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KNIGHTON, G. W. Licensing Branch 3

SUBJECT: Forwards final internal review program rept. Rept updates status repts submitted on 840731, (DCL-84-276) & 841019, (DCL-84-322). Rev 2 to Tables 1, 2 & 3 supersedes previous submittals.

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	ELD/HDS2		1	0	IE FILE		1	1
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	IE/DQASIP/QAB	21	1	1	NRR ROE, M. L		1	1
	NRR/DE/AEAB		1	0	NRR/DE/CEB	11	1	1
	NRR/DE/EHEB		1	1	NRR/DE/EQB	13	2	2
	NRR/DE/GB	28	2	2	NRR/DE/MEB	18	1	1
	NRR/DE/MTEB	17	1	1	NRR/DE/SAB	24	1	1
	NRR/DE/SGEB	25	1	1	NRR/DHFS/HFEB	40	1	1
	NRR/DHFS/LQB	32	1	1	NRR/DHFS/PSRB		1	1
	NRR/DL/SSPB		1	0	NRR/DSI/AEB	26	1	1
	NRR/DSI/ASB		1	1	NRR/DSI/CPB	10	1	1
	NRR/DSI/CSB	09	1	1	NRR/DSI/ICSB	16	1	1
	NRR/DSI/METB	12	1	1	NRR/DSI/PSB	19	1	1
	NRR/DSI/RAB	22	1	1	NRR/DSI/RSB	23	1	1
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	RM/DDAMI/MIB		1	0				
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	NRR/DE/EHEB	1	1	NRR/DE/EQB 13	2	2
	NRR/DE/GB 28	2	2	NRR/DE/MEB 18	1	1
	NRR/DE/MTEB 17	1	1	NRR/DE/SAB 24	1	1
	NRR/DE/SGEB 25	1	1	NRR/DHFS/HFEB40	1	1
	NRR/DHFS/LQB 32	1	1	NRR/DHFS/PSRB	1	1
	NRR/DL/SSPB	1	0	NRR/DSI/AEB 26	1	1
	NRR/DSI/ASB	1	1	NRR/DSI/CPB 10	1	1
	NRR/DSI/CSB 09	1	1	NRR/DSI/ICSB 16	1	1
	NRR/DSI/METB 12	1	1	NRR/DSI/PSB 19	1	1
	NRR/DSI/RAB 22	1	1	NRR/DSI/RSB 23	1	1
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	RM/DDAMI/MIB	1	0			
EXTERNAL:	BNL(AMDTS ONLY)	1	1	DMB/DSS (AMDTS)	1	1
	FEMA-REP DIV 39	1	1	LPDR 03	2	2
	NRC PDR 02	1	1	NSIC 05	1	1
	NTIS	1	1			
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JAMES D. SHIFFER
VICE PRESIDENT
NUCLEAR POWER GENERATION

November 2, 1984

PGandE Letter No.: DCL-84-344

Mr. George W. Knighton, Chief
Licensing Branch No. 3
Division of Licensing
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Re: Docket No. 50-323
Diablo Canyon Unit 2
Internal Review Program Final Report

Dear Mr. Knighton:

Enclosed is PGandE's Final Report on the Unit 2 Internal Review Program. The Final Report updates the Status Reports previously submitted on July 31, 1984 (DCL-84-276) and October 19, 1984 (DCL-84-332). Revision 2 of Tables 1, 2, and 3 supersedes those previously submitted.

Kindly acknowledge receipt of this material on the enclosed copy of this letter and return it in the enclosed addressed envelope.

Sincerely,

For J. D. Shiffer

cc: H. E. Schierling
Service List

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1/40

PGandE Letter No.: DCL-84-344

ENCLOSURE

INTERNAL REVIEW PROGRAM

FOR DIABLO CANYON UNIT 2

FINAL REPORT

0132s/0023K

CONTENTS

DIABLO CANYON UNIT 2

INTERNAL REVIEW PROGRAM FINAL REPORT

I. PURPOSE AND OBJECTIVE

The Unit 2 Internal Review Program (IRP)* was established in late 1982 to determine the applicability and impact on Unit 2 of the Unit 1 design verification issues identified by the Independent Design Verification Program (IDVP) and the Internal Technical Program (ITP). Subsequently, the Unit 1 Open Items and Followup Items identified by the Staff in SSERs 18, 19, and 20 and License Condition 2.C.(11) items were reviewed to determine if similar action was required on Unit 2. The objective of the Unit 2 IRP is to assure that all applicable Unit 1 design verification program-related items have been addressed and satisfactorily resolved for Unit 2.

II. BACKGROUND

In response to the NRC order and letter issued on November 19, 1981, Pacific Gas and Electric Company (PGandE) established several programs to verify the adequacy of the Diablo Canyon Unit 1 design and its compliance with licensing criteria and requirements. Two major efforts responded to these requirements. One was formation of an integrated Diablo Canyon Project (DCP or Project) organization in April 1982 comprised of personnel from the Bechtel Power Corporation and PGandE. The Project is responsible for completing Diablo Canyon Units 1 and 2 and has established separate engineering organizations for each Unit. The second effort was comprised of several outside companies completely independent of PGandE and the DCP called the Independent Design Verification Program (IDVP).

The November 19, 1981, order and letter required the submittal of the results of an independent design verification program on safety-related seismic and nonseismic design activities pertaining to Unit 1.

As prescribed in the November 19, 1981, order and letter, the purpose of the IDVP was to verify the DCP design process and assess the effectiveness of the implementation of design quality assurance (QA) procedures and controls by each contractor and PGandE.

This verification involved developing criteria for selection of a suitable number and type of sample calculations related to the design of safety-related structures, systems, and components. Following identification of the sample, the IDVP verified the design process for the calculations selected.

*A glossary of terms is included as Attachment 5.

As an outgrowth of the early review program and the development of the IDVP, the ITP was established within the DCP to:

- Provide an additional design verification effort to assure the overall adequacy of the design and analysis of Unit 1
- Respond to IDVP open items and findings
- Implement design modifications or other corrective actions arising from the IDVP and ITP. This function was called the Corrective Action Program (CAP).

The IDVP was managed by Teledyne Engineering Services, Waltham, Massachusetts. Teledyne reported independently to the NRC and PGandE, and retained three companies to perform the work. Thus, the IDVP was comprised of Teledyne and the following companies:

- R. F. Reedy and Associates - quality assurance review
- Stone & Webster Engineering Corporation - verification of the nonseismic design aspects of several safety systems
- Robert L. Cloud Associates, Inc. - verification of the seismic design aspects of structural and mechanical systems

Prior to issuance of reports, the results of the design verification and analysis performed by these companies were reviewed and approved by Teledyne.

III. SCOPE

The scope of the IRP includes: (1) determining the applicability for Unit 2 review of issues identified in the IDVP, ITP, and NRC reviews of Unit 1; (2) monitoring the development and completion of the Unit 2 resolutions; and (3) providing documented records. This work is performed under Unit 2 procedures established in accordance with the NRC-approved Project QA Program.

In particular, the following specific items have been reviewed:

- Design-related Error and Open Items (EOIs) identified by the IDVP, Open Items (OIs) identified by the ITP, and Unit 1 concerns discussed in PGandE Phase I and Phase II final reports (See Table 1).
- NRC-identified Open Items and Follow-up Items documented in SSERs 18, 19 and 20 (See Table 2).
- Generic items discussed in IDVP Interim Technical Reports and other verification program-related items (not included as EOIs). (See Table 3.)

IV. ORGANIZATION

The Unit 2 engineering organization is directed by a Project Engineer who is supported by five Assistant Project Engineers (APEs) (see Figure 2). The APEs are responsible for work done in the following areas: (1) seismic design, (2) system design, (3) special projects, (4) quality engineering, and (5) the Unit 2 IRP.

The APEs responsible for system design and quality engineering also serve Unit 1. The APE responsible for the IRP is designated as the IRP Director.

To support the IRP for Unit 2, engineering group supervisors and discipline group leaders interface directly with the Program Director in the Project matrix organization (see Figure 2). These individuals are responsible to the Program Director for the technical review and resolution of Unit 1 design verification program issues applicable to Unit 2. The IRP has available to it the technical resources of both Unit 1 and Unit 2 engineering organizations.

V. METHODOLOGY

The method for evaluating the applicability of Unit 1 findings to Unit 2 and implementing corrective actions is specified in Project Engineer's Instruction No. 13 (PEI-13) which was approved by Project QA. This method has been summarized on the Flow Chart (Figure 1). The five steps identified on the Flow Chart are described in detail below.

Step 1

The initial assessment of the applicability of each Unit 1 item for Unit 2 review is made by the IRP Director. Any Unit 1 item assessed as not applicable for further Unit 2 review is so noted by the IRP Director and appropriate documentation is included in the file which includes the rationale for that assessment. The IRP Director applies one of the following criteria in making the initial assessment:

- Unit 2 is identical to Unit 1 with respect to the subject item and the Unit 1 resolution is equally applicable to Unit 2
- The item applies to a portion of the plant common to both Units 1 and 2 and, therefore, is already resolved by the Unit 1 verification program
- The item applies only to Unit 1
- The item raised by a Unit 1 IDVP participant is actually not an error or deviation, and is, therefore, inconsequential
- Additional Unit 2 reanalyses/reviews already in progress prior to IRP review initiation clearly envelop the area of concern.

Step 2

Unit 1 items that are not excluded by one of the above criteria are designated by the IRP Director for further Unit 2 review. Appropriate source documents describing these items and their resolutions on Unit 1 are assembled into Unit 2 review packages and given individual package numbers. Review responsibility for each package is assigned by the IRP Director to a Lead Review Entity (LRE) who is normally a Unit 2 engineering discipline group supervisor.

The first step in the review involves comparing the Units 1 and 2 designs to determine similarities and differences. The LRE is responsible for coordinating the efforts of others involved in the review and for monitoring the review progress. The LRE ensures that available PGandE engineers who took part in the original design work, as well as all other groups or entities knowledgeable in the specific area of plant design, are involved in the review process. The LRE also ensures that the licensing bases for the plant are met.

Step 3a

For items essentially identical in both units, an evaluation of the Unit 1 resolution is made to determine whether or not it is needed in the analogous Unit 2 area to satisfy the Unit 2 design commitments. If so, the Unit 1 resolution is implemented on Unit 2 using existing Project procedures.

Step 3b

When review item resolutions are not identical for both units, the differences are documented. Before implementing the resolution for Unit 2, the LRE ensures that a licensing review of the resolution is performed to assure consistency with license requirements. Appropriate action is also taken to ensure that Unit 2 specific requirements are satisfied. If a Unit 2 resolution involves changes to plant operating procedures, PGandE's Nuclear Plant Operations (NPO) Department is notified. Confirmation of NPO's intent to change the applicable operating procedure is included in the review package.

Step 4

For review items that involve physical modifications to the Unit 2 plant, the appropriate engineering documents for the modifications are issued to PGandE's General Construction (GC) Department. Upon completion of the physical modifications, the as-built documentation for the construction work is reviewed by Project Engineering in accordance with existing project procedures to assure that the modifications conform to design requirements.

Step 5

When the Unit 2 resolution is completely implemented, the LRE fills out a Completion Sheet identifying the documents that confirm completion of the work. The Completion Sheet is included in the review package along with other applicable documentation, such as a Review Package Cover Sheet, Alternate

Plans Sheets, and a Resolution Sheet (see Attachments 1, 2, 3, and 4, respectively). The Unit 2 review is considered complete when the Completion Sheet is signed by the Unit 2 Project Engineer (or his designee) and the review package is filed in the IRP records.

VI. CONCLUSIONS

The Unit 2 IRP has accomplished its goal of addressing review items identified by the Unit 1 design verification programs for their impact on Unit 2 and ensuring that applicable resolutions are developed for Unit 2. The IRP addressed all of the Unit 1 design verification items identified by the IDVP, ITP, and NRC as EOIs, OIs, SSER Open and Followup Items, and License Condition 2.C(11) Items. In addition, the IRP addressed other design verification-related items identified in IDVP Interim Technical Reports, in NRC correspondence, and by the Unit 2 Allegation Review Program. Since separate analyses were in progress and continuing on Unit 2 in various areas of structural and piping design, as part of the Unit 2 completion effort, the IRP also served as a monitoring system to follow the progress and document the completion of the Unit 2 reviews associated with the design verification-related issues identified on Unit 1.

Of 195 review packages composed of items applicable to Unit 2, only twelve IRP review packages are still in Engineering review. The last of these reviews is scheduled to be completed by November 30, 1984. Attached Tables 1, 2, and 3 summarize the resolutions and followup actions resulting from the Unit 2 review of each of the specific Unit 1 items addressed.

As might be expected, due to the similarity of the two units, and the commonality of the Unit 1 and 2 design philosophies and criteria, virtually all of the Unit 2 resolutions, usually implemented as part of the Unit 2 completion effort, were essentially the same as those implemented on Unit 1. In two instances, the Unit 2 resolution is different than the final resolution for Unit 1 (IRP Packages No. 2-1049 and No. 2-8049). The difference is due to either a different location for the subject Unit 2 equipment or a different Unit 2 local piping configuration with associated different locations for pipe supports. Neither of these Unit 2 resolutions resulted in any significant modifications to the plant.

The followup action items associated with the Unit 2 resolutions are either physical modifications implemented in conjunction with normal plant completion, changes incorporated in the FSAR Update, or changes in the plant operating procedures. Where physical modifications are required to implement the Unit 2 resolutions, they were included in the continuing evolving Unit 2 design and will be completed prior to the Unit 2 fuel load. The required changes incoporated in the FSAR Update and changes to the plant operating procedures apply equally to both Units 1 and 2.

