2.6 7-33

MAUCK, ICSB

PSE#6 Action

PSE#6 to provide  
response for staff  
review by 6.3.85

(21) High pressure coolant injection initiation

7.3.2.9

The applicant has proposed replacing the K32 contact in the pump discharge valve (E41-F006) logic circuit with contacts from a relay that is sealed-in upon HPCI initiation (whether automatic or manual). This is acceptable to the staff, and it concludes that this modified design will meet the requirements of IEEE Std. 279.

The staff will confirm that the HPCI design meets the requirements of IEEE Std. 279 when the final drawings are submitted to the staff.

7.3.2.9 7-14  
Mauk, ICSB

PSE&G Action

Staff awaiting PSE&G  
response

The staff has reviewed the applicability of the Limerick Generating Station approach to the resolution of the concerns raised in IE Bulletin 79-27 to Hope Creek and found it acceptable, subject to the review and approval of the recommended hardware or procedural changes or the justification for not requiring them.

The staff will require the applicant to document the results of the analysis, providing recommendation of hardware or procedural changes as appropriate in response to IE Bulletin 79-27. This currently is scheduled for submittal during the fourth quarter of 1984. This is a confirmatory item.

7.4.2.1 7-39  
MAUCK, ICSB

STAFF ACTION

PSEG letter of 2.7.85  
refers staff to Question  
A21.42 of the FSAR

On the basis of its review of the bypassed and inoperable status indication, the staff finds that the applicant has provided an acceptable method of indicating the bypass or inoperable status of portions of the protection system, systems actuated or controlled by the protection system, and auxiliary support systems. However, the information provided in FSAR Section 7.5.1.3.2 appears to conflict somewhat with FSAR Table 7.1-2 and Section 7.3.2.2 of this SER regarding the applicability of the guidance of RG 1.47 to the ESF equipment area cooling system (as indicated in FSAR Section 7.5.1.3.2).

The staff will confirm that the descriptions provided in the FSAR regarding bypassed and inoperable status indication (RG 1.47) for the ESF equipment area cooling system are consistent and acceptable to the staff. This is a confirmatory item.

7.5.2.4 7-48

MAUCK, ICSB

STAFF Action

---

(24) Logic for high pressure coolant injection interlock  
circuitry

7.6.2.1

---

The staff will review the logic configurations for the LPCI interlock circuitry when the final drawings are provided to the staff and confirm their acceptance. This is a confirmatory item.

7.6.2.1 7-59

MAVCK, ICSB

PSE&G Action  
Staff awaiting PSE&G  
response



---

(25) End-of-cycle recirculation pump trip

7.6.2.4

---

The staff review of the elementary diagrams does not indicate that the EOC RPT transfers the pumps to low-frequency M/G sets after tripping their main power supplies. At previously reviewed BWRs (e.g., Susquehanna (NUREG-0776) and River Bend (NUREG-0989)), this transfer takes place after the RPT and the pumps run at approximately one-quarter their normal speed.

There is not sufficient information for the staff to complete its review regarding the EOC RPT. The applicant is required to submit design details showing the transfer of the recirculation pump power supply to a lower frequency motor/generator set upon EOC RPT. This is a confirmatory item.

7.6.2.4 7-62

MAUCK, JCSB

STAFF Action

Response provided in  
PCEDG letter of 3.1.85

---

(26) Multiple control system failures

7.7.2.1

---

The applicant provided the results of these analyses in a letter dated August 24, 1984. On the basis of its review of the information provided, the staff finds that these concerns are resolved. However, as a confirmatory item, the staff is currently verifying the control system failures that were assumed and validating the assumed consequences.

7.7.2.1 7-67

MAUCK, ICSB

STAFF Action

---

(27) Relief function of safety/relief valves

7.7.2.2

---

The staff is currently reviewing the information provided regarding the relief function of the SRVs and will determine the adequacy of the design in a supplement to this report. This is a confirmatory item.

7.7.2.2 7-69

MAUCK, JCSB

STAFF Action

Response provided in PSE#6  
letter of 2.15.85

The applicant has committed to perform an analysis to verify that, after both the primary and backup protective devices open as a result of failure of the nonprotected equipment together with the worst-case single failure, the plant can be safely shut down. If the analysis shows the plant cannot be safely shut down, the applicant has committed to provide protection. On the basis of these commitments, the staff concludes that the design meets the protection requirements of GDC 2, 4, and 17 and is acceptable. This item is confirmatory pending receipt and review of the applicant's analysis.