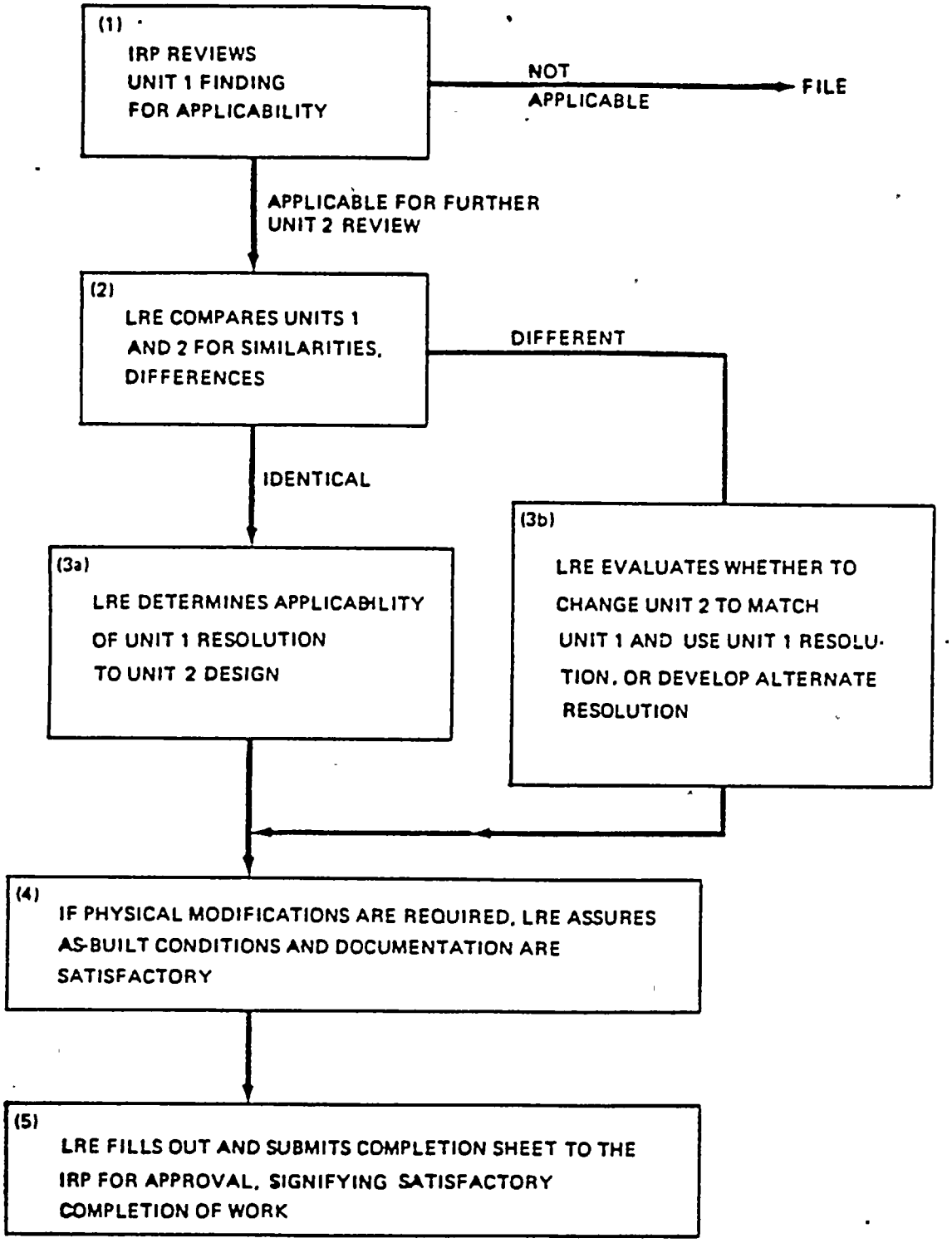

Figure 1
UNIT 2 REVIEW OF UNIT 1 FINDINGS

G1003620-21

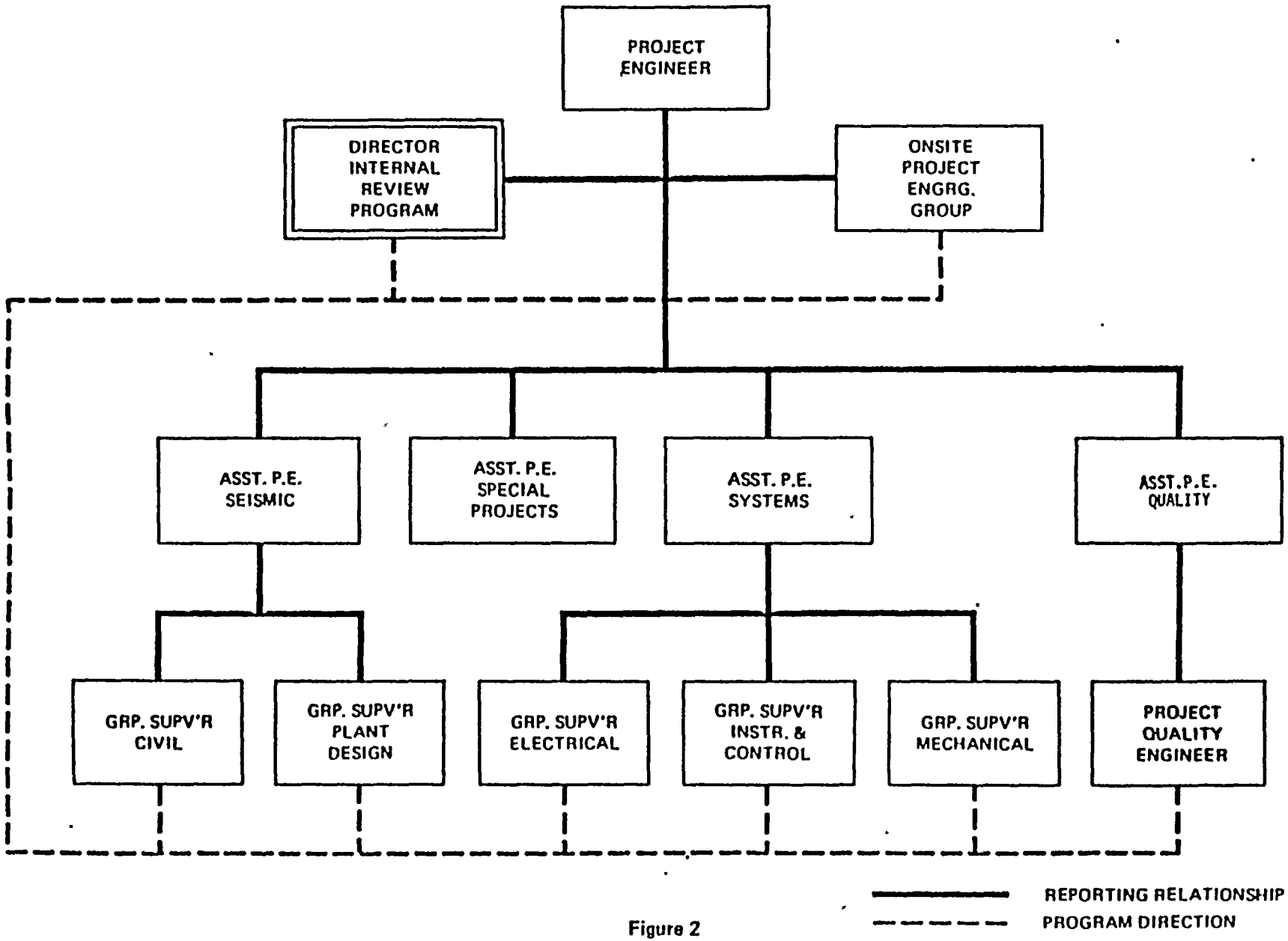

Figure 2
DIABLO CANYON PROJECT
UNIT 2 ORGANIZATION

ATTACHMENT 1

Diablo Canyon Unit 2
Internal Review of Unit 1
Verification Program Results

REVIEW PACKAGE COVER SHEET

Package No. _____

Description of Concern _____

_____

Package Contents

[ ] Unit 2 Alternative Plans Sheet
[ ] Unit 2 Resolution Sheet
[ ] Unit 2 Completion Sheet
Unit 1 Verification Documents (as listed):

_____
_____
_____
_____
_____
_____

Other Reference Documents/Correspondence (as listed):

_____
_____
_____
_____
_____

Unit 2 Review Responsibility

Lead Review Entity _____

Other Disciplines/Entities:

_____
_____
_____
_____

ATTACHMENT 2

Diablo Canyon Unit 2
Internal Review of Unit 1
Verification Program Results

ALTERNATIVE PLANS SHEET

Package No. _____

1. Description of Concern: _____

2. Description of Unit 1 resolution: _____

3. Reason why Unit 2 should not be changed to match Unit 1: _____

4. Description of alternative plans to resolve concern on Unit 2:

5. Responsibility for leading coordination and final determination of resolution: _____ _____
Entity/Person Sched. Completion Date

Lead Review Entity: _____ _____
Signature Date

Approved: _____ _____
Signature Date

ATTACHMENT 3

Diablo Canyon Unit 2
Internal Review of Unit 1
Verification Program Results

RESOLUTION SHEET

Package No. _____

1. Description of Concern: _____

2. Description of Unit 2 resolution: _____

Same as Unit 1 resolution? [ ] Yes [ ] No - See Alternative Plans Sheet for input

3. If resolution is unique for Unit 2, has licensing review been completed? [ ] Yes [ ] No. If not, scheduled completion date is _____.

4. Are revisions to operating procedures required? [ ] Yes [ ] No.

Description of Operating Procedure Revision(s)	Initiating ICM/Date	Respon. for Issuing DCN & Confirming Completion Entity/Person	Sched. Compln. Date of Rev(s)

5. Are physical modifications required? [ ] Yes [ ] No

Description of Physical Modifications	DCN No.	Respon. for Issuing DCN & Confirming Completion Entity/Person	Sched. Compln. Date of Mod(s)

Lead Review Entity: _____ _____
Signature Date

Approved: _____ _____
Signature Date

ATTACHMENT 4

Diablo Canyon Unit 2
Internal Review of Unit 1
Verification Program Results

COMPLETION SHEET

Package No. _____

1. Unit 2 resolution of Unit 1 concern in Open Item/EOI File No. _____ involves:
   [ ] Physical modification(s).
   [ ] Change(s) to operating procedure(s).
   [ ] No physical modifications nor changes to operating procedures.
   [ ] Licensing review.

2. Completion of Unit 2 Resolution Involving NO Physical Modifications Nor Changes to Operating Procedure

   Confirming Document _____ Date _____

3. Completion of Revision(s) to Operating Procedure(s)

   Confirming Document _____ Date _____

4. Completion and Acceptance of Physical Modification(s)

   Document _____/Date _____ confirming that construction was completed.

   Document _____/Date _____ confirming that as-built modification is acceptable to Engineering.

5. Completion of License Review of Unique Unit 2 Resolution Confirming Document _____ Date _____

6. Applicable Nonconformance Report No. _____ or Discrepancy Report No. _____.

Lead Review Entity: _____ _____
Signature Date

Approved: _____ _____
Signature Date

ATTACHMENT 5

INTERNAL REVIEW PROGRAM FINAL REPORT

GLOSSARY OF TERMS

TERM	DESCRIPTION	DEFINITION
CAP	Corrective Action Program	The Unit 1 program which implemented design modifications or other corrective actions arising from the IDVP and ITP.
EOI	Error and Open Item	A term used by the IDVP to identify its Unit 1 findings. At the time an EOI was identified, it was not known if the finding would be classified as an error, or as an open item.
GC	General Construction	The PGandE department responsible for construction of the plant.
IDVP	Independent Design Verification Program	The program required by the November 19, 1981 order which established the independent review of the Diablo Canyon Power Plant Unit 1 design process.
IRP	Internal Review Program	The Unit 2 program established to determine the applicability of Unit 1 findings on Unit 2.
ITP	Internal Technical Program	The program established within the Diablo Canyon Project to perform additional design verification, independently of the IDVP. Also, the ITP resolved IDVP findings.
LRE	Lead Review Entity	A Diablo Canyon Project engineer, usually an engineering discipline group leader, responsible for resolving certain Unit 1 findings which are applicable to Unit 2.
NPO	Nuclear Plant Operations	The PGandE department responsible for operation of the plant.
OI	Open Item	A term used by the ITP to identify its Unit 1 findings.

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ATTACHMENT 6

Legend and Other Explanatory Notes for Tables

Column Heading	Explanation
Unit 1 EOI/OI No. (Table 1 only)	Number assigned by Unit 1 Independent Design Verification Program for EOIs (Errors & Open Items) or by Unit 1 Internal Technical Program for OIs (Open Items).
Unit 2 IRP Pkg. No.	Number assigned to review package by Unit 2 Internal Review Program. i) If the package no. does not correspond to the EOI/OI No., then the EOI/OI is included in a combined package bearing the indicated package number. This is done to include similar topics in one package for resolution. ii) The designation "N/A" indicates that a review package is not generated for the particular EOI/OI because the initial assessment determined further review was not necessary for Unit 2.
Description	Brief description of topic.
Review Summary	Review intent or process. If not applicable for further Unit 2 review, indicates criteria upon which this determination was made. (See Step 1 of Report Section V).
Findings and Resolutions	Results of package reviews.
Resolution Status	Resolution is considered COMPLETE when the engineering review is finished and any required followup action is identified, i.e., physical modifications in accordance with the design change procedure, revisions to plant operating procedures, updates of FSAR sections, etc.
Phys. Mod., Op. Proc. Chg., FSAR Rev.	Indicates followup actions, i.e., physical modifications, changes to operating procedures and FSAR revisions, when required.

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E 1

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 OI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1	2-0001	During a review of piping analyses in the annulus area, the modeling of all valves in the area was checked. Six valves were found to have been modeled incorrectly.	In Unit 2 piping analyses performed by the Diablo Canyon Project (DCP), hand- and remote-operated valves were modeled to DCP Procedure P-11, Section 4.5.6. Westinghouse-modeled valves were checked by DCP to ensure pipe stresses were within allowables.	All Unit 2 valves installed in Class 1 piping were found to be qualified as part of the overall Unit 2 piping completion program.	Complete	None
2	2-0002	An error was discovered in the digitization of the E-W translational response spectra (Newmark) for the Hosgri earthquake. The digitized peaks were lower than the actual curves by 12%.	Seismic analyses in the Aux. Bldg. are based on the DCMs C-17 (Hosgri) C-25 (DE), and C-30 (DDE). Safety-related piping is analyzed using secondary response spectra which are generated from the primary spectra (DCM-C-17, C-25, C-30) as described in procedure P-29. The digitized spectra referred to in the concern were never used in Unit 2 analyses.	No corrective action is required since correct spectra was used in the Unit 2 reanalysis of all piping.	Complete	None
3	2-0983	The method used to calculate raceway weights for electrical raceway supports resulted in an underestimation of the weights of some conduits.	The table of raceway weights was revised and the supports evaluated based on the correct weights.	The raceway support qualification program includes the modification of some supports due to this evaluation as documented in IRP Package No. 2-0983.	Complete	Modifications are pending. Providing seismic reinforcements, new supports and/or bracings as required.
4	2-0004	Review of all small bore piping identified 42 supports requiring vertical restraint, where only a single rod was used.	All small bore piping supports, including dead load supports, are being evaluated as part of the overall Unit 2 piping completion program. Vertical restraints were designed in accordance with DCM No. M-9 which requires that the pipe be physically restrained in both directions along the restraining axis.	Modifications, if required, were made as part of the overall Unit 2 piping completion program.	Complete	Modifications were included as part of piping completion program.

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 OI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
5	N/A	One valve list in the Hosgri Report was not updated as required by a licensing document.	Hosgri qualification accelerations and frequencies for active valves in both Units 1 & 2 were updated and incorporated into DCM M-58.	Because the work was completed during the resolution of the IDVP concern on Unit 1, no further Unit 2 review is required.	N/A	N/A
6	N/A	In a small number of instances, in accordance with past practice, deviations from maximum allowable span lengths for small bore (SB) pipe were approved based on engineering judgment.	All Unit 2 piping is analyzed using applicable computer programs.	Because the Unit 2 piping analysis does not involve the use of support span tables, no further Unit 2 review is required.	N/A	N/A
7	2-0007	A piping review of the containment annulus area revealed two thermal analyses that incorrectly modeled supports.	Review and checking for correct support modeling is performed in accordance with Section 4.4.4 of procedure P-11 for piping stress analysis. This work is being performed during the separate overall Unit 2 piping completion program.	No findings were determined solely as a result of this item. Physical modifications required to ensure that pipe stresses are below allowables are the combined result of many aspects of the piping/support design review.	Complete	None attributable solely to this specific concern.
8	2-1014	Inappropriate spectra were used to analyze containment piping, raceways and supports.	Applicable response spectra were developed and included in DCMs C-17 and C-25 for containment interior locations above Elev. 140 ft. and the exterior pipeway and were used in the containment pipe and raceway support seismic analyses.	All pipe and pipe support designs located in the containment interior structure above Elev. 140 ft. and attached to the pipeway were shown to be qualified to the appropriate spectra.	Complete	None.
9	2-1058	A small number of Class 1 pipe supports were found to have less than the minimum required shear lugs. Support 58N/21R had lug and local pipe overstresses.	Pipe support shear lugs are being evaluated as part of the overall Unit 2 piping completion program.	Unit 2 Support 8/21R design comparable to 58N/21R on line 316 was modified to delete the axial restraint. Other supports are being reviewed as part of the piping completion program.	Complete	Physical modifications complete.

TA (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 OI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
10	N/A	Seven annulus area piping analyses were found for which spectra sets were not enveloped by the appropriate revised and reoriented spectra.	All Unit 2 safety-related piping and associated supports are analyzed and verified in accordance with PEI No. 11 using the latest applicable response spectra available through controlled distribution per Civil Engineering Procedure No. VJG-1, Rev. 2.	Because of the comprehensive Unit 2 piping analysis effort, no further review of this specific item is required.	N/A	N/A
11	N/A	A preliminary erroneous URS/Blume natural frequency calculation was used to qualify the plant exhaust vent.	Reanalysis of the vent using DCM C-26 showed it to be fully capable of resisting seismic loads.	Because DCM C-26 applies to both Units and the installed exhaust vents are identical in both Units, no further Unit 2 review is required.	N/A	N/A
12	2-1014	Some incorrect masses were used in the containment interior structure dynamic model, which is used for generating vertical response spectra for the annulus structure.	The Unit 2 containment annulus steel, platforms and concrete structures were completely evaluated using correct mass inputs.	Appropriate spectra in DCM C-17 resulting from the reanalysis using correct masses was used for structure, system and component qualification.	Complete	None
13	2-0013	Numerous discrepancies were identified between the as-built piping configurations and the piping isometrics.	Unit 2 Procedure P-35, Rev. 1 describes the incorporation of as-built information and the interfacing/coordination between responsible groups to ensure accuracy of the isometrics.	The engineering review and acceptance of as-built conditions is a prescribed and documented function in the project procedures subject to periodic auditing by PGandE and project QA organizations.	Complete	None
14	2-0014	A deficiency was found in the instructions for projection of skewed lines of small bore piping in a design criteria document.	All Unit 2 seismic Category I piping has been computer analyzed using Procedure P-11 rather than the instructions of concern provided in DCM M-40.	Because DCM M-40 is only applicable to Unit 1 and not used by Unit 2, no resolution of this item is required.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 OI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
15	2-0015	Documentation of the qualification of certain small bore piping support standard details for bi-directional loading could not be located.	Unit 2 review is not required since no small bore support standard details were developed on Unit 2.	Project support standard details referred to in some Unit 2 calcs. were developed and qualified by Unit 1.	Complete	None
16	2-0016	An incorrect File 44 value for the Hosgri horizontal seismic coefficient for the Auxiliary Building was found.	File 44 coefficients are used in Unit 2 only to determine seismic loads for support designs in non-seismic Category I portions of lines. Support loads for seismic Category I piping are based on latest approved computer analyses.	The Unit 2 review revealed that the subject Hosgri horizontal seismic coefficient for Auxiliary Building Elev. 163 ft. is 7.1 as now given in Table 1 of DCM M-9, Rev. 7, Appendix A.	Complete	None
17	2-0017	Seismic anchor movements (SAM) were not addressed for large bore Class I piping installed by span criteria and attached to computer-analyzed piping.	All Unit 2, Design Class I, large-bore piping is being seismically analyzed in accordance with Procedure P-11 for piping stress analysis including seismic anchor movement (SAM) effects when applicable.	Since Unit 2 Class I piping is analyzed only by computer and not using span criteria, no further review is required.	Complete	None
18	2-0018	Class I equipment for the ASW system located in the Intake Structure was qualified to Hosgri ground response spectra instead of intake structure floor response spectra.	All Class I equipment for the Unit 2 ASW system located in the Intake Structure is being qualified to the Hosgri response spectra applicable to its location per DCM C-17.	All Unit 2 Class I ASW system equipment located in the Intake Structure is qualified with or without physical modifications to the response spectra applicable to its actual location.	Complete	Some physical modifications are complete. Pending physical modifications attributable to this concern are included and discussed in other IRP packages.

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 OI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
19	2-0019	The original 2-D polar crane analysis submitted in licensing documents was questioned based on a URS/ Blume 3-D analysis.	Unit 2 polar crane is identical to Unit 1. The analysis done for Unit 1 covers both cranes and was performed using DCM C-57.	Modifications to the polar crane are included in the design.	Complete	Physical modifications are pending.
20	2-0020	The seismic analysis of the containment dome service crane used some results of the 3-D nonlinear polar crane analysis which had not been submitted for NRC review.	Unit 1 and Unit 2 dome service cranes are identical. Analysis performed by Unit 1 in accordance with DCM C-14 Rev. 1 is applicable to both units.	Modifications to the dome service crane are included in the design.	Complete	Physical modifications are pending.
21	2-1003	Some Turbine Building HVAC duct supports were qualified by EDS using incorrect spectra.	The Unit 2 HVAC duct and support calculations are checked to confirm that the correct spectra are used.	The Unit 2 HVAC duct support analyses included the latest Turbine Building response spectra.	Complete	None
22	2-1021	The appropriateness of modeling pressurizer supports and the CCW Hx as rigid was questioned.	The Unit 2 CCW Hx was properly modeled as flexible in analysis G-026-03. The nozzles were modeled as anchors with SAM effects considered. The Unit 1 modeling of the pressurizer supports as a rigid anchor was confirmed by Westinghouse to be equally applicable to Unit 2.	All computed pipe stresses were found to be within code allowable stresses.	Complete	None
23	2-0023	The Blume Internal Review determined that several computer analyses were performed before QA verification on all analyses was required.	The additional Blume Unit 1 QA-verified structural computer analyses for the containment structure are also applicable to Unit 2. DCP analyses of the Auxiliary and Turbine Buildings for both units using QA verified computer programs supersede the Blume analyses.	Structural computer analyses, performed separately on Unit 2, i.e., containment annulus structure analysis, conform to the verification requirements of the Diablo Canyon Project QA Program as documented in IRP Package No. 2-0116.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 OI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
24	2-0024	The Blume Internal Review identified several concerns regarding the original Turbine Building and turbine pedestal seismic designs and analyses.	A complete evaluation of the Unit 2 portion of the Turbine Building was done using new models that supersede the original Blume models and in accordance with DCM C-42 design criteria.	Some modifications are required to the Unit 2 portion of the Turbine Building steel and concrete structures as a result of the overall analysis.	Complete	Physical modifications are pending. Column lines A & G are being stiffened. Wall 19 is being reinforced with lateral bracing. Floor diaphragms at Elev. 104 ft., 119 ft., and 123 ft. are being reinforced.
25	2-1014	The Blume Internal Review identified several questions on URS/Blume's original analysis of the containment interior structure. These related to equipment weights, masses, stiffness, center of rigidity, shear values, and rotational acceleration.	Performed confirmatory analyses to show that identified questions did not alter the original results and the original spectra are still valid.	No changes resulted in the containment interior structure response spectra in DCM C-17 which are applicable to both Units 1 and 2.	Complete	None
26	N/A	The appropriateness of using a different than actual time history of ground motion in analyzing the Auxiliary Building for the 7.5M Hosgri earthquake was questioned.	No noticeable difference resulted in the Unit 1 spectra developed from the 20 sec. vs. the actual 24 sec. time histories.	Because the Auxiliary Building is the same structure for both Units 1&2, and therefore, the same time history applies to both units, no further Unit 2 review is required.	N/A	N/A

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 OI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
27	N/A	Three questions on the seismic analysis of the Intake Structure and the intake structure crane were raised. These addressed (1) dealing with residual responses in directions other than the ground motion, (2) effects on crane analysis of high frequency amplifications of spectra and discrepant floor response criteria, and (3) tsunamic effects.	The Unit 1 response clarified details and showed that the effects of high frequency amplifications of spectra or a tsunami do not affect the design of the common Intake Structure.	Because the Intake Structure is common to both units, no further Unit 2 review is required.	N/A	N/A
28	2-0028	Switchgear assemblies had been supplied with circuit breakers having different interrupting ratings than those specified in the purchase specifications.	It was found that incorrect 125 VDC circuit breakers were supplied on distribution panels 21, 22, and and 23.	Breakers with 10,000 A interrupting ratings were replaced by breakers with 20,000 A ratings.	Complete	Physical modifications complete.
29	N/A	Piping support spacing tables for noncomputer-analyzed piping did not consider the effect of insulation mass. Also, table for piping greater than 4-in.-diameter was not reviewed, approved, or controlled by a QA program.	The Unit 2 piping for safety-related systems is analyzed using applicable computer programs. DCM M-40 containing support spacing tables for non-computer analysed Class I piping does not apply to Unit 2.	Because the Unit 2 piping analysis does not involve the use of support spacing tables, no further Unit 2 review is required.	N/A	N/A

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 OI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
30	2-0030	Coincident loss of off-site power and failure of a diesel bus would result in loss of power to CRVP HVAC equipment.	The Unit 1 and 2 electrical power sources for the CRVP system were reviewed to determine system operability during a loss of off-site power.	The CRVP electrical power and control systems were revised so they are not dependent on the diesel generators of both units to satisfy single failure criteria. Also, operating procedure EP-OP-4B was revised to ensure safe-shutdown capability of the non-LOCA unit on loss of off-site power.	Complete	Physical modifications complete. Operating procedure EP OP-4B revised.
31	2-0031	Blume Internal Review identified five items requiring further investigation to verify acceptance of the main steam and feedwater piping G-line anchor design for Hosgri conditions.	The structural design loads for the "G"-line anchor analysis are based on doubling the seismic loads from the Auxiliary Bldg. and adding the other loads which are actually calculated from both the Unit 2 Turbine and Auxiliary Bldg. sides.	Review of the structural calculations for the Unit 2 "G"-line anchor confirmed that the structure is more than adequate to support the design loads.	Complete	None
32	2-0032	The analyses for the seis-qualification of the Fuel Handling Building (FHB) and crane were based on assumptions that appeared deficient.	The FHB steel superstructure was analyzed using the applicable design criteria.	Necessary modifications were designed and issued for construction.	Complete	The physical modifications are complete.
33	2-1003	A review of Hosgri qualification calculations for Class I HVAC duct supports identified 21 generic support types that may not have met applicable criteria.	All Unit 2 Class I HVAC duct supports have been reanalyzed in accordance with DCM C-31 using Hosgri response spectra identified in DCM C-17.	Modifications to satisfy HVAC duct and support design requirements have been identified.	Complete	Modifications are pending. Upgrading ducts and supports in same manner as was done for Unit 1.

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 OI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
34	2-0034	Under certain failure modes, the CCW system may not meet its licensing basis in two ways.	The seismic design of the Unit 2 post-LOCA sample cooler, "C" header components and CCW tank level instruments are reviewed in accordance with the Unit 2 overall equipment seismic qualification program. Heat removal capabilities of the Unit 2 CCW system was evaluated by Westinghouse.	Although some modifications have been identified, not all seismic qualification analyses are complete. Westinghouse has confirmed that the Unit 2 CCW system will perform its intended function following an accident.	In Progress	Physical modifications are pending.
35	2-0035	Deficiencies were found in the STRUDL-II program which resulted in incorrect answers in piping support calculations.	The current version of the program corrects the deficiencies. PGandE has performed additional verification of the STRUDL-II program. Users reviewed their use of the program.	Procedure EMP 3.11 was used to control programs and their verification. A complete review of PGandE STRUDL-II use for Unit 2 design activities by group supervisors indicated only one instance of impact on these activities. In this instance, 68 pipe supports will be reevaluated using Bechtel-approved programs.	Complete	None expected
36	2-0036	The heat loads used in designing the Class I ventilation system serving switchgear rooms and areas were less than more recently calculated heat loads for these areas.	Switchgear room and associated area ventilation system heat loads were reassessed and HVAC system capabilities reevaluated.	It was determined that the HVAC system in these areas would need to remove a greater heat load than in the original design.	Complete	Physical Modifications are pending. System is being modified to include larger supply and exhaust fans, larger ducting/fittings and larger attendant seismic supports.
37	2-0037	Generic concerns and discrepancies for piping were identified.	A complete piping qualification program is being performed on Unit 2 for all Class I small bore and large bore piping and supports.	Piping and supports are being qualified and modified as required to satisfy project design criteria. Modifications resulting from specific IDVP and ITP concerns are identified and discussed in corresponding Unit 2 IRP packages.	Complete	Physical modifications are being implemented as required.

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 OI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
38	2-0038	Two radiation monitors for the Fuel Handling Building ventilation system did not fully comply with Regulatory Guide 1.52.	It was determined that new radiation monitors and indicating switches were to be installed in the FHB ventilation system.	Monitors RE-58, 59 and indicating switches RIS-58, 59 are being installed to conform to Class I and seismic requirements.	Complete	Physical Modifications are pending.
39	2-0002	Calculations indicated that some rupture restraint crushable bumpers inside containment were shorter than the length required to absorb pipe rupture energy.	Unit 2 rupture restraints were provided with crushable bumpers adequately designed to safety rupture restraint design criteria.	Gaps will be adjusted after piping movements observed during hot functional walkdowns are available.	Complete	Some adjustments to gaps will be required.
40	2-0040	Review of all safety-related air-operated valves identified four as not fully satisfying functional criteria.	Review shows that valves FCV-364, 365, 602 and 603 may not actuate upon loss of their normal air supply.	Back-up air receivers are being provided on the affected valves.	Complete	Modifications are pending.
41	2-0041	The adequacy of bolt tightening requirements and the specified slip capacity of bolted connections in the track of galvanized strut material used in supports of Class I raceways was questioned.	Dynamic testing for the in situ bolt slip capacity has been performed. The tested supports, as installed, were found able to perform their intended function.	Some support types are being modified to improve their margin of safety.	Complete	Modifications are pending.
42	2-0042	Several stainless steel Unit 2 rods (same heats as Unit 1 rods) on rupture restraints exhibit ductility lower than design requirements. Testing indicated premature stripping of double hex nut and threaded coupler threads at rod end connections.	An evaluation of the low ductility of straight rods found the cause to be cold working of the exterior surfaces.	All bars are tested for exterior hardness. Those not meeting acceptance criteria are reworked or replaced.	Complete	Modifications complete. Tested all straight stainless steel rods and replaced those that did not meet ductility requirements.

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
910	2-0983	Some raceway supports were found to vary with installation criteria.	Raceways have been evaluated based on as-built configurations to the criteria of DCM C-15.	Physical modifications based on the outcome of the evaluation have been specified.	Complete	Modifications are pending. Strengthening connections and providing bracings as required.
920	N/A	Some Auxiliary Building floor response spectra in the N-S direction contained in the Hosgri Report differed from those in the 1979 Blume Report.	The Unit 1 response spectra are equally applicable to Unit 2.	Because the Auxiliary Bldg. floor response spectra are common to both units, no further Unit 2 review is required.	N/A	N/A
930	2-0983	IDVP preliminary review of the PGandE raceway criteria indicated the possibility that non-conservative seismic loads were used in five areas.	The Unit 2 raceway evaluation included the following areas of concern: 1) Longitudinal support for conduit. 2) Raceway stresses over max. span. 3) Effects of adjacent supports. 4) Coupled frequency of raceway and support. 5) Joint flexibility and fatigue.	The Unit 2 raceways were analyzed on the basis of DCM C-15 using the same methodology and procedures described in the Phase I Final Report. As for Unit 1, each of the subject five areas was properly considered in the Unit 2 raceway qualification.	Complete	None
931	2-0931	The orientation of valve 9001A was found to be incorrectly reflected in the Design Review Isometric (DRI).	Valve exists in the field, is shown on the DRI, and was modeled in analysis G-002-06 with its operator oriented vertically.	No corrective action was required.	Complete	None
932	2-0932	Support 58S-23R to discharge line of containment spray pump No. 1 was found to be a dead load support instead of the rigid vertical support indicated on the DRI.	Support 50/23R (comparable to 58S/23R) is Y-Z restraint as modeled in analysis G-002-06 and as shown on drawings.	No corrective action was necessary.	Complete	None

TABLE 1 (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
933	2-0933	The as-built length of Line 110 between two supports in the RHR system was found to differ from that shown on the Design Review Isometric and from that used in the design analysis.	The comparable segment of the RHR line in Unit 2 was determined to be modeled at the correct length and properly shown on the DRI.	No corrective action was necessary.	Complete	None
934	2-0934	Direction of restraint for support 72/11R was not given on the DRI.	Support 22/11R (comparable to 72/11R) is modeled correctly correctly as a vertical restraint as shown on the walkdown DRI.	No corrective action was required.	Complete	None
935	N/A	IDVP initially thought that an RHR branch line was shown incorrectly on the DRI.	It was shown that the Unit 1 DRI was correct and that the drawing had been misread by the IDVP. No corrective action required because concern was not an error or deviation.	No further Unit 2 review is required.	N/A	N/A
936	2-0936	Pipe 1971 length between a valve and RHR Hx was found to be incorrectly recorded on design review drawing.	The walkdown vertical dimension of of 2'-8" between valve 2-8804A and RHR Hx 2-1 in Line 1971 was correctly incorporated in the DRI and modeled correctly in analysis G-006-01.	No corrective action was required.	Complete	None
937	2-0937	A second flange in vertical piping 44 was not recorded on DRI and was not included in the design analysis.	Analysis G-006-01 did not show the second set of flanges of the start-up strainer. The weight of the flanges was not considered in the preliminary analysis.	Stress isometric SK-G-006-01A, Rev. 0, has been revised to Rev. 1 to show the second set of flanges so that the additional weight of the flanges is included in the final run of the analysis.	Complete	None

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ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
938	2-0938	Valve 8805B was found to be installed with its operator horizontal instead of the vertical required by the vendor. The vendor subsequently confirmed that valve should be installed in the horizontal position.	Valve 8805B was modeled in analysis G-006-01 in the horizontal position with its stem in the upward position as shown in the walkdown and DRI. Stress summary shows all stresses under allowable.	No corrective action was required.	Complete	None
939	2-0939	Support 73-72R in suction line of the pressurizer charging pump was found to be a X, Z restraint instead of the X restraint shown on the DRI and used in the analysis.	Support 23/72R (comparable) is shown as an X-only restraint on walkdown and DRI. Support was properly modeled in analysis G-006-01.	No corrective action was required.	Complete	None
940	2-0940	The correct dimension of Line 103 south of supports in the Component Cooling Water System was not transferred to the DRI and not modeled in the seismic analysis.	Walkdown dimensions were correctly transferred to the DRI and were properly modeled in analysis G-026-03.	No corrective action was necessary.	Complete	None
941	2-0941	The as-built direction of restraint for support of 18/4R was not recorded on DRI.	Support 407/4R (comparable) is properly indicated as a vertical on walkdown DRI and in analysis G-026-03.	No corrective action was necessary.	Complete	None
942	2-0942	The restraint symbol for support 18/7R was not transferred from the as-built isometric to the Design Review Isometric.	It was confirmed that comparable Unit 2 support 407/7R as-built restraint direction concurs with the piping analysis requirements.	As-built support 407/4R is a Y restraint in complete concurrence with requirements of piping analysis.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
943	N/A	Field inspection found that support 5006/V was not shown on the DRI.	Concern negated as a result of a design change (support was removed). Ongoing Unit 2 piping review envelopes this area.	No further Unit 2 review is required.	N/A	N/A
944	N/A	Inspection found that support 5003/V was not specifically located on the DRI.	Concern negated as a result of a design change (support was removed). Ongoing Unit 2 piping review envelopes this area.	No further Unit 2 review is required.	N/A	N/A
945	2-0945	Support 55S/20R was found to be unlabeled on the DRI.	Comparable Unit 2 support is anchor 413/127A required by stress analysis G-026-03.	Anchor 413/127A will be shown on next revision (Rev. 3) of DRI #451429.	Complete	None
946	2-0946	The dimension of piping Line 1980 between two valves in Safety Injection System was not recorded on the DRI and not modeled in the seismic analysis.	The comparable dimension shown on the walkdown DRI is the same as used in analysis G-005-02.	No corrective action was required.	Complete	None
947	2-0947	The orientation of Valve 8821-A was found to be recorded incorrectly on the DRI and modeled incorrectly in the seismic analysis.	Valve 8821-A was modeled correctly in analysis G-005-04 as shown on walkdown DRI.	No corrective action was required.	Complete	None
948	2-0948	The direction of restraint for support 13/23SL was found to be missing on the DRI.	Comparable support 73/30 SL was properly modeled in analysis H-055-04 and shown on walkdown DRI as a vertical restraint.	No corrective action was required.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
949	2-0949	The original design analysis was found to incorrectly assume that the main annunciator cabinet was rigid in all directions.	Qualification document DC-663101-75-2 was prepared to modify the annunciator cabinet. It is an attachment to DR 82-104-C which is applicable to both Units 1 and 2.	The main annunciator cabinet required added bracing to assure rigidity.	Complete	Modification complete. Added braces for seismic rigidity.
950	2-0950	The designs of valves FCV-95 & FCV-37 required yoke stiffeners of 1/2-in. plate. The stiffeners actually installed were of 3/8-in. plate.	The yoke stiffener on FCV-95 was determined to be in accordance with the design documents.	No corrective action was necessary.	Complete	None
951	2-0951	The correct dimension for locating support 1/27R was not transferred from the as-built drawing to the DRI.	The comparable dimension is properly noted in the design documents.	No corrective action was necessary.	Complete	None
952	2-0952	The correct dimension on Line 593 between valve FCV-37 and support 3/27V was not transferred from the as-built drawing to the DRI.	Stress analysis G-016-01 required new supports, 413/367SL, 413-545SL and 413-543V on Unit 2 line 593 in a location comparable to 3/27V.	Unit 2 supports 413/367SL, 413-545SL, and 413-543V will be shown and as-built dimensions between these supports and valve FCV-37 verified on the next revision (Rev. 3) of DRI #449318.	Complete	None expected
953	2-0953	Support 58S/69R was found to be a X,Y,Z restraint instead of the Y,Z restraint shown in drawings and used in the dynamic analysis.	Comparable support 50/69R is in accordance with design documents.	No corrective action was necessary.	Complete	None