8.3.3.1.4 8-13

Knox, PSB

STAFF Action  
response provided by  
letter dated 5.24.85

---

(29) Cable tray separation testing

8.3.3.3.2

---

Subsequently, the applicant by letter dated September 28, 1984, indicated that additional testing would be performed, provided a proposed test plan, and committed to install tray covers on the top and bottom of the trays in accordance with the guidelines of IEEE Std. 384-1974 if the proposed testing fails. On the basis of this commitment and the proposed test plan, the staff concludes that satisfactory test results or the alternative design proposals meet the independence requirement of GDC 17 and are acceptable. The staff will review the results of the proposed testing. This is a confirmatory item.

8.3.3.3.2 8-16

Knox, PSB

STAFF Action

response submitted by PSEdG  
letter dated 4.4.85

By letter dated October 1, 1984, the applicant provided a proposed test plan and a commitment that if the tests are not successful, either the non-Class IE loads will be removed from Class IE buses or the non-Class IE associated cables will be rerouted so that they are independent of non-Class IE cables associated with redundant safety divisions. On the basis of this commitment and the test plan, the staff concludes that satisfactory test results or the alternative design proposals meet the independence requirements of GDC 17 and are acceptable. On the basis of discussions with the applicant, it is the staff's understanding that the proposed testing of the isolation device will include subjecting it to the four fault conditions listed in the test plan as well as subjecting it to a 200% overload to demonstrate that the input current and voltage do not exceed specified values. On the basis of this understanding, the staff finds the test plan and its acceptance criteria acceptable. The staff will review the results of the proposed testing. This is a confirmatory item.

8.3.3.3.4 8-17

KNOX, PSB

STAFF Action

response provided by  
PSEG letter of 3.7.85

---

(31) Core damage estimate procedure

9.3.2

---

On the basis of the above evaluation, the staff concludes that the postaccident sampling system meets the requirements of Item II.B.3 of NUREG-D737 and is, therefore, acceptable. However, before fuel loading, a plant-specific procedure to estimate the extent of core damage should be provided. This is a confirmatory item.

9.3.2 9-24

KIRSCH, CHEB

PSE&G Action  
Staff awaiting PSE&G  
response



---

(32) Continuous airborne particulate monitors

12.3.4.2

---

The applicant will provide the locations, quantity, and type of continuous airborne monitors to be used by July 1, 1985. On the basis of the applicant's commitment to provide the above information at a later date, this is a confirmatory item.

12.3.4.2 12-8

HINSON, RAB

PSE&G Action  
response to be provided  
by 7.1.85

---

(33) Qualifications of senior radiation protection engineer 12.5.1

---

The applicant has designated the senior radiation protection supervisor as the backup for the radiation protection engineer (RPM). Draft ANSI 3.1 recommends that individuals temporarily filling the RPM position should have a B.S. degree in science or engineering and 2 years of experience in radiation protection, 1 year of which should be nuclear plant experience and 6 months of which should be on site. The applicant has stated that the senior radiation protection supervisor, as well as the radiation protection supervisors who report to him, will be qualified in accordance with ANSI 3.1-1981. The staff will review the qualifications of the senior radiation protection supervisor against the qualifications of a backup RPM when they are submitted in December 1984. This is a confirmatory item.

12.5.1 12-11

HINSON, RAB

No Action

closest SER dated 3.26.85  
received from RAB

RG 1.97 states that portable instrumentation should be available to analyze and assess post-accident conditions. The range should be 10-3 rem/hr to 104 rem/hr for photons and 10-3 rad/hr to 104 rad/hr for beta radiation and low-energy photons. Hope Creek has two portable ion-chamber dose rate instruments capable of detecting radiation in these ranges. The applicant will provide more details of the onsite instrument calibration capabilities, including sources, equipment, and methods, by July 1, 1985. This item is confirmatory pending receipt and review of this information.

12.5.2 12-12

HINSON, RAB

PSE&G ActionResponse to be provided  
by 7.1.85

Section III.D.3.3 of NUREG-0737 states that each licensee shall provide equipment and associated training and procedures for accurately determining the airborne iodine concentration in areas within the facility where plant personnel may be present during an accident. The applicant has committed to provide a description of the equipment, training, and procedures for accurately determining the airborne iodine concentration in areas within the plant where personnel may be present during an accident, by June 1, 1985 (see Section 12.3.4.2). The applicant has stated that these procedures and associated training will meet the intent of item III.D.3.3 of NUREG-0737. The staff will review this material for acceptability when it is received. This is a confirmatory item.