TABLE 1 (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
954	2-0954	The location of support 58S/56R was incorrectly shown on the isometric drawing and was not modeled correctly in the dynamic analysis.	Comparable support 50/56R is modeled correctly and shown correctly on appropriate drawings.	No corrective action was required.	Complete	None
955	N/A	Two supports in the Auxiliary Feedwater Supply System were labeled with the same number.	This was an erroneous concern because supports need not have unique numbers.	No further Unit 2 review is required.	N/A	N/A
956	2-0956	Support 58S/69R was incorrectly dimensioned on the DRI and incorrectly modeled in the dynamic analysis.	Comparable support 50/69R was modeled correctly as per design and walkdown drawings.	No corrective action was required.	Complete	None
957	2-0957	Lines 577 and 578 in the Auxiliary Feedwater Supply System were found not to be insulated as indicated on the DRI and modeled in the design analysis.	Analysis H-017-05 models the added weight of insulation where shown on walkdown DRI.	No corrective action was required.	Complete	None
958	2-0958	Support 58S/55V was found to be incorrectly located on the DRI and incorrectly modeled by the design analysis.	Comparable support 50/55R is modeled and shown correctly in design documents.	No corrective action was required.	Complete	None

TABLE 1 (Cont'd)

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DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
959	2-0959	The location of Support 11-49SL in the Reactor Coolant System was incorrectly shown on the as-built isometric, on the DRI, and in the design analysis.	Comparable support 71/60 SL is in accordance with the design documents.	No corrective action was required.	Complete	None
960	N/A	The correct elevation locating a 45° elbow in the RCS was not transferred from the as-built isometric to the DRI.	Concern negated as a result of performing additional piping analysis for Unit 2 using walkdown measurements.	No further Unit 2 review is required.	N/A	N/A
961	2-0961	The direction of support 11/59SL was shown incorrectly on the DRI.	Comparable support 71/68 SL is in accordance with design documents.	No corrective action was required.	Complete	None
962	N/A	Initial field inspection indicated the direction of support 48/44R was incorrectly shown on the DRI.	The Unit 1 concern was erroneously raised because the initial field information was incorrect.	No further Unit 2 review is required.	N/A	N/A
963	2-0963	Field inspection showed gaps in both directions of restraint for support 58S-32R exceeded allowable tolerances.	Comparable support 50/32R has gaps of 1/16" and 1/32" which are within PGandE allowed tolerances.	No corrective action was required.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
964	2-0964	The design analysis did not include: NS rigid support 55S-88R installed on Line 279 in the Containment Spray System.	Unit 2 stress analysis G-002-07 was reviewed for supports 47-128V and 47-110R, which are analogous to 55S-88R in line 279.	Analysis G-002-07 included supports 47-128V and 47-110R which are shown on field walkdown DRI-449287, Rev. 1.	Complete	None
965	2-0965	The location of support 55S/128V was not transferred from the as-built drawing to the DRI and not used in design analysis.	Comparable support 47/128V is in accordance with design documents.	No corrective action was required.	Complete	None
966	2-0966	The location of support 14/335L was incorrectly transferred from the as-built isometric to the DRI.	Support 47/128V is also comparable to support of concern. It is in accordance with its design documents.	No corrective action was required.	Complete	None
967	N/A	Some of the Intake Structure maximum absolute accelerations contained in the Hosgri Report differed from those in the May 1979 Blume Report.	Unit 1 resolution is equally applicable to Unit 2 since the Intake Structure is common to both units.	No further Unit 2 review is required.	N/A	N/A
968	N/A	Harding Lawson Associates (HLA) was not required to implement a formal QA program before April 10, 1978.	Concern pertains to soils work that is common to both units. Unit 1 resolution is equally applicable to Unit 2.	No further Unit 2 review is required.	N/A	N/A

[illegible]E 1 (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
969	N/A	HLA QA program and operating procedures applicable to their work before June 1978 did not comply with applicable criteria of 10CFR50, Appendix B.	Concern pertains to soils work that is common to both units. Unit 1 resolution is equally applicable to Unit 2.	No further Unit 2 review is required.	N/A	N/A
970	N/A	Insufficient evidence existed to show that control on HLA work was equivalent to that required by 10CFR50, Appendix B.	Concern pertains to soils work that is common to both units. Unit 1 resolution is equally applicable to Unit 2.	No further Unit 2 review is required.	N/A	N/A
971	N/A	Documentation, supporting that Design Review Criteria were used in accordance with QAP, was not available for EDS design review.	Original concern shown not to be significant to plant design. Unit 2 design engineering is performed in accordance with DCP QA Program. QA audits are scheduled quarterly by PGandE and annually by QA Management.	No further Unit 2 review is required.	N/A	N/A
972	N/A	Point of use references required by the EDS Nuclear QA Manual were not made for equations in the calculation files.	Original concern shown not to be significant to plant design. Unit 2 design engineering is performed in accordance with DCP QA Program. QA audits are scheduled quarterly by PGandE and annually by QA Management.	No further Unit 2 review is required.	N/A	N/A
973	N/A	Sign-offs were missing on documentation that would verify the EDS Nuclear QA Manager concurred with discrepancies as required by the company's QAP.	Original concern shown not to be significant to plant design. Unit 2 design engineering is performed in accordance with DCP QA Program. QA audits are scheduled quarterly by PGandE and annually by QA Management.	No further Unit 2 review is required.	N/A	N/A

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
974	N/A	It could not be verified that EDS Nuclear project personnel had read the project interface instructions, but no significant interface problems were found.	Original concern shown not to be significant to plant design. Unit 2 design engineering is performed in accordance with DCP QA Program. QA audits are scheduled quarterly by PGandE and annually by QA Management.	No further Unit 2 review is required.	N/A	N/A
975	N/A	Inconsistent with the EDS Nuclear QAP, memoranda were used in lieu of technical instructions.	Original concern shown not to be significant to plant design. Unit 2 design engineering is performed in accordance with DCP QA Program. QA audits are scheduled quarterly by PGandE and annually by QA Management.	No further Unit 2 review is required.	N/A	N/A
976	N/A	No transmittal to Westinghouse could be located of exterior containment structure spectra published in the June 1977 Blume Report.	The transmitted spectra apply to both units. The Unit 1 resolution applies equally to Unit 2.	No further Unit 2 review is required.	N/A	N/A
977	2-1014	This item was issued to track the evaluation of the structural adequacy of the containment annulus.	The structural design of the Unit 2 containment annulus steel structure was evaluated.	Modifications are required to provide adequate strength for all seismic loads.	Complete	Physical modifications are pending. Reinforcing members and connections. Adding new columns and other members.
978	2-0978	The regenerative heat exchanger was qualified using filtered spectra instead of the unfiltered spectra required by the Hosgri Report.	Westinghouse confirmed that the regenerative heat exchanger is qualified to the applicable seismic spectra.	The Westinghouse supplied regenerative heat exchanger is qualified to the applicable spectra.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
979	N/A	The November 1981 Preliminary Report recommended that additional equipment in the containment structure be reviewed.	Equipment qualification of all affected Unit 2 equipment addressed by additional Unit 2 analysis.	No further Unit 2 review is required.	N/A	N/A
980	N/A	No formal documentation had been found by IDVP for qualification of ASW pump compartments.	Not applicable to Unit 2 since this item was solely an information request for Unit 1 IDVP.	No further Unit 2 review is required.	N/A	N/A
981	2-0981	The input to calculations used both to qualify and independently verify the buried pipelines connecting the Intake Structure to the turbine was not independently verified as part of the independent review.	The IDVP resolved this file as a closed item for Unit 1 since it determined that the input was independently verified. Since the same design criteria and calculations are applicable to both units, the Unit 1 resolution applies to Unit 2.	No corrective action is required.	Complete	None
982	N/A	Turbine Building technical information exchanged between URS/Blume and PG&E had not been reviewed.	Turbine Building was completely evaluated as part of the Unit 1 verification. Review of detailed transmittals was obviated by performance of additional analyses for both units' portions of Turbine Building.	No further Unit 2 review is required.	N/A	N/A
983	2-0983	Some raceway support seismic calculations were found to have been performed using inapplicable spectra.	Reevaluation of the raceway supports based on as-built configuration has been made.	Some modifications are required to the supports to adequately resist seismic loads in accordance with the raceway support design criteria DCM C-15.	Complete	Modifications are pending. Providing seismic reinforcements, new supports and/or bracings as required.

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
984	N/A	The design review did not verify URS/Blume-PG&E interface procedures. Several technical questions on the Turbine Building analyses were identified in the Blume Internal Review (BIR).	The Turbine Building was completely evaluated as part of the Unit 1 verification. Interface procedure verification obviated by performance of additional analyses for both units' portions of the Turbine Bldg.	No further Unit 2 review is required.	N/A	N/A
985	N/A	No documentation could be found of the resolution of the use of different Auxiliary Building weights by URS/Blume and PG&E in their computations of the Double Design Earthquake (DDE) model.	The Auxiliary Building is common to both units and therefore, this concern was already resolved during Unit 1 verification.	No further Unit 2 review is required.	N/A	N/A
986	N/A	The final vertical Control Room spectra were higher than preliminary spectra. It was necessary to ensure that correct spectra were used to qualify Control Room equipment.	The Auxiliary Building is common to both units, and therefore, this concern was already resolved during Unit 1 verification. DCM C-17 provides the required response spectra.	No further Unit 2 review is required.	N/A	N/A
987	N/A	The November 1981 Preliminary Report recommended a detailed review of the seismic analysis of the Auxiliary Building and its qualification be performed.	The Auxiliary Building is common to both units, and therefore, this concern was already resolved during Unit 1 verification.	No further Unit 2 review is required.	N/A	N/A

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
988	N/A	As-built drawings of the Intake Structure crane may have differed from the drawings used to qualify the crane.	The Intake Structure crane qualification was verified during the Unit 1 program. The same Intake Structure crane is used for both units.	No further Unit 2 review is required.	N/A	N/A
989	2-0024	The modifications to the Turbine Building crane shown in the construction drawings may not have been properly implemented.	Reevaluation of the Turbine Building crane is being done based on the as-built configuration using DCM C-42 design criteria.		In Progress	No modifications expected
990	N/A	The applicability of transmitted Fuel Handling Building (FHB) crane design information needed to be checked.	The FHB crane is common to both units, and therefore, concern is already resolved in the Unit 1 verification program.	No further Unit 2 review is required.	N/A	N/A
991	N/A	The Hosgri modifications to the FHB crane may not have been implemented in the field.	The FHB crane is common to both units, and therefore, concern is already resolved in the Unit 1 verification program.	No further Unit 2 review is required.	N/A	N/A
992	2-0993	The original design information on the outdoor water storage tanks (OWST) was found to have been informally transmitted.	Unit 1 calculations are applicable to both units. The primary water storage tank is not included in these calculations as it is a design Class II tank and Non-Q.	No corrective action was required.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
993	2-0993	The accuracy of outdoor water storage tank (OWST) design information transferred between PG&E and URS/Blume required verification.	Unit 1 calculations are applicable to both units. The primary water storage tank is not included in these calculations as it is a design Class II tank and Non-Q.	No corrective action was required.	Complete	None
994	N/A	The transmittal of the formal design guide for seismic factors by PG&E to consultants evaluating piping needed to be examined.	Piping interface concerns are enveloped by additional Unit 2 analysis. Analysis work done by consultants is approved by the project to insure compliance with criteria.	No further Unit 2 review is required.	N/A	N/A
995	N/A	The cover sheets on transmittals to EES did not list the entire contents of the attachments. The traceability of the information flow was in doubt.	Piping interface concerns are enveloped by additional Unit 2 analysis. Analysis work done by consultants is approved by the project to insure compliance with criteria.	No further Unit 2 review is required.	N/A	N/A
996	N/A	Very little correspondence could be located for the piping analyses assigned to URS/Blume.	Original Unit 1 concern turned out to have no significance to safety or design.	No further Unit 2 review is required.	N/A	N/A
997	N/A	A complete set of EES transmittals on valve analyses to PG&E had not been compiled.	Ongoing Unit 2 valve analyses superseded previous work. See packages 2-1001 and 2-1106.	No further Unit 2 review is required.	N/A	N/A

TABLE 1 (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
998	N/A	Complete documentation of EDS requalification information for valves had not been compiled by IDVP.	The area of concern was already enveloped by ongoing Unit 2 analysis or review. See packages 2-1001 and 2-1106.	No further Unit 2 review is required.	N/A	N/A
999	N/A	A complete set of EDS transmittals for valves being reviewed had not been compiled.	The area of concern was already enveloped by ongoing Unit 2 analysis or review. See packages 2-1001 and 2-1106.	No further Unit 2 review is required.	N/A	N/A
1000	N/A	Insufficient records were found to document the flow of valve information to Westinghouse.	The area of concern was already enveloped by ongoing Unit 2 analysis or review. See packages 2-1001 and 2-1106.	No further Unit 2 review is required.	N/A	N/A
1001	2-1001	No evidence was found that valve accelerations were verified before transmittal to valve qualifiers.	DCM M-58 identifies all active valves and sources of seismic parameters.	Valve accelerations have been checked by the project to insure they are within allowables.	Complete	None
1002	2-1002	Calculations used to qualify Turbine Building HVAC supply fans were found to have incorrect and unconservative seismic inputs. Also, calculations used to qualify the forced draft shutter damper did not include gravity with vertical acceleration.	Analysis of Unit 2 fans and dampers and verification of the the equipment to meet Diablo Canyon Criteria DCM No. CH-52, C-17, C-25 and C-30, per calcs DHV-2-1, 6-1 and DHV-2-6, 22-1 were performed to resolve this concern.	No corrective action was required.	Complete	None

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1003	2-1003	Hosgri HVAC duct support qualifications for the 4 kV switchgear room in Turbine Building could not be located.	All Unit 2 Class I HVAC duct supports have been analyzed in accordance with DCM C-31 using Hosgri response spectra identified in DCM C-17. A field walkdown was performed to confirm the installation of fireproof coatings on applicable ducts and as-built configurations.	Modifications to satisfy HVAC duct and support design requirements have been identified.	Complete	Modifications are pending. Upgrading ducts and supports in same manner as was done for Unit 1.
1004	N/A	IDVP could not locate all Hosgri qualification information for electrical equipment and instrumentation in the containment.	Many transmittals of response spectra used in containment qualifications had been made to Westinghouse. The Unit 2 area of concern is not significant because the original Unit 1 concern was shown during Unit 1 review to be not significant.	No further Unit 2 review is required.	N/A	N/A
1005	N/A	Documentation of formal transmittals of spectra for electrical equipment to Wyle Labs was not found.	Unit 2 design input documents are formally transmitted to off-project entities in accordance with para 4.2.3 of Project Engineering Instruction No. 5.	This item has no impact on existing analyses, and therefore, no further Unit 2 review is required.	N/A	N/A
1006	N/A	For electrical equipment requalified by analysis, no information was found on who had performed the analyses.	DCP provided information on the organizations that had performed the analyses. The item is common to both Units, and therefore, already resolved in Unit 1 verification program.	No further Unit 2 review is required.	N/A	N/A
1007	N/A	Transmittals of electrical equipment information between PG&E and its consultants were not satisfactorily documented.	Unit 2 design input documents are formally transmitted to off-project entities in accordance with para. 4.2.3 of Project Engineering Instruction No. 5.	This item has no impact on existing analyses, and therefore, no further Unit 2 review is required.	N/A	N/A

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1008	2-1008	The spectra used to qualify the main annunciator cabinet were preliminary rather than final.	The cabinet was analyzed using the correct spectra.	Qualification Document DC-663101-75-1 was revised to satisfy requirements of applicable floor response spectra. DC-663101-75-2 is included with DR-82-104-C and is applicable to Unit 2.	Complete	None
1009	2-1014	Spectra had not been provided nor scaling criteria defined for containment interior support locations above Elev. 140 ft.	Response spectra and scaling criteria were developed and included in DCMs C-17, -25, and -30 for the Unit 2 containment interior support locations above Elev. 140 ft.	No modifications were found to be necessary.	Complete	None
1010	N/A	Spectra had not been provided nor scaling criteria defined for support locations above elevation 140 ft. in the Turbine Building.	New response spectra have been developed for the Unit 2 portion of the Turbine Building and have been included along with the basis for extrapolation in DCM C-17.	No further Unit 2 review is required.	N/A	N/A
1011	N/A	Preliminary response spectra instead of Hosgri Report spectra were used in the seismic stress analysis of the diesel generator oil priming tank.	The concern is not significant because the original Unit 1 concern was not valid. DCM C-17 provides the required Hosgri response spectra.	No further Unit 2 review is required.	N/A	N/A
1012	N/A	The IDVP calculated stresses on the D/G oil priming tank differed by more than 15% from the design analysis results.	The Unit 2 area of concern is identical to that in Unit 1, and therefore, the Unit 1 resolution is equally applicable to Unit 2.	No further Unit 2 review is required.	N/A	N/A

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1013	2-1013	The target test spectra and SSE test response spectra used to qualify Group VI electrical equipment did not completely envelop the required Hosgri response spectra.	The Unit 1 concern was shown not to be valid because the subject equipment was properly qualified. The analogous Unit 2 equipment qualifications were reviewed.	The Unit 2 Group VI Class 1E equipment is appropriately qualified. No corrective action was needed.	Complete	None
1014	2-1014	Spectra had not been provided nor scaling criteria defined for the pipe rack attached to the containment exterior.	The structural design of the containment annulus steel, platforms, concrete structures and exterior pipeway structure was evaluated.	Modifications are required to the pipeway structure steel to adequately support the main steam and feedwater lines. The resolution for this generic package includes those other packages related to the containment seismic design.	Complete	Physical modifications are pending. Reinforcing the pipeway structure connections which support the main steam and feedwater lines.
1015	N/A	PG&E qualification analysis specified a % damping different from Regulatory Guide 1.61.	The original Unit 1 concern was erroneously raised and not an error or a deviation.	No further Unit 2 review is required.	N/A	N/A
1016	2-1016	The anchor allowables on PG&E drawing did not agree with those in the Design Criteria Memorandum. Thus, the correct design criteria for the anchor bolts could not be determined.	PGandE Dwg. 054162 and DCM M-9 are applicable to both units.	No corrective action was necessary.	Complete	None

TABLE 1 (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1017	2-1017	A lower than actual weight for the level indicator on the Diesel Engine Fuel Oil Priming Tank was used in the stress analysis.	The Unit 2 installation is not significantly different from that in Unit 1. Therefore, the Unit 1 reanalysis showing that there are no overstresses applied to this item.	No corrective action was necessary.	Complete	None
1018	2-1018	The channel size shown on the drawing differed from that used in the Buffalo Forge and EDS Nuclear calculations.	The bracing material shown on fan dwg. and used in seismic analysis is identical to that installed on fans S-33 and S-34, i.e., 4-inch as shown on DC-663399-8-4.	This package resolves the concern for dimensional discrepancy only. For seismic qualification of this equipment, see package 2-1096.	Complete	None
1019	N/A	IDVP had been unable to obtain documentation for their independent modeling of the separator/stabilizer in the CVCS system.	Not applicable to Unit 2 since this item was solely an information request for Unit 1 IDVP.	No further Unit 2 review is required.	N/A	N/A
1020	2-1020	The response spectra used in the analysis for the Auxiliary Saltwater (ASW) pumps were preliminary rather than being taken from the final Hosgri Report.	The ASW pumps were reanalyzed as part of the Unit 1 verification program.	No corrective action was required.	Complete	None
1021	2-1021	The component cooling water heat exchanger was modeled as a rigid pipe anchor. The Hosgri Report listed this equipment as non-rigid (9 Hz natural frequency).	The CCW Hx was modeled as flexible in analysis G-026-03. The nozzles were modeled as anchors with SAM effects considered.	All computed pipe stresses are below code allowables.	Complete	None

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1022	2-1022	The upper ASW pump supports are located 10 ft. above elevation -2.1 ft. Spectra applicable at elev. -2.1 ft. were used as input for the upper pump support.	Because the design calculations are common to both units, the Unit-1 resolution applies to Unit 2.	No corrective action was required.	Complete	None
1023	N/A	Information to model a 3-inch Velan valve could not be obtained.	Not applicable to Unit 2. This item was solely an information request for Unit 1 IDVP.	No further Unit 2 review is required.	N/A	N/A
1024	N/A	The URI gave a different identification number for a support on Line 1917-4" from the qualification analysis isometric.	Isolated mislabeling of a hanger on Unit 1 was not an error or a deviation.	No further Unit 2 review is required.	N/A	N/A
1025	N/A	The Hosgri Report did not include vertical spectra for the Turbine Building elevation 104 ft., bents 16-20.	DCM C-17, which applies to both units, provides the required response spectra, for both the Unit 1 and 2 portions of the Turbine Building.	No further Unit 2 review is required.	N/A	N/A
1026	N/A	The Hosgri Report did not include spectra for several areas of the Turbine Building. A number of other EOIs were combined into 1026 to establish a generic Turbine Building EOI.	DCMs C-15 and C-17 apply to both units. DCM C-15 specifies the criteria for supporting Class 1E electrical conduit, and DCM C-17 provides the required response spectra and basis for extrapolation for both the Unit 1 and 2 portions of the Turbine Building.	No further Unit 2 review is required.	N/A	N/A

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1027	N/A	There was a design discrepancy in the FHB crane supporting structure between a figure in the Hosgri Report and one PG&E design drawing.	The FHB crane is common to both units. Therefore, the area of concern was already resolved in the Unit 1 verification program.	No further Unit 2 review is required.	N/A	N/A
1028	N/A	The October 1979 Blume Report on Auxiliary Bldg. appeared to specify a method for calculating the maximum horizontal acceleration that differed from the Hosgri Report. The application of torsional effects in the Turbine Building was questioned.	The Auxiliary Building is common to both units. Therefore, the area of concern was already resolved in the Unit 1 verification program.	No further Unit 2 review is required.	N/A	N/A
1029	N/A	Discrepancies of more than 15% were found between dynamic model properties independently calculated by IDVP and PG&E for the Auxiliary Building.	The Auxiliary Building is common to both units. Therefore, the area of concern was already resolved in the Unit 1 verification program.	No further Unit 2 review is required.	N/A	N/A
1030	2-1030	Four areas of concern were identified in the boric acid tank seismic analysis. (1) Stresses calculated independently differed by more than 15%. (2) The tank skirt was not evaluated for buckling. (3) Sloshing loads on the roof were not evaluated. (4) An incorrect formula was used to calculate the area of the skirt.	Seismic verification of the boric acid tank and supports was performed for DE, DDE and Hosgri per DCMs C-17, C-25, C-30 and M-45.	No physical modifications or other corrective action were required.	Complete	None

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

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1031	N/A	Documentation needed to independently model valves FCV-37 and LCV-115 was not obtainable.	Not applicable to Unit 2. This item was solely an information request for Unit 1 IDVP.	No further Unit 2 review is required.	N/A	N/A
1032	N/A	IDVP field inspection noted a support that was thought to be restrained in the west direction contrary to PG&E drawings. IDVP also could not locate the design analysis for the support.	The Unit 1 concern was determined not to be an error or a deviation.	No further Unit 2 review is required.	N/A	N/A
1033	N/A	There was no evidence of EES (Cygna) QA auditor training and qualification beyond the basic indoctrination and training session.	EES is not involved in Unit 2 piping analysis effort. Unit 2 piping is being analyzed under the DCP Quality Assurance program.	No further Unit 2 review is required.	N/A	N/A
1034	N/A	All revisions of QA Manual were not formally transmitted to EES (Cygna) Project Manager.	EES is not involved in Unit 2 piping analysis effort. Unit 2 piping is being analyzed under the DCP Quality Assurance Program.	No further Unit 2 review is required.	N/A	N/A
1035	N/A	EES (Cygna) audits were not timely or comprehensive. There was no evidence of effective corrective action. Only calculations and computer binders were audited.	EES is not involved in Unit 2 piping analysis effort. Unit 2 piping is being analyzed under the DCP Quality Assurance Program.	No further Unit 2 review is required.	N/A	N/A

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

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1036	N/A	No QA procedures were developed or implemented by EES (Cygna).	EES is not involved in Unit 2 piping analysis effort. Unit 2 piping is being analyzed under the DCP Quality Assurance Program.	No further Unit 2 review is required.	N/A	N/A
1037	N/A	Formal records of computer program verification of SAP IV were unavailable. EES (Cygna) personnel had to be used to verify the program.	EES is not involved in Unit 2 piping analysis effort. Unit 2 piping is being analyzed under the DCP Quality Assurance Program.	No further Unit 2 review is required.	N/A	N/A
1038	N/A	EES (Cygna) quarterly management meetings were not held quarterly.	EES is not involved in Unit 2 piping analysis effort. Unit 2 piping is being analyzed under the DCP Quality Assurance Program.	No further Unit 2 review is required.	N/A	N/A
1039	N/A	A PG&E letter referenced by EES (Cygna) memo as containing project criteria could not be located in project files.	EES is not involved in Unit 2 piping analysis effort. Unit 2 piping is being analyzed under the DCP Quality Assurance Program.	No further Unit 2 review is required.	N/A	N/A
1040	N/A	Controlled memos were not adequately controlled by EES. Memos did not indicate when they superseded others and were not specific on referencing other material.	EES is not involved in Unit 2 piping analysis effort. Unit 2 piping is being analyzed under the DCP Quality Assurance Program.	No further Unit 2 review is required.	N/A	N/A
1041	N/A	EES (Cygna) lacked interface control and could not verify that one analysis was completed or that the requirement was deleted.	EES is not involved in Unit 2 piping analysis effort. Unit 2 piping is being analyzed under the DCP Quality Assurance Program.	No further Unit 2 review is required.	N/A	N/A

TAB (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1042	N/A	ANCO had not implemented a QA program on its seismic-related design activities for the pre-June 1978 time period.	ANCO is not involved in the Unit 2 piping analysis effort. Unit 2 piping is being analyzed under the DCP Quality Assurance program.	No further Unit 2 review is required.	N/A	N/A
1043	2-1043	The locations of supports 512/7R and 512/8R were improperly transferred to the DRI.	Comparable supports 512/31R and 512/32R were located correctly in the DRI 449294, Rev. 2 as shown in the walkdown drawing.	No corrective action is necessary. These supports have been replaced for other reasons.	Complete	None
1044	N/A	Small bore lines were shown without supports in the DRI.	Since small bore (SB) pipe supports are normally shown on SB hanger isometrics rather than on a DRI, the Unit 1 concern was determined not to be an error or a deviation.	No further Unit 2 review is required.	N/A	N/A
1045	2-1045	The DRI showed support 99/9R to be a Y, Z restraint, while field verification and analysis showed it to be a X,Y,Z restraint.	The walkdown direction of support 949/12R which is comparable to 99/9R was reviewed and found to be identical to that shown on DRI 449294, Rev. 2.	No corrective action is necessary. Piping stress analysis G-009-01 changed 949/12R to 414/241R for other reasons.	Complete	None
1046	2-1046	Field inspection of the length of pipe S6-52-3 between a support (99/7R) and an elbow showed it to be different from that shown on the DRI.	This item has been reviewed for support location of 949/7R which is comparable to 99/7R in Unit 1.	Walkdown and DRI 449294 Rev. 1 shows 2'-7" from the elbow to support 949/7R and G-009-01 analysis modeled 2'-7 1/2" from data point 140 (elbow) to data point 145 (support 949/7R) No corrective action was necessary.	Complete	None
1047	N/A	Small bore lines were shown without supports on the DRI. Field inspection showed untagged supports.	Since small bore (SB) pipe supports are normally shown on SB hanger isometrics rather than on a DRI, the Unit 1 concern was determined not to be an error or a deviation.	No further Unit 2 review is required.	N/A	N/A

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1048	N/A	Unrestrained E-W pipe span through support 99/101R exceeded maximum allowable for non-analyzed piping.	The Unit 1 concern was raised erroneously and determined not to be an error or deviation, since piping was shown to be rigorously analyzed and not designed using span tables.	No further Unit 2 review is required.	N/A	N/A
1049	2-1049	The spectra used to qualify the Unit 1 typewriter were challenged. Also, the location of the Unit 2 typewriter and its relation to safety were questioned.	Reviewed spectra for Unit 2 typewriter location and compared accelerations with typewriter qualification allowables.	Unit 2 typewriter is being relocated to a location equivalent to Unit 1, where seismic qualification is valid.	Complete	Physical modification is pending. Relocating Unit 2 typewriter and providing electric power to new location.
1050	2-1050	Neither the design analysis nor the Design Review Isometric considered the insulation that was installed on Line 279.	Unit 2 as-built DRI 449287 Rev. 1 shows the insulation. Analysis G-02-07 needed revision to include the insulation weight.	Revised analysis showed no overstresses.	Complete	None
1051	N/A	No insulation was specified on Drawing 102040, Rev. 9, for Lines 264-8 and 2519-8, but the DRI specified personnel-protection-only insulation.	Unit 2 piping is insulated in accordance with Note 6 of Piping Insulation Specification for Units 1 and 2. Dwg. No. 101905 specifies that personnel protection insulation is provided on applicable piping whose temperature exceeds 150° F when required for personal safety.	Unit 2 insulation review and walkdown negates the need for further review.	N/A	N/A
1052	N/A	A QA program was not contractually required of Wyle Labs on their seismic safety-related testing before 12/1/78. Insufficient evidence was available to indicate whether testing was performed in compliance with a QA program.	IDVP evaluation results and conclusions documented in ITR No. 2 apply to both Units.	No further Unit 2 review is required.	N/A	N/A

TA (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1053	2-1053	The diesel generator starting air tank seismic analysis used spectra not contained in the Hosgri Report. Also, a different % damping was used from that specified in the Hosgri Report.	The same response spectra and damping values (based on DCMs C-17, -25, -30 and M-45) are used for the starting air receivers for both Units 1 and 2. Therefore, the EOI-1053 resolution applies to Unit 2.	No corrective action was necessary.	Complete	None
1054	2-1054	The qualification analysis of the diesel generator (DG) starting air tank did not include code calculations. Also, the method for calculating weld stresses was misapplied.	The seismic verification of the DG starting air receiver showed that the equipment and its support are satisfactory for DE, DDE, and Hosgri events. The design criteria used complied with FSAR specified criteria.	No corrective action was necessary.	Complete	None
1055	N/A	Containment annulus spectra curves were not uniquely numbered. Also, damping values associated with the curves were not marked in each figure.	DCM C-17 applies to both Units. Resolution for Unit 1 is also equally applicable to Unit 2.	No further Unit 2 review is required.	N/A	N/A
1056	N/A	Checkers signatures required by QA program were absent from several PG&E calculations.	Review of implementation of project design calculation procedures is in QA Audit scope for Unit 2.	No further Unit 2 review is required.	N/A	N/A
1057	N/A	The PG&E and IDVP analyses of stresses and support loads based on computer codes PIPESD and ADLPIPE, respectively, differed by more than 15%.	Unit 2 piping is analyzed using computer code ME-101. The analysis envelops the areas of this concern.	No further Unit 2 review is required.	N/A	N/A

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1058	2-1058	Small bore pipe load combinations for several single lug locations were found to exceed allowable criteria.	Shear lugs are being evaluated by using pipe support manual table method or ME-210 program.	Support 8/21R comparable to 58N/21R on line 316 was modified to delete the axial restraint in analysis H-056-02. Other supports are being modified as necessary to eliminate overstresses.	Complete	Physical modifications complete.
1059	N/A	The PG&E small bore report noted overstresses in 2-1/2 in. pipe. The span tables did not address insulated pipe.	Concern (1) - Unit 2 Class 1 small bore piping is being stress analyzed separately as part of overall Unit 2 piping completion program. Concern (2) - All Unit-2 Class 1 piping is analyzed by computer including the effects of insulation.	No further Unit 2 review is required.	N/A	N/A
1060	N/A	Two options for modeling tributary pipe masses, allowed by PIPESD Code, produced results that differed by more than 15%. PIPESD and ADLPIPE can consider masses lumped at support locations in a different manner and yield results differing by more than 15%.	Analyses on Unit-2 piping are being done using computer code ME-101. These analyses clearly envelop the area of concern.	No further Unit 2 review is required.	N/A	N/A
1061	N/A	PG&E and the manufacturer were thought unable to produce for IDVP review, a detailed fabrication drawing for HVAC fan S-31.	Not applicable to Unit-2. This item was solely an information request for Unit-1 IDVP.	No further Unit 2 review is required.	N/A	N/A

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1062	N/A	For the Containment Spray System, stresses in the design analysis and the verification analysis differed by more than 15%. One support location, two valve weights, one valve height, one flange weight, and one pipe length were modeled incorrectly. Differences in mass lumping were found.	Additional analyses on Unit 2 piping are being done using computer code ME-101 as part of the Unit 2 overall piping completion program. These analyses clearly envelop the area of concern.	No further Unit 2 review is required.	N/A	N/A
1063	N/A	In the Containment Spray System, stresses in the design analysis and the verification analysis differed by more than 15%. Ten differences included valve weight, spectra, water weight, insulation weight, support modeling (4 instances), pipe length, and mass lumping.	Additional analyses on Unit-2 piping are being done using computer code ME-101 as part of the Unit 2 overall piping completion program. These analyses clearly envelop the area of concern.	No further Unit 2 review is required.	N/A	N/A
1064	N/A	The PG&E QA program on design work was inadequate in policy, procedures, and implementation. The QA organization has insufficient program responsibility.	The concern of this package is related to EOI-3004. IDVP evaluation of PGandE QA results and conclusions documented in ITR No. 2 apply to both Units.	No further Unit 2 review is required.	N/A	N/A
1065	N/A	A general weakness existed in internal and external interface and document controls. Thus, it was questionable whether appropriate design information was exchanged and used by design groups and consultants.	The concern of this package is related to EOI-3004. IDVP evaluation of PGandE QA results and conclusions documented in ITR No. 2 apply to both Units.	No further Unit 2 review is required.	N/A	N/A

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1066	N/A	The design verification program was not formalized and was inconsistently implemented and documented. Major gaps existed in design overviews of design approaches for equipment.	The concern of this package is related to EOI-3004. IDVP evaluation of PGandE QA results and conclusions documented in ITR No. 2 apply to both Units.	No further Unit 2 review is required.	N/A	N/A
1067	N/A	URS/Blume did not establish or implement a QA program that met 10CFR50, App. B, before June 1978.	The concern of this package is related to EOI-3005. IDVP evaluation results and conclusions documented in ITR No. 2 apply to both Units.	No further Unit 2 review is required.	N/A	N/A
1068	N/A	The Hosgri Report was not developed or issued by URS/Blume as a controlled design document.	The concern of this package is related to EOI-3005. IDVP evaluation results and conclusions documented in ITR No. 2 apply to both Units.	No further Unit 2 review is required.	N/A	N/A
1069	2-1069	Inspection and the DRI showed valves LCV-113 and LCV-115 to be unsupported.	Analysis H-017-05 required that supports 414/110R, 414/111SL, 414/113R and 414/114SL be added to valves LCV-113 and 115. Weights from the valve's drawing were used and modeled correctly in the analysis.	Analyzed resultant accelerations are lower than the qualifying acceleration and the valves are qualified as per analysis. Stresses at all load combinations are within code allowables.	Complete	Physical modifications are pending. Valve supports are being installed.
1070	N/A	The Auxiliary Building horizontal soil spring calculated by IDVP differed from the URS/Blume value by 50%.	The Auxiliary Building is common to both units, and therefore, this concern was already resolved by Unit 1 verification program.	No further Unit 2 review is required.	N/A	N/A