12.5.2 12-12

HINSON, RAB

PSE&G Action

Staff awaiting PSE&G  
response

---

(36) Emergency Plan items

13.3.2.1,  
13.3.2.4-9,  
13.3.2.12,  
13.3.2.15

---

Part 1

Section 2.1 of the plan states that the applicant has entered into agreements with the appropriate emergency response agencies that provide onsite and off-site support. These agreements (half are in either draft form or interim status) are included in the plan as Attachment 2-1. The matter of finalizing the draft and interim letters of agreement with the agencies/individuals identified in Attachment 2-1 to the plan is confirmatory.

13.3.2.1 13-20

PERROTTI, EPB

PSE#6 Action  
response to be provided  
by 6.15.85

Part 2

The plan establishes a standard emergency classification and action level scheme based on the four standard emergency classes: notification of unusual event, alert, site area emergency, and general emergency. The plan states: "The Event Classification Guide (ECG) (to be provided in December 1984) will contain all of the NUREG-0654 Appendix 1 elements in a format that assists the operators in determining the appropriate Emergency Action Level." The plan specifies that the ECG will be discussed and agreed on by the applicant and the State and local governments. Section 17.4 of the plan specifies that, as part of an annual review of the plan, the ECG will be reviewed with State and local governments. In a letter dated September 12, 1984, the applicant provided the staff with two sample draft emergency action levels (EALs). These draft EALs appear to conform to NUREG-0654, Appendix 1. The matter of the ECG is confirmatory, and the staff will ensure that the ECG is completed before fuel loading, currently projected for January 1986.

13.3.2.4 13-22

PERROTTI, EPB

STAFF Action  
PSE#6 response provided  
by letter dated 1.16.85

Part 3

In the January 31, 1984, response to the staff's request for information on the applicant's role in supporting the State and local authorities with information to be included in public messages, the applicant briefly described an emergency broadcast system (EBS) manual and committed to reference the manual in the plan. This matter is confirmatory.

13.3.2.5 13-23

PERROTTI, EPB

STAFF Action

response provided by  
PSE#6 letter dated  
4.4.85

Part 4

A description of  
the Hope Creek communication system will be provided by December 1984. This matter is confirmatory.

13.3.2.6 13-24

PERROTTI, EPB

STAFF Action

response provided by  
PSE#6 letter dated  
11.9.84

Part 5

The plan specifies that  
information will be provided in various forms - an information insert in appropriate local publications, pamphlets, advertisements, bill inserts, and placards and/or postings. On September 5, 1984, the applicant furnished the staff with a sample public information brochure and informed the staff that the final brochure would be provided in mid-1985. In a letter dated September 12, 1984, the applicant committed to provide the final brochure to the local population as outlined in the plan. This matter is confirmatory.

13.3.2.7 13-25

PERROTTI, EPB

PSE#6 Action

response to be submitted  
for staff review by  
6.15.85

Part 6

The plan identifies the location of the TSC and operations support center (OSC), and provides a general summary of the purpose of these facilities. In the January 31, 1984, submittal, the applicant stated that the OSC and TSC are under construction, and as information on these facilities becomes available, it will be incorporated into the plan. This matter is confirmatory.

13.3.2.8 13-26

PERROTT, EPB

PSE&G Action  
response to be submitted  
by 6.15.85

Part 7

In the January 31, 1984, response to the staff's request for additional information on onsite monitoring systems used to initiate emergency measures and for conducting assessment, the applicant stated that the plan will be updated as information becomes available on these systems. This matter is confirmatory.

13.3.2.8 13-26

PERROTT, EPB

PSE&G Action  
response to be submitted  
by 6.15.85

Part 8

The Hope Creek plan should be updated with regard to the support and resources to be provided by the Salem Generating Station, including seismic and hydrological data. In a letter dated September 12, 1984, the applicant committed to include this information in the next plan revision, scheduled for October 1984. This matter is confirmatory.

13.3.2.8 13-26

PERROTT, EPB

STAFF Action  
PSE&G provided response  
by letter dated 11.9.84



Part 9

The meteorological monitoring program as presented in the plan, including procedures for its use, will be reviewed and evaluated at the time of the onsite emergency preparedness implementation appraisal (preoperational inspection). The applicant will be required to correct any deficiencies identified by the staff. Accordingly, this matter of the meteorological monitoring program, as presented in the plan, is confirmatory pending the outcome of the onsite appraisal.