TAB (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP UIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1071	N/A	In the Auxiliary Feedwater System, stresses in the design analysis and verification analysis differed by more than 15%. Differences identified were design, spectra, mass lumping, valve supports, swages, and a piping support.	Additional analyses performed on Unit 2 as part of the overall piping completion program using walkdown configuration and applicable Hosgri spectra clearly envelop the area of concern.	No further Unit 2 review is required.	N/A	N/A
1072	2-1072	DCP and IDVP calculated stresses in the AFWS turbine driven pump differed by more than 15% and spectra used by DCP may not have been Hosgri spectra.	The turbine driven AFW pump was seismically analyzed using the latest DE, DDE and Hosgri inputs per DCMs C-17, C-25, C-30 and M-45.	The pump and its supports were found to be satisfactory.	Complete	None
1073	N/A	Initial IDVP analysis of Auxiliary Saltwater Pump (ASWP) bolt stresses exceeded the allowable limits.	This concern was raised erroneously and found to be invalid upon further Unit 1 review. IDVP erroneously used wrong pump shut-off pressure in their analysis resulting in incorrect bolt stresses and identification of non-existent concern.	No further Unit 2 review is required.	N/A	N/A
1074	N/A	For the Safety Injection System, stresses in the design analysis and the verification analysis differed by more than 15%. The differences were in spectra, mass lumping and valve orientation. The design spectra did not envelop the proper Hosgri spectra.	Additional analyses performed on Unit 2 as part of the overall piping completion program using walkdown configurations and applicable Hosgri spectra clearly envelop the area of concern.	No further Unit 2 review is required.	N/A	N/A

TAB (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1075	2-1075	Supports 5007/R and 18/5R were labeled Y, Z restraints on the DRI. Field inspection indicated one was incorrectly labeled.	The walkdown directions of comparable Unit 2 supports 407/5R and 5007/R were reviewed and identified on DRI 451431, Rev.2.	No corrective action is necessary. Piping stress analysis G-026-03 later deleted 5007/R and changed 407/5R for other reasons.	Complete	None
1076	2-1076	Support 55S/3R was labeled as a Y restraint on the DRI. Field inspection showed it to be an X, Y restraint.	The walkdown direction of comparable Unit 2 support 47/11R was reviewed and identified as Y restraint on DRI 451429, Rev.2.	No corrective action is necessary. Piping stress analysis G-024-01 later changed 47/11R direction to XY restraint for other reasons.	Complete	None
1077	2-1003	A Hosgri calculation for the HVAC duct support included in IDVP sample #2 in the Auxiliary Building and dated before 11/8/81 could not be located.	All Unit 2 Class 1 HVAC duct supports were analyzed per DCMs C-31 and C-17. Field walkdowns were performed to confirm the as-built configurations.	Some duct support modifications are required. The modifications are similar to those made on Unit 1.	Complete	Physical modifications are pending. Upgrading ducts and supports in same manner as was done for Unit 1.
1078	2-1078	Field inspection of two ventilation system logic panels found missing screws on printed circuit rack mountings. These screws had been in place for seismic qualification vibration tests.	The appropriate job site procedures have been revised to control the replacement of bracing that has been removed. The procedures are common to both Unit 1 and Unit 2.	No other corrective action was required.	Complete	None
1079	N/A	Drawing 451597 Rev. 3 showed a lower steel beam across the location of a roll-up door in the FHB structure.	The subject beam in the FHB structure is unique to Unit 1.	No further Unit 2 review is required.	N/A	N/A

TABL (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1080	N/A	For Residual Heat Removal System, stresses in design analysis differed by more than 15% from verification analysis.	Additional analyses performed on Unit 2 as part of the overall piping completion program using walkdown configurations and applicable Hosgri spectra clearly envelop the area of concern.	No further Unit 2 review is required.	N/A	N/A
1081	N/A	For Component Cooling Water (CCW) System, stresses in design analysis differed more than 15% from the verification analyses.	Additional analyses performed on Unit 2 as part of the overall piping completion program using walkdown configurations and applicable Hosgri spectra clearly envelop the area of concern.	No further Unit 2 review is required.	N/A	N/A
1082	2-1082	For Valve FCV-95 analysis, the natural frequency differed by more than 15% from the design analysis. The design analysis used yoke dimensions and weights different from actual.	Analysis G-014-01 shows that the analyzed horizontal and vertical accelerations of valve FCV-95 are below the 7.7 g valve qualifying acceleration. The valve was modeled as rigid (nat. freq. = 38.6 Hz) using procedure P-11.	Stresses at all load cases are within code allowables.	Complete	None
1083	N/A	Differences between the manufacturer's drawing of HVAC Volume Damper 7A and field inspection were noted. Also, adequacy of bolts fastening the actuator to the floor and ceiling stanchion bolts was questioned.	Concern regarding square vs. fillet welds was raised erroneously. Review of other concerns is included in Unit 2 IRP Package 2-1102 seismic qualification review of damper 2-7A.	No further Unit 2 review of this item is required.	N/A	N/A
1084	N/A	For Chemical Volume Control (CVC) and Residual Heat Removal (RHR) Systems, stresses in design analysis differed by more than 15% from verification analysis.	Additional analyses performed on Unit 2 as part of the overall piping completion program using walkdown configurations and applicable Hosgri spectra clearly envelop the area of concern.	No further Unit 2 review is required.	N/A	N/A

TABLE 1 (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1085	N/A	For the Reactor Coolant (RC) System, stresses in the design analysis differed by more than 15% from the verification analysis.	Additional analyses performed on Unit 2 as part of the overall piping completion program using walkdown configurations and applicable Hosgri spectra clearly envelop the area of concern.	No further Unit 2 review is required.	N/A	N/A
1086	N/A	For the Turbine Steam Supply System, stresses in the design analysis differed by more than 15% from the verification analysis.	Additional analyses performed on Unit 2 as part of the overall piping completion program using walkdown configurations and applicable Hosgri spectra clearly envelop the area of concern.	No further Unit 2 review is required.	N/A	N/A
1087	2-1087	The IDVP calculated stress results for hot S/D remote control panel differed by more than 15% from those of the design analysis.	IDVP analysis, which verified low seismic stresses, was reverified by EQG.	The hot shutdown remote control panel is structurally satisfactory for the response spectra of DCM-C-17 and DCM-C-30. No corrective action is required.	Complete	None
1088	2-1088	The verification analysis of the Component Cooling Water (CCW) heat exchanger supports obtained results that differed by more than 15% from the design analysis results. IDVP calculations showed anchor bolts to be overstressed.	The seismic qualification analysis of the Unit-2 CCW Heat exchanger was reviewed.	Modifications to the Unit 2 CCW heat exchanger support design similar to those issued on Unit 1 were made to reduce nozzle displacements within acceptable limits. With these modifications, the Unit 2 CCW heat exchanger is seismically qualified.	Complete	Physical modifications are pending.
1089	N/A	A hanger drawing showed Support 3/30A to be located in the wrong area.	Since each Unit has its own set of hanger drawings, wrong reference to support locations on Unit 1 hanger drawings does not affect Unit 2. Also, piping analyses do not rely on support locations referenced on hanger drawings.	No further Unit 2 review is required.	N/A	N/A

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1090	N/A	A hanger drawing showed Support 11/92SL to be located in the wrong area.	Since each Unit has its own set of hanger drawings, wrong reference to support locations on Unit 1 hanger drawings does not affect Unit 2. Also piping analyses do not rely on support locations referenced on hanger drawings.	No further Unit 2 review is required.	N/A	N/A
1091	N/A	There were differences in bracing sizes in the Auxiliary and Fuel Handling Buildings between design drawings and the computer model.	Auxiliary Building and Fuel Handling Building structures are common to both units. This concern was resolved during Unit 1 review.	No further Unit 2 review is required.	N/A	N/A
1092	2-0032	Various figures in the Hosgri Report did not agree.	The FHB steel superstructure was analyzed using the applicable design criteria.	Necessary modifications were completed.	Complete	The modifications are completed.
1093	N/A	Hosgri response spectra were not available for fan rooms at two elevations.	The Auxiliary Building structure is common to both units, and therefore, the Unit 1 analysis covers the entire Aux. Bldg. structure. DCM C-17 provides required response spectra and basis for extrapolation.	No further Unit 2 review is required.	N/A	N/A
1094	N/A	The locations of borings 2 and 3 in the soils review were inconsistent.	HLA soils analysis work is common to both Units. Unit 1 resolution is equally applicable to Unit 2.	No further Unit 2 review is required.	N/A	N/A

TAB (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1095	N/A	Auxiliary Building time history from URS/Blume may not have conservatively enveloped Hosgri design spectra at certain frequencies.	The Auxiliary Building is common to both units and the input time history applies to the entire building.	No further Unit 2 review is required.	N/A	N/A
1096	2-1096	Verification analysis of ventilation supply fan S-31 found discrepancies in design analysis in three areas.	The seismic qualifications of comparable Unit 2 supply fans S-33 and S-34 were reviewed by EQG.	The fan base connections for S-33 and S-34 were modified to meet the seismic criteria, per EQG project package No. HV-2-1.2.	Complete	Physical modifications complete. Installed stiffener angle braces.
1097	N/A	Hosgri spectra were not available for the fan/machine room above elevation 163.6 ft.	The Aux. Bldg. is common to both Units, and therefore, the Unit 1 analysis covers the entire Aux. Bldg. structure. DCM C-17 provides spectra and basis for extrapolation.	No further Unit 2 review is required.	N/A	N/A
1098	2-0037	The design analysis modeled the separator/stabilizer support differently from the as-built configuration.	An overall piping completion program is being performed on Unit-2 for all Class I small bore and large bore piping and supports.	Piping and supports are being qualified and modified as required to satisfy project design criteria.	Complete	Physical modifications are being implemented as required.
1099	2-1099	PG&E's drawing 463683 Rev. 6 showed stiffener plates installed on fixed end supports of the CCW HXs. Field inspection found plates to be installed only on CCW Hx #1-1.	CCW Hx 2-1 had been modified with 3/4" gusset plates for stiffening. Heat exchanger 2-2 had not needed the modification. The drawing needed revision to clarify the earlier modifications.	The drawing was clarified to show the modifications done previously.	Complete	None

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1100	N/A	Harding Lawson Associates (HLA) mislabeled a tank in their field log.	HLA soils analysis work is common to both Units. Unit 1 resolution is equally applicable to Unit 2.	No further Unit 2 review is required.	N/A	N/A
1101	N/A	The location of a sample boring was different in the field log and the report prepared by HLA.	HLA soils analysis work is common to both Units. Unit 1 resolution is equally applicable to Unit 2.	No further Unit 2 review is required.	N/A	N/A
1102	2-1102	The design analysis of the HVAC damper supports assumed a different location for the actuator's center of gravity relative to shaft centerline than the manufacturer.	EQG packages 1322D and 1328D verified the qualification of the comparable Unit-2 damper (2-7A).	The Unit-1 analysis also qualified the Unit-2 damper. No corrective action was required.	Complete	None
1103	2-1103	For auxiliary steel, steel plates and rupture restraints to which pipe supports are attached, IDVP was concerned that the 20-Hz flexibility criterion was not considered.	All pipe support/supporting steel structures in Unit-2 meet the 20-Hz criterion.	No corrective action is required.	Complete	None
1104	2-0037	Some supports on Lines 3078 and 4260 were found to be missing the U bolts needed to provide bilateral restraint.	An overall piping completion program is being performed on Unit-2 for all Class I small bore and large bore piping and supports.	Piping and supports are being qualified and modified as required to satisfy project design criteria.	Complete	Physical modifications are being implemented as required.

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1105	2-0938	Three valves in the RHR system were found to be installed with their stems oriented horizontally rather than vertically as required by the vendor. The vendor subsequently confirmed that valves could be installed in the horizontal position.	The 3 comparable valves in Unit-2 were modeled in analysis G-003-04 to be in the horizontal position indicated in the walkdown as-built drawing.	No corrective action was required.	Complete	None
1106	2-1106	A number of piping samples had nozzle loads and valve accelerations that exceeded allowable design analysis values. EOI-1109 (combined into this EOI) identified other excessive nozzle loads.	Unit 2 Class 1 equipment nozzle loads and valve accelerations developed by the piping stress analysts are compared to the qualified equipment allowables.	The results of the ongoing nozzle load and valve acceleration review are documented in the Diablo Canyon Unit 2 "Class I Equipment Nozzle Log" and individual valve seismic qualification calculation packages.	Complete	None expected
1107	2-0037	(a) Two valves were installed in a 3/4-in. vent line where design documents showed only one valve. (b) Two supports modeled as rigid existed in the field as dead weight only. (c) IDVP and DCP used different stress intensification factors (SIF) for socket welds.	An overall piping completion program is being performed on Unit-2 for all Class I small bore and large bore piping and supports.	Piping and supports are being qualified and modified as required to satisfy project design criteria.	Complete	Physical modifications are being implementated as required.
1108	N/A	The design analysis of the RTD sample lines did not include movements at their attachments to the Reactor Coolant System.	Additional analyses performed on Unit-2 for small bore piping as part of the overall piping completion program include movements at the attachment points to the RCS.	No further Unit 2 review required.	N/A	N/A

TABLE 1 (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1109	2-1106	Nozzle loads calculated by IDVP in the feedwater system exceeded the design analysis values. This was combined with EOI-1106.	See IRP Pkg. No. 2-1106.	See IRP Package No. 2-1106	Complete	None expected.
1110	2-1110	The HVAC duct from Fan S-69 to 4 KV swgr. was supported differently than the design drawings specified.	The duct in question was completely analyzed. A walkdown was conducted to confirm the as-built configuration of the supports. Analysis was performed according to DCM C-31.	The duct was found to be acceptable and no physical modification was required.	Complete	None
1111	N/A	A number of IDVP Phase I error reports and DCP open items were superseded by IDVP Phase II piping and pipe supports independent calculations. DCP was to review both Phase I and Phase II work.	Additional analyses performed on Unit-2 as part of the safety-related piping and supports completion program envelop the area of concern.	No further Unit 2 review is required.	N/A	N/A
1112	N/A	There was a disagreement between the Harding Lawson Associates (HLA) report site drawings and boring logs about several soils boring locations.	HLA soils analysis work is common to both Units. Unit 1 resolution is equally applicable to Unit 2.	No further Unit 2 review is is required.	N/A	N/A
1113	2-1113	The results of the verification analysis of the Component Cooling Water (CCW) pumps differed from those of the design analysis by more than 15%.	The Unit-2 CCW pump is seismically analyzed taking into account final nozzle loads and stress allowables for cast iron components per DCM-M45.	Modifications to the support design for two of the three CCW pumps were made to alleviate an overstress condition. With these modifications, the CCW pumps are seismically qualified.	Complete	Physical modifications are pending. Strengthening CCW pumps 2-1 & 2-2 base anchorage.

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1114	N/A	The design analysis of the ASW pumps did not consider the load contribution of the virtual mass of water surrounding the pump casing.	The Unit-2 ASW pumps are identical to those in Unit-1 and the concern is therefore already resolved for both Units in the Unit-1 verification program.	No further Unit 2 rewiew is required.	N/A	N/A
1115	N/A	Because of the DCP corrective action program on large bore pipe supports, the IDVP proposed to discontinue verifying superseded design work.	This concern was an IDVP administrative matter not applicable to Unit-2. Additional analyses are performed on Unit 2 for all Class I large bore pipe supports as part of the overall Unit 2 piping completion program.	No further Unit 2 review is required.	N/A	N/A
1116	2-1116	The results of the verification analysis on Valve FCV-41 differed by more than 15% from the results of the design analysis.	A specific analysis was performed for the Unit-2 main steam isolation valve, FCV-41, to determine its accelerations under seismic loads.	The stresses calculated for valve FCV-41 are within the allowables for the valve as stated in DCM M-58, Rev. 7.	Complete	None
1117	2-1117	The model used to calculate the natural frequency of the Instrument AC Power Panels was not conservative. The frequency calculated was therefore too high.	A generic program of evaluation and documentation of seismic qualification of Class 1E equipment for both Units 1 and 2 has been performed.	Seismic qualification of the Unit-2 panels has been verified (Panels PY 21, 21A, PY22, PY23, PY23A and PY24)	Complete	None
1118	2-1118	The shake table testing report showed different attachments of the vital load center than field verification, which could affect seismic loads.	A generic program of evaluation and documentation of seismic qualification of Class 1E equipment for both Units 1 and 2 has been performed.	Bracing to be added to Unit 2 480 VAC vital load centers same as was ultimately done in Unit 1.	Complete	Physical modifications are pending.

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1119	2-1118	The DC Distribution Panel was thought to be shake-table tested using mountings that differed from the in-service mountings.	A generic program of evaluation and documentation of seismic qualification of Class 1E equipment for both Units 1 and 2 has been performed.	Verification of the seismic qualification of 125V DC panels is complete.	Complete	None
1120	2-1120	Field verification found different mounting bolt sizes on HVAC condenser CR-35 than were modeled.	Analysis HV-2-4.1 showed that the bolts on the analogous Unit-2 condenser, CR-37, were not overstressed.	No corrective action was required.	Complete	None
1121	2-1121	Field verification found different anchor bolt sizes on the HVAC filter unit than were used in the design analysis.	Analysis HV-2-5.11 showed that the the bolts were not overstressed.	No corrective action was required.	Complete	None
1122	2-1122	The design analysis for Support 10/70SL did not address support frequencies in the unrestrained directions. This might have been a violation of licensing criteria.	DCM M-9 and Procedure P-9 address the criteria for the design of Class 1 supports in the unrestrained direction.	Unit-2 comparable support 412/86 SL, in analysis W-054-01 is rigid in the unrestrained direction and is seismically qualified. Computed stresses are below allowables.	Complete	None
1123	2-1123	Design analysis ITS-5, Rev. 0 assumed an instrument tubing support to be an A-1202 member. Rev. 1 of analysis used as-built data showing the support to be a B-1202 member.	Unit-2 instrument tubing analyses use criteria that are identical to Unit-1 criteria.	These analyses reflect as-built Unit-2 conditions. No corrective action required.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1124	N/A	The design analysis model of the control room slab, used to generate the Hosgri spectra, located the supporting walls differently than as-built.	The control room slab in the Auxiliary Bldg. is common to both units. Concern was already resolved during the Unit-1 verification program.	No further Unit 2 review is required.	N/A	N/A
1125	2-1125	The seismic design analysis for HVAC compressors CP-35 and -36 used an incorrect value for vertical acceleration.	The analysis of Unit-2 compressors using the Hosgri response spectra shows that the stresses for the Unit-2 compressors are below allowables.	No corrective action was required.	Complete	None
1126	2-0037	Two instances of misapplied stress intensification factors (SIFs) were identified.	An overall piping completion program is being performed on Unit-2 for all Class I small bore and large bore piping supports.	Piping and supports are being qualified and modified as required to satisfy project design criteria.	Complete	Physical modifications are being implemented as required.
1127	2-1127	The frequency calculation for HVAC supply fans was thought to have two factors that resulted in a natural frequency higher than actual.	Comparison was made between Unit-1 and Unit-2 for comparable fans based on their location and corresponding response spectra. Since Unit-1 and Unit-2 fan designs are identical, Unit-1 resolution applies equally to Unit-2.	No corrective action was required.	Complete	None
1128	2-1128	The design analysis for the station battery racks assumed larger structural bolts than were actually installed.	Based on actual force distribution in the battery racks, it is shown that all stresses (tension and shear) are well below their allowable stresses.	No corrective action was required.	Complete	None

TABLE 1 (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1129	2-1129	The design analysis neglected the cross-sectional area in the large bore pipe support 56S/3A weld.	Procedure P-6, Attachment G which is used on Unit 2 to evaluate welds includes the cross-sectional area of the weld in the large bore pipe support design evaluation.	Unit-2 Support 48/3A (anchor type), which is comparable to 56S/3A in Unit-1, was deleted in stress analysis H-022-01. This particular concern in Unit-1 is therefore not applicable to Unit-2.	Complete	None
1130	2-1130	The Phase I Final Report showed the CCW Lube Oil Cooler as qualified, while the design analysis showed it as not qualified and requiring modifications.	A review of the seismic qualification of Unit 2 CCW pump lube oil coolers is being performed.		In Progress	
1131	2-1131	The design analyses for large bore pipe supports 58S/16V and 63/26V do not evaluate the shear lugs and attachment welds.	The welded attachments of Unit-2 comparable supports 15/26v and 50/16V were qualified by analysis.	No corrective action was required.	Complete	None
1132	N/A	Auxiliary Building member evaluations were listed as complete when they were not, implying the DCP corrective action was not fully implemented.	Concern based on IDVP misinterpretation and therefore not significant. Since the Auxiliary Building is common to both Units, the Unit 1 resolution is equally applicable to Unit 2.	No further Unit 2 review is required.	N/A	N/A
1133	2-1133	One revision of piping analysis modeled valve 9003A at 2/3 of total weight instead of total weight.	Analysis G-002-07 modeled the total weight of valve 9003A and its operator in accordance with Procedure P-11.	Piping analysis confirms installed Valve 9003A is seismically qualified and the computed maximum stresses are within code allowables.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1134	2-1003	The one-dimensional loading used with the Rayleigh-Ritz method might not have accurately established first-mode frequencies.	The methodology used to analyze the Unit 2 HVAC duct supports is the same used for Unit 1.	Since the results were found to be conservative on Unit 1, they are also conservative for Unit 2.	Complete	None
1135	2-1069	Valves LCV-113 and -115 were modeled with incorrect body and operator weights.	Analysis H-017-05 was performed to qualify the valves. Correct weights from the valves' drawing were used in the analysis.	Upon addition of 2 new supports on each valve, per the analysis, all stresses are within allowables.	Complete	Physical modifications are pending. Adding supports 414/110R, 414/111SL, 414/113R, 414/114SL.
1136	2-1136	In the CCW surge tank analysis, the bolt shear stress allowables calculated were larger than allowables defined by code. Also, internal tank pressure was excluded from the evaluation of the tank shell stress at the nozzles.	A seismic verification of the CCW surge tank and supports was done per DCMs C-17, C-25, C-30 and M-45.	All stresses are below allowables. No corrective action was necessary.	Complete	None
1137	2-1137	Valve FCV-365 was modeled in the design analysis with a weight of 405 lbs. IDVP claimed that the valve weighs 502 lbs.	The weight of Unit-2 valve FCV-365 is correct in analysis G-024-03.	Analyzed valve accelerations and maximum computed stresses are below the allowables. No corrective action was necessary.	Complete	None
1138	2-0037	An incorrect stress intensification factor was used in the design analysis.	An overall piping completion program is being performed on Unit-2 for all Class I small bore and large bore piping and supports.	Piping and supports are being qualified and modified as required to satisfy project design criteria.	Complete	Physical modifications are being implemented as required.

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1139	2-0037	In the design analysis of small bore pipe support 2159/2, the calculated deflection was compared to an erroneous standard deflection.	An overall piping completion program is being performed on Unit-2 for all Class I small bore and large bore piping and supports.	Piping and supports are being qualified and modified as required to satisfy project design criteria.	Complete	Physical modifications are being implemented as required.
1140	N/A	The UCP analysis of the Fire Pump did not examine the discharge nozzle flanged joint. The combination of seismic and design pressure nozzle loads may overstress the flange bolts.	The Fire Pump is common to both Units, and therefore, the concern is already resolved in Unit-1 verification program.	This item is also covered in IRP Package No.2-0124. Therefore, no further Unit 2 review is required.	N/A	N/A
1141	2-1141	UCP procedure P-11 did not include some lines (#26, 1040 to 1043) for postulated HELB review.	Procedure P-11 does not control high energy pipe break review. High energy lines are identified by the Mechanical Group based on the NRC Reg. Guide 1.46.	For Unit 2, Instruction I-44, Rev. 1, Attachments A & B include line #26 and lines #1040 thru 1043 in the review of the postulated high energy line break locations.	Complete	None
1142	2-1142	Anchor S1-8R online 3900 was not considered in the design analysis of loading conditions.	Describe how the effects of loading conditions of tributary non-Class I small bore anchors are considered in the Unit 2 Class I pipe support design analyses.		In Progress	
1143	2-1003	Based on verification analysis, revised vertical and horizontal Hosgri inputs may not have been correctly considered in the seismic analysis of HVAC duct supports.	The methodology used to analyze the Unit 2 HVAC duct supports as defined in DCM C-31 correctly considered the revised vertical and horizontal Hosgri inputs in the same manner as was done for Unit 1.	The Unit 2 duct support analyses include the Hosgri seismic spectra input identified in DCM C-17.	Complete	None

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
1144	2-0037	The design analysis performed to generically qualify vents and drains may not have been conservative in the method of accounting for pipe flexibility.	An overall piping completion program is being performed on Unit-2 for all Class I small bore and large bore piping and supports.	Piping and supports are being qualified and modified as required to satisfy project design criteria.	Complete	Physical modifications are being implemented. as required.
3000	N/A	Additional design verification of Harding Lawson Associates soils work was required by QA discrepancies.	HLA soils work is common to both units. Unit 1 resolution is equally applicable to Unit 2.	No further Unit 2 review is required.	N/A	N/A
3001	N/A	Additional design verification of EES (Cygna) pipe support work was required by QA discrepancies.	EES is not involved in Unit 2 piping analysis effort. Unit 2 piping is being analyzed under the DCP Quality Assurance program.	No further Unit 2 review is required.	N/A	N/A
3002	N/A	Additional design verification of ANCO seismic work was required by QA discrepancies.	ANCO is not involved in Unit 2 piping analysis effort. Unit 2 piping is being analyzed under the DCP Quality Assurance program.	No further Unit 2 review is required.	N/A	N/A
3003	N/A	Additional design verification of Wyle Labs seismic testing activities was required by QA discrepancies.	IDVP evaluation of the Wyle work results and conclusions in ITR No. 2 apply to both Units. QA concerns already resolved.	No further Unit 2 review is required.	N/A	N/A
3004	N/A	Additional design verification of PG&E QA and design work was required by QA discrepancies.	IDVP evaluation results and conclusions in ITR No. 2 apply to both Units. QA concerns already resolved.	No further Unit 2 review is required.	N/A	N/A

TABLE 1 (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
3005	N/A	Additional design verification of URS/Blume seismic design work was required by QA discrepancies.	IDVP evaluation results and conclusions in ITR No. 2 apply to both Units. QA concerns already resolved.	No further Unit 2 review is required.	N/A	N/A
3006	2-1014	Review of the 1981/82 Blume calculations noted a concern with the accurate representation of various sections of the containment annulus structure.	The structural design of the Unit 2 containment annulus steel structure was evaluated. The vertical dynamic analysis of Hosgri event considered 28 main frames and subframes to represent the annulus structure.	The annulus structure was modeled conservatively by assuming an equivalent spring to account for the amplification effect at the tangential beam connection to the radial frame when the vertical frequency was determined to be less than 33 Hz.	Complete	None
3007	2-1014	Review of the 1981/82 Blume calculations questioned the effect of the annulus tangential beams on the local amplified response spectra.	The complete Unit 2 containment annulus steel structure has been evaluated and tangential beam seismic responses checked.	Reinforcement has been provided in the design for tangential beams showing high seismic responses.	Complete	Physical modifications are pending.
3008	2-1014	There was a discrepancy between the annulus structure beam to column welded connection (bottom of flange at elevation 106 ft, column line 10) shown on the vendor drawing and that found in field inspection.	The complete Unit 2 containment annulus steel structure has been evaluated and welded connections checked.	Welded connections have been modified as required to satisfy design criteria.	Complete	Physical modifications complete. As-built dwgs. indicate that welding was performed in accordance with design requirements.
3009	2-1014	Hosgri horizontal response spectra did not envelop raw spectra developed independently by the IDVP.	Performed confirmatory analyses to show that original spectra are still valid for containment interior structure.	The Hosgri horizontal response spectra in DCM C-17 are valid for both Units 1 and 2 containment interior structures.	Complete	None

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ITP OIs and IDVP EOIs

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6001	N/A	A number of previously issued IDVP Phase I EOIs and DCP OIs were applicable to planned IDVP Phase II piping and support independent calculations. As a result of these items, DCP was to review the piping and supports for both Phase I and Phase II criteria.	Additional analyses performed on Unit 2 as part of the overall piping and supports completion program envelop the area of concern.	No further Unit 2 review is required.	N/A	N/A
6002	2-6002	The DCP program for analysis of rupture restraints provided for a sample that was larger than the initial sample planned by IDVP.	Unit-2 rupture restraints including crushable bumpers are being evaluated to verify that they are designed with sufficient capacity to perform their intended function.	Rupture restraints have been provided at all required locations and crushable bumpers designed to satisfy rupture restraint design criteria. Some modifications to adjust gaps are expected. Gaps will be finalized after piping movements observed during hot functional walkdowns are available.	Complete	Physical modifications are pending.
7001	2-7001	There was no evidence of an independent review of Auxiliary Building and FHB HVAC pressure loss calculations performed by GEZ.	The GEZ calculations were shown to to have been independently reviewed.	The calculations cover HVAC system in the Auxiliary Bldg. and FHB. These areas are common to both Units and the item is therefore, resolved for Unit-2.	Complete	None
7002	2-7002	IDVP could find no evidence concerning PG&E's jet-impingement analysis for components inside containment.	Jet impingement effects on safety related components inside containment are being defined and evaluated as specified in DCM M-65 and procedure MEP-1 in accordance with licensing criteria.	The results of the Unit 2 HELB jet impingement and pipe whip review and safety evaluation are documented. Modifications to assure safeguard functions are identified.	Complete	Physical modifications are pending.

TABLE 1 (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
7003	2-7003	PG&E could not provide evidence that independent design review had been performed for CIS items resolved by PG&E in a manner different from that previously agreed upon by PG&E and EDS.	Concern did not address current design. However, evidence shows EDS discrepancies were adequately corrected.	No corrective action was necessary.	Complete	None
7004	N/A	Neither PG&E nor Quadrex could provide evidence that door and penetration valve position assumptions made in PGE-01-27, Rev. 1, were still valid in view of plant design changes since 1974.	This concern is enveloped by additional Unit 2 environmental analysis efforts described in IRP Pkg. No. 2-8001.	No further Unit 2 review of this item is required.	N/A	N/A
7005	N/A	There was no evidence that Quadrex performed temperature, pressure, and flooding calculations in all compartments that are subject to high energy line break (HELB) consequences.	This concern is enveloped by additional Unit 2 environmental analysis efforts described in IRP Pkg. No. 2-8001 and 2-8005.	No further Unit 2 review of this item is required.	N/A	N/A
7006	2-7006	IDVP verification of equipment qualification for radiation dosage may have used as input superseded dosage information.	Rev. 3 of the radiation shielding review is applicable to Unit 2 and provides the results of the radiation shielding review performed in accordance with Part II. B. 2 of NUREG 0737. This report provides dose levels used to qualify equipment.	The dose levels are per Diablo Canyon licensing commitments. This information was sent to NRC in PGandE Letter No. DCL-84-260 dated dated July 12, 1984.	Complete	None

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8001	2-8001	The analytical model and computer code (CONTEMPT) used by NSC to calculate environmental conditions outside containment were not appropriate. The environmental temperatures were therefore, underpredicted.	The worst case environmental conditions due to HELB in both Units 1 and 2 were analyzed per calcs. M-447, M-446, M-445, M-455, M-484, M-492, M-493, M-457, M-458, M-474 and 88-33. The results were included in DCM M-73. The analyses did not use the CONTEMPT Computer Code.	Some modifications have been identified. These are required to assure analysis assumptions regarding door positions, wall/floor openings, system integrity and ventilation barriers are conservative.	Complete	Physical modifications are pending. These involve replacing doors and ventilation louvers, providing pressure retaining sealant and air-tight barriers, modifying flashing and access panels in walls/floors, and completing pipe break detection and isolation system.
8002	2-8001	Non-conservative assumptions were used in predicting environmental parameters in vital equipment areas during a high energy line break (HELB).	Unit-2 analyses described under IRP Package 2-8001 cover this concern.	See IRP Package 2-8001.	Complete	See IRP Package 2-8001.
8003	2-8001	The pressure/temperature (P/T) analysis of a long term blowdown in the Turbine Building resulting from a main steam line break used values of enthalpy that were too low.	Unit-2 analyses described under IRP Package 2-8001 cover this concern.	See IRP Package 2-8001.	Complete	See IRP Package 2-8001.
8004	2-8001	Initial environmental values for input to compartment P/T analyses may have been less conservative than values shown in the FSAR.	Unit-2 analyses described under IRP Package 2-8001 cover this concern.	See IRP Package 2-8001.	Complete	See IRP Package 2-8001.

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

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8005	2-8005	In the S/G flooding analysis, non-conservative assumptions were made for the S/G inventory and aux. feed contribution.	NSC Report PGE 01-27 is the basis for the submergence analysis. The maximum available water inventory is the same for both Units. The Unit-2 flow rates are 2.2% higher than those of Unit-1.	The increased Unit-2 flow rates provide a negligible increase in flood height. A field walkdown verified that safety-related equipment is not affected by the increased flood height.	Complete	None
8006	N/A	IDVP could not obtain the input data used to calculate environmental conditions in the Turbine Bldg. due to a high energy line break.	Unit-2 analysis efforts described in IRP Package 2-8001.	No further Unit 2 review of this item is required.	N/A	N/A
8007	2-8007	A pipe rupture restraint (1030-14RT) appeared to IDVP to be improperly located to restrain the pipe during a circumferential break. This would create a potential hazard to conduit K6844.	The Unit-2 restraint, 2030/14RT is the mirror image of the Unit-1 restraint, 1030/14RT. In the NSC analysis, no loads are given at the the node occupied by this restraint.	Restraint 2030/14RT is abandoned in place and is not required to handle any postulated break.	Complete	None
8008	2-8008	A pipe rupture restraint (1031-11RT) appeared to IDVP to be improperly located to restrain the pipe during a circumferential break. This would create a potential hazard to conduit K6844.	The Unit-2 restraint, 2031/11RT is the mirror image of the Unit-1 restraint, 1031/11RT. In the NSC analysis, no loads are given at the the node occupied by this restraint.	Restraint 2031/11RT is abandoned in place and is not required to handle any postulated break.	Complete	None

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

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8009	2-8009	Under certain operating conditions, the discharge piping and valves of the turbine driven aux. feed pump might have been exposed to pressures in excess of code allowables.	On Unit-1, DCP replaced the discharge valves and proposed to lower the turbine overspeed trip set-point during plant startup.	As documented in NCR DC2-83-EN-N013, the Unit-2 resolution is the same as Unit-1 except that the various values of pressures are slightly different.	Complete	Physical modifications and set-point adjustments are pending.
8010	2-8010	Under certain operating conditions, the bearing cooling water and pump recirc. systems for the AFW turbine could be subjected to overpressure.	The bearing cooling water and recirculation systems have been redesigned.	The piping design was revised by re-routing and changing some piping, adding an orifice, removing or modifying certain isolation and throttle valves and replacing other valves.	Complete	Physical modifications are pending.
8011	2-8011	Some Class 1E cables were installed in a possible main steam line break area. The cables were not listed in the FSAR as qualified for this application.	DCM M-73, Rev. 1 provides the criteria for determining the pressurization and environmental effects of a high energy line break (HELB).	It has been verified that all types of cables subject to main steam line break (MSLB) have been suitably qualified to identical Unit-1 and Unit-2 worst-case environmental conditions per DCM M-73.	Complete	None
8012	2-0030	The power supplies to the Control Room Ventilation and Pressurization System (CRVP) equipment did not meet single failure criteria.	The CRVP system was reviewed to determine its operability and additional calculations performed to confirm the required capability of the Unit-2 diesel generators, which are identical to the Unit-1 diesel generators.	The CRVP system design was revised so that the electric power and control supplies do not depend on the diesel generator systems of both units to meet the single failure criteria.	Complete	Physical modifications complete. Operating procedure EP OP-4B revised.
8013	2-8013	IDVP was concerned that the test data for the diesel generators did not clearly document the generators' ability to accept the worst-case loads.	Additional test data were obtained and additional calculations performed to confirm the required capability of the Unit-2 diesel generators, which are identical to the Unit-1 diesel generators.	No corrective action was necessary.	Complete	None

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UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
8014	2-8014	IDVP claimed that the spray protection shields for four AFW system valves were not properly supported. Also, the commitment to install shields on two other AFW valves was not implemented.	MELB spray protection requirement for four valves (LCV-108, 109, 113 and 115) was evaluated. The other two valves (FCV-436 and 437) were determined not to require shields. A revision to the licensing commitment on these two valves has been proposed.	No MELB spray protection is provided for the subject LCV and FCV valves. Redundant AFW supply trains and manual handwheels satisfy plant cooldown requirements.	Complete	FSAR update pending NRC review.
8015	2-8015	The Tech. Specs. and the ISI Program of the AFW pumps provide no evidence that the pumps can supply the required flow to the S/Gs or that adequate recirculation flow can exist.	Reviewed Unit 2 AFW pumps Tech. Specs. and ISI Program requirements. Start-up testing of the Unit-2 pumps will verify their capability to satisfy design flow rate requirements.	The Technical Specifications and Inservice Inspection and Testing (ISI) Programs have identical provisions for both Unit 1 and 2 AFW pumps.	Complete	Tech. Specs. and ISI Programs pending NRC review.
8016	2-0030	An evaluation of various combinations of vital bus failures for a postulated LOCA in either Unit 1 or Unit 2 indicated conditions in which the CRVP system did not meet its design bases regarding single failure criteria. The ability to safely shut down the other Unit following a LOCA was also a concern.	The CRVP system was reviewed to determine its operability and additional calculations performed to confirm the required capability of the Unit-2 diesel generators, which are identical to the Unit-1 diesel generators.	The CRVP system design was revised so that the electric power and control supplies do not depend on the diesel generator systems of both Units, to meet the single failure criteria.	Complete	Physical modifications complete. Operating procedure EP OP-4B revised.
8017	2-8017	Control power from two redundant safety-related sources for the CRVP system was brought together in one transfer/selector switch contrary to separation criteria and requirements of IEEE-279-1971 and IEEE-308-1971.	Separation of CRVP System electric control circuits has been reviewed.	An additional bus selector switch has been added so that the redundant circuits go to separate switches. NPO is implementing administrative procedures so that the installed switches do not need to be key-interlocked.	Complete	Physical modification is complete. Administrative procedure change will be made by NPO.