13.3.2.8 13-27

PERROTTI, EPB

STAFF Action  
response provided by  
PSE#6 letter of 4.4.85

Part 10

The plan specifies that the instruments and plant parameter values needed to identify an accident class will be provided in Section 5, "Emergency Classification System." The applicant has committed to provide this information by December 1984. In addition, the plan specifies that a list of portable sampling and survey instrumentation will be provided by July 1985. The matter regarding the onsite monitoring and assessment systems is confirmatory.

13.3.2.9 13-28

PERROTTI, EPB

PSE#6 Action  
response to be submitted  
by 6.15.85

Part 11

The applicant has committed to provide curves of containment radiation monitor readings versus time for various scenarios (i.e., reactor coolant release, coolant and gap activity, 1% fuel inventory, and 10% fuel inventory) at a later time. This matter is confirmatory.

13.3.2.9 13-28

PERROTTI, EPB

STAFF Action  
response provided by  
PSE#6 letter dated 4.4.85



Part 12

The staff discussed the hospital plan with the applicant on September 20, 1984, and requested that certain portions of the plan be clarified. The applicant agreed to coordinate with SMH and RMC in finalizing the revisions to the SMH plan. This matter is confirmatory.

13.3.2.12 13-31

PERRONI, EPB

STAFF Action

PSE#6 responded by  
letter dated 2.7.85

Part 13

In a letter dated September 12, 1984, the applicant provided a copy of the information guide to be provided to personnel on site who do not have badges for unescorted access. This visitor's guide, similar to one currently used at Salem, will be used at Hope Creek. This matter is confirmatory.

13.3.2.15 13-33

PERRONI, EPB

STAFF Action

PSE#6 responded by  
letter dated 11.9.84

II K.3.18 Modification of ADS Logic

By FSAR Amendment 5, the applicant adopted the results of the BWRDG report ("NUREG-0737, Item II.K.3.18 - Modification of Automatic Depressurization Systems (ADS) Logic--Feasibility for Increased Diversity for Some Events" dated October 28, 1982) on TMI Action Plan Item II.K.3.18. The applicant has committed to modify the ADS logic to bypass the high drywell pressure trip after a sustained lower water level signal and to add a manual switch that may be used to inhibit ADS actuation if necessary. This is consistent with Option 4 of the BWRDG study and is acceptable to the staff with the following conditions:

- (1) Installation must be completed before initial criticality.
- (2) Technical Specifications must be provided for the bypass timer and manual inhibit switch.
- (3) The use of the inhibit switch must be addressed in the plant emergency procedures.
- (4) A plant-specific analysis must be provided to justify the bypass timer setting.

The staff finds the conceptual design for ADS logic modifications proposed by the applicant acceptable confirmatory on completion of the above specified actions.

15.9.3 15-22

THOMAS, RSB

→ PSE&G Action→ Staff Action

response provided by PSE&amp;G letter dated 1.17.85

→ Staff Action: response provided by PSE&G letter of 4.22.85→ Staff Action: response provided by PSE&G letter dated 3.1.85

cc: J. Ridgely  
S. Kirslis  
D. Kubicki  
L. Ruth  
D. Perrotti  
R. Jachowski  
R. Wright  
J. Lombardo  
H. Garg  
C. Hinson  
G. Thomas  
G. Lapinsky  
J. Mauck  
J. Buzy  
F. Allenspach  
H. Shaw  
P. Li  
P. Kirkwood  
J. Fairbent  
H. Hum  
D. Smith  
S. Rhoads  
J. Knox  
M. Goodman  
T. Novak  
H. Thompson

cc w/o enclosures:  
K. Houston  
L. Rubenstein  
R. Bernero  
J. Knight  
W. Johnston  
R. Bosnak  
W. Russell

MEB	0	1
MtEB	0	1
PSB	1	3
RSB	0	3 (2 confirmatory items, 1 with 2 subparts)

The above list reflects the project status as of June 1, 1985. Because open/confirmatory items are not considered resolved until DL has received an SER from the appropriate review organization, those items for which SERs are in preparation have not been accounted for in this listing.

Enclosure 2 is a detailed listing of each open/confirmatory item. For each item, the word descriptions from the SER have been excerpted and reproduced within. Also, the reviewer, branch of origin and status of each item are identified. In most cases, the status refers the staff to PSE&G submittals responding to the items.

By letter dated May 22, 1985, PSE&G notified the NRC that the fuel load date for Hope Creek has been accelerated from January 14, 1986 to December 1, 1985. This will place added importance on the staff reviewing PSE&G open/confirmatory item responses in a timely fashion. Accordingly, for those open/confirmatory items identified as requiring staff action, you are requested to review the material referenced in Enclosure 2 and to provide DL the SER(s) for inclusion in the next SSER. The schedule for issuing SSERs is as follows:

<u>Document</u>	<u>Issuance Date</u>	<u>SER Input to PM (Drop-dead date)</u>
SSER 2	June 1985	June 1, 1985
SSER 3	August 1985	August 1, 1985
SSER 4	October 1985	October 1, 1985
SSER 5	November 1985	November 1, 1985

**Original signed by:**

Walter Butler, Chief  
Licensing Branch No. 2  
Division of Licensing

Enclosures: As stated

cc: See next page

\*Previously concurred  
DL:LB#2  
\*DWagner  
05/30/85

DL:LB#2  
WButler  
06/3/85

WB

DISTRIBUTION

Docket File  
NRC PDR  
Local PDR  
PRC System  
NSIC  
LB#2 Reading

Dewey, OELD  
WButler  
DWagner  
EHylton

MEB	0	1
MtEB	0	1
PSB	1	3
RSB	0	3 (2 confirmatory items, 1 with 2 subparts)

The above list reflects the project status as of June 1, 1985. Because open/confirmatory items are not considered resolved until DL has received an SER from the appropriate review organization, those items for which SERs are in preparation have not been accounted for in this listing.

Enclosure 2 is a detailed listing of each open/confirmatory item. For each item, the word descriptions from the SER have been excerpted and reproduced within. Also, the reviewer, branch of origin and status of each item are identified. In most cases, the status refers the staff to PSE&G submittals responding to the items.

By letter dated May 22, 1985, PSE&G notified the NRC that the fuel load date for Hope Creek has been accelerated from January 14, 1986 to December 1, 1985. This will place added importance on the staff reviewing PSE&G open/confirmatory item responses in a timely fashion. Accordingly, for those open/confirmatory items identified as requiring staff action, you are requested to review the material referenced in Enclosure 2 and to provide DL the SER(s) for inclusion in the next SSER. The schedule for issuing SSERs is as follows:

<u>Document</u>	<u>Issuance Date</u>	<u>SER Input to PM (Drop-deed date)</u>
SSER 2	June 1985	June 1, 1985
SSER 3	August 1985	August 1, 1985
SSER 4	October 1985	October 1, 1985
SSER 5	November 1985	November 1, 1985

Walter Butler, Chief  
Licensing Branch No. 2  
Division of Licensing

cc: See next page

DL:LB#2  
DL Wagner  
05/30/85

DL:LB#2  
WButler  
05/ /85

MEB	0	1
MtEB	0	1
PSB	1	3
FSB	0	3 (2 confirmatory items, 1 with 2 subparts)

The above list reflects the project status as of June 1, 1985. Because open/confirmatory items are not considered resolved until DL has received an SER from the appropriate review organization, those items for which SERs are in preparation have not been accounted for in this listing.

Enclosure 2 is a detailed listing of each open/confirmatory item. For each item, the word descriptions from the SER have been excerpted and reproduced within. Also, the reviewer, branch of origin and status of each item are identified. In most cases, the status refers the staff to PSE&G submittals responding to the items.

By letter dated May 22, 1985, PSE&G notified the NRC that the fuel load date for Hope Creek has been accelerated from January 14, 1986 to December 1, 1985. This will place added importance on the staff reviewing PSE&G open/confirmatory item responses in a timely fashion. Accordingly, for those open/confirmatory items identified as requiring staff action, you are requested to review the material referenced in Enclosure 2 and to provide DL the SER(s) for inclusion in the next SSER. The schedule for issuing SSERs is as follows:

<u>Document</u>	<u>Issuance Date</u>	<u>SER Input to PM (Drop-dead date)</u>
SSER 2	June 1985	June 1, 1985
SSER 3	August 1985	August 1, 1985
SSER 4	October 1985	October 1, 1985
SSER 5	November 1985	November 1, 1985

**Original signed by:**

Walter Butler, Chief  
Licensing Branch No. 2  
Division of Licensing

Enclosures: As stated

cc: See next page

\*Previously concurred

DL:LB#2

\*DWagner

05/30/85

DL:LB#2

WButler

06/3/85

**DISTRIBUTION**

Docket File

NRC PDR

Local PDR

PRC System

NSIC

LB#2 Reading

Dewey, OELD

WRutler

DWagner

FHyton