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
8018	2-8018	The design classification of valves FCV-37 and -38 is I&C Class II. IDVP, thinking they are required to operate to isolate a postulated break in the AFW turbine steam supply line, claimed that the valves should be I&C Class I.	On Unit-1, DCP showed that these valves are not required to isolate a postulated break. Therefore, the I&C Class II classification is appropriate.	Resolution of Unit-2 is same as Unit-1 because the Westinghouse analysis, which is the basis of the Unit-1 resolution is also applicable to Unit-2.	Complete	None
8019	2-8019	IDVP was concerned that both motor-driven AFW pumps and a control valve (FCV-45) circuit (K8317) for the turbine-driven AFW pump were all contained in one fire zone (3-Q-2).	A review of all safe shutdown circuit routings for FCV-95 showed that none is routed through analogous fire zone 3-T-2 or in conduit K-8317.	No corrective action was necessary.	Complete	None
8020	2-8020	IDVP identified several CRVP components essential to control room habitability that were apparently not addressed in DCP's 1978 fire protection report. IDVP also identified circuit routings that were different than indicated in the report.	DCP analysis demonstrated that the the as-built CRVP system can continue to operate during fires outside the control room envelope.	Since the CRVP systems in both Units service the same control room space, the Unit-1 resolution included review and evaluation of the Unit 2 CRVP system. No corrective action was required.	Complete	None
8021	2-8021	IDVP identified eleven power/control circuit routings in the AFWS that were different than described in the licensing document.	Field walkdown determined as-built circuit routings through Unit 2 fire zones.	A comparison of the Unit 1 and 2 routings, different than listed or not included in the SIFPR, established that a single fire in any fire zone will not adversely affect the safe shutdown capability of the AFW system.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
8022	2-8022	IDVP calculated that the worst-case available short-circuit current on the 4.16 kV safety-related systems exceeds the ratings of the breakers on buses F, G, and H. Concerns were also raised about the adequacy of breakers in other (i.e., 480 V) systems.	Manufacturer's test data and DCP analysis on the Unit 1 and 2 4.16 kV and 480v breakers showed that these breakers have interrupting capabilities at currents in excess of the maximum short-circuit currents.	No corrective action was necessary.	Complete	None
8023	2-8023	After a LOCA and automatic transfer to the 230 kV startup source, steady state voltage at the terminals of 460 V safety-related motors may have been less than 90% of rated motor voltage.	Voltage regulation studies were done for correct voltages during different modes of operation.	No transformer tap setting changes were warranted. However, during start-ups or after a LOCA, Morro Bay will be requested to maximize grid voltage. Also, 4kV motors will be started in sequence.	Complete	None
8024	2-8024	IDVP was concerned that, with auxiliary power being supplied from the 230 kV startup source, 480 V starter contacts may drop out when large motors start.	Voltage regulation studies were done for correct voltages during different modes of operation.	No transformer tap setting changes were warranted. However, during start-ups or after a LOCA, Morro Bay will be requested to maximize grid voltage. Also, 4kV motors will be started in sequence.	Complete	None
8025	2-8025	IDVP believed that all 4 kV motors transfer automatically at one time to the 230 kV source after a LOCA. This transfer may have resulted in low voltage to 4 kV and 480 V terminals.	Voltage regulation studies were done for correct voltages during different modes of operation.	No transformer tap setting changes were warranted. However, during start-ups or after a LOCA, Morro Bay will be requested to maximize grid voltage. Also, 4kV motors will be started in sequence.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
8026	2-8026	IDVP calculations predicted that during normal steady-state and full-load operation with 230 kV supplying station auxiliaries, the voltage at 480 V terminals may be low.	Voltage regulation studies were done for correct voltages during different modes of operation.	No transformer tap setting changes were warranted. However, during start-ups or after a LOCA, Morro Bay will be requested to maximize grid voltage. Also, 4kV motors will be started in sequence.	Complete	None
8027	2-8027	A steam trap in the AFW turbine steam supply was not installed as required by DCN DC1-GM-1017.	AFW turbine quick start failures experienced during initial Unit 1 start-up testing were attributable to a faulty turbine governor and not to condensate formation in the steam supply line.	Governors were replaced on the Units 1 and 2 AFW turbines. Subject steam trap was never shown on Unit 2 design dwgs. nor installed in Unit 2.	Complete	None
8028	2-8028	IDVP was concerned that the effects of a crack break in Line 760 on the AFW pump motors were not evaluated.	Line 760 in Unit 2 is not pressurized during normal plant operation, including startup and shutdown and is therefore, not subject to crack/ruptures.	Breaks in this line are not required to be postulated and a revision to the FSAR has been drafted stating this.	Complete	FSAR update pending approval by NRC.
8029	2-8028	IDVP was concerned that the effects of a crack break in Line 760 on PT-434 and Pump 1-3 were not evaluated.	Line 760 in Unit 2 is not pressurized during normal plant operation, including startup and shutdown, and is therefore, not subject to crack/ruptures.	Breaks in this line are not required to be postulated and a revision to the FSAR has been drafted stating this.	Complete	FSAR update pending approval by NRC.
8030	2-8028	IDVP was concerned that the effects of a crack break in Line 760 on PT-433 and Pump 1-1 were not evaluated.	Line 760 in Unit 2 is not pressurized during normal plant operation, including startup and shutdown, and is therefore, not subject to crack/ruptures.	Breaks in this line are not required to be postulated and a revision to the FSAR has been drafted stating this.	Complete	FSAR update pending approval by NRC.

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
8031	2-8031	Valve position monitors, POM-113 and POM-115 may not have been qualified or addressed as targets exposed to a crack break.	Reviewed Unit 1 and 2 designs for similarity and the applicability of the Unit 1 resolution to Unit 2.	Resolution is the same as for Unit 1. The POMs are not required to be Class I instruments. The concern has no impact on plant safety because any jet impingement temperature is below the manufacturer's ratings for ambient temperature.	Complete	An FSAR revision adding an alternate method of calculating jet temperatures as described in ANSI/ANS 58.2 is pending NRC approval.
8032	2-8032	Isolation of the control room circuits for LCV-110, 111, 113, 115 was not provided to prevent loss of operation from two areas by a local fire in either of the two areas, i.e., control room or the hot shutdown panel.	The control room circuits for LCVs-110, 111, 113, 115 were reviewed to determine their operability during a local fire.	The switches are being rewired to provide automatic functions without the possibility of a control room fire preventing such functions.	Complete	Physical modifications are pending.
8033	2-8001	Unconservative methods were used to model the steam generators for calculating mass and energy release data to be used in determining main steam line rupture parameters.	Unit 2 analyses described under IRP Package 2-8001 cover this concern.	No findings were attributable to the method used to model the steam generators.	Complete	None
8034	2-8001	Unconservative pressure-temperatures were calculated by NSC for Area GE.	Unit 2 analyses described under IRP Package 2-8001 cover this concern.	The worst case environmental conditions due to HELB in both Units 1 and 2 were determined and documented in DCM M-73.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
8035	2-8035	Smoke detectors had not been installed by EOI issuance in the control room ventilation and pressurization intake ducts to meet licensing commitment.	Amendment 51 commitment requires smoke detectors in the CRVP intake ducts.	Two air duct smoke detectors are being installed in the CRVP ducts.	Complete	Physical modifications complete.
8036	2-8036	In fire zone 3-Q-1, the cover on a hydrogen isolation valve was missing and the cover on a check valve was loose with bolts missing.	The lines were not operational at the time the concern was raised. The need for the valve covers to be installed and secured tightly was addressed.	The field was instructed that valve covers be secured tightly after the system is aligned for operation and before it is charged with hydrogen.	Complete	None
8037	2-8037	Fire damper FD-24 in the noncombustible barrier separating the motor-driven auxiliary feedwater pumps appeared not to meet applicable criteria.	Field inspection confirmed the Unit-1 damper was properly labeled and met applicable standard UL-555.	The Unit-2 installation uses the same dampers and specification as Unit-1. Therefore, the Unit-2 dampers also meet standard UL-555.	Complete	None
8038	2-8038	Fire Zone 3-Q-2 is in direct communication with Fire Zone 3-K through a ventilation exhaust opening contrary to confining a fire to its own fire zone.	An Appendix R review of Unit-2 fire protection was performed to confirm that a fire will not propagate between comparable Fire Zones 3-T-2 and 3-W.	For the reasons stated in the Unit 2 Appendix R report, propagation of a fire between Fire Zones 3-T-2 and 3-W is very unlikely.	Complete	None
8039	2-8039	Cable spreading rooms in Fire Zones 12-A, B, C are in direct communication with 4160V. switchgear rooms in Fire Zones 13-A, B, C.	An Appendix R review of Unit-2 fire protection was performed to confirm that a fire will not propagate between comparable Fire Zones 23-A, B, C and 24-A, B, C.	For the reasons stated in the Unit 2 Appendix R report, propagation of a fire between Fire Zones 23-A, B, C and 24-A, B, C is very remote and a single fire will not affect more than one redundant vital bus.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
8040	N/A	Unconservative assumptions in steam generator inventory and auxiliary feedwater flow were made when analyzing flooding of area GW.	The area of concern was enveloped by additional Unit-2 flooding analysis efforts described in. IRP Package No. 2-8005.	No further Unit 2 review of this item is required.	N/A	N/A
8041	2-8041	There was a question of whether or not the Class IE circuit separation criteria described in the FSAR were satisfied in the supply circuits to a CRVP transfer switch.	The supply circuits to this switch are not mutually redundant and the the separation criteria are not violated. Standard plant procedures cover transfer of power sources.	No corrective action was necessary. For other reasons, the transfer switches have been eliminated per DCN.	Complete	None
8042	2-8042	Electrical separation criteria may not have been satisfied for the power source to Auxiliary Feedwater System and Control Room Ventilation and Pressurization System instruments.	A single failure analysis of Unit-1 circuits showed the arrangement did not violate separation criteria and met the licensing commitment and the requirements of IEEE-380, 1971.	A comparison of the Unit 1 and Unit 2 circuitry confirmed they are similar so that the safety analysis performed for Unit 1 is equally applicable to ensure safe shutdown capability of Unit 2 in accordance with FSAR and IEEE-380 commitments.	Complete	None
8043	2-8043	Safe shutdown capability might be compromised by a failure of cables in a main annunciator and monitor light terminal box.	The main annunciator and the monitor lights are not redundant systems required for safe shutdown of the plant. Power supply circuits to these devices are sufficiently isolated to preclude propagation of a failure back to the Class 1E supply bus.	No corrective action was necessary.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
8044	2-8044	Certain cable splices in the Auxiliary Feedwater and Control Room Ventilation and Pressurization Systems might not meet the qualification for maximum environmental temperature.	The subject splices were requalified for a temperature of 540°F. This is the highest temperature to which they could be subjected during a HELB.	No other action was required.	Complete	None
8045	2-8045	IDVP concluded diesel generator 125V dc independent control power circuits did not satisfy separation criteria in the FSAR.	Each diesel generator control circuit was designed to operate with the single failure of one control power source. The separation of the two power sources is not required since they do not supply mutually redundant systems. Failure of both fuses and circuit breakers is a double failure. IEEE standards do not require this double-failure criterion. Therefore, FSAR criteria are met.	No corrective action was necessary.	Complete	None
8046	2-8046	In some instances the control power for the Control Room Ventilation and Pressurization (CRVP) fans was not supplied from the same bus as the bus that supplied the fan.	The circuits for the CRVP fans were reviewed for single failure and separation criteria.	Transfer switches were provided in the control power circuit and additional circuit modifications have been made. Also, the control power has a battery source through an inverter to supply power on bus failure.	Complete	Modifications are complete.
8047	2-8047	If eight blowdown valves failed to close because of a nonsafety grade relay failure, the ability of the Auxiliary Feedwater System (AFWS) to supply adequate cooling water to four steam generators could be impaired.	Reviewed Unit 1 and 2 designs for similarity and the applicability of the Unit 1 resolution to Unit 2.	It was determined that a redundant safety-related relay must be installed along with the existing relays in each valve control circuit, same as was done for Unit 1.	Complete	Modifications are complete. Installed redundant relay 3AFWPA with one contact in each blowdown valve control circuit.

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
8048	2-8048	A discrepancy existed between the as-built Auxiliary Feedwater System hose station and the latest design drawing.	Unit-2 P&ID 10816, Rev. 1, was reviewed to determine the applicability of this concern to Unit-2.	The Unit-2 P&ID already showed the check valve in question. No corrective action was necessary.	Complete	None
8049	2-8049	A postulated pipe break in Line 594 of the Auxiliary Feedwater System (AFWS) could impact associated electrical conduits and potentially disable the AFWS.	Effects of high energy line breaks on safety-related equipment are the subject of a separate Unit 2 overall jet impingement review.	No high energy pipe break is postulated in the Unit 2 AFW system line comparable to the Unit 1 break location. Effects of other Unit 2 pipe breaks are included in the Unit 2 overall jet impingement review.	Complete	None
8050	2-8050	The effect of a moderate energy line break on the Control Room Ventilation and Pressurization System was not addressed in DCP's submittals to NRC.	The CRVP is not required to be protected from MELB. If the control room becomes uninhabitable, the plant can be shut down from the hot shutdown panel.	No postulated MELB on the CRVP could prevent safe plant shutdown.	Complete	None
8051	2-8051	A discrepancy in the safety classification existed for components of the auxiliary feedwater pressure instrument loop between the licensing document and the design documentation.	This instrument loop is not required to be safety related. The licensing documents are being revised accordingly.	An FSAR change to show these instruments as not safety-related is in process.	Complete	FSAR update pending approval by NRC.
8052	2-8052	Flow transmitter FT-78 and valve FCV-95 may not have been environmentally qualified.	Documentation demonstrates that FT-78 and FCV-95 are identical to to their Unit-1 counterparts; FT-78 has been retagged to FT-200.	Due to acceptable qualification for Unit-1, identical HELB area location, and identical equipment, these items are qualified for Unit-2.	Complete	None

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
ITP OIs and IDVP EOIs

UNIT 1 EOI NUMBER	UNIT 2 IRP PKG. NUMBER	DESCRIPTION OF UNIT 1 CONCERN	UNIT 2 REVIEW SUMMARY	UNIT 2 FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP. PROC. CHG., FSAR REV.
8053	2-8053	An instrument drawing designated certain radiation monitors Class II instead of the Class I they are required to be. This discrepancy could have resulted in improper installation.	Purchase order T 4R-42212 shows that the subject radiation monitors were originally purchased as Class I.	Instrument schematic 102931, Sh. 12, was revised to reclassify the subject radiation monitors as Class I.	Complete	None
8054	2-8059	Safety-related cables were possibly not color-coded and properly separated according to FSAR commitments.	Review established that the design met the separation commitments made in the FSAR. The associated concerns of cable identification and other separation concerns within panels are addressed in IRP Packages 2-8057 and 2-8059.	The FSAR is being revised to address color coding of conductors in the same raceway or enclosure.	Complete	FSAR update pending approval by NRC.
8055	2-8055	Auxiliary feedwater (AFW) pump discharge pressure indicators were not installed on main control board with minimim separation committed to in the FSAR.	As presently installed, the indicators meet the intent of FSAR Section 8.3.3.	The text of this FSAR section is being revised to eliminate confusion for low-power devices (indicators, etc.) mounted on the main control board.	Complete	FSAR update pending approval by NRC.
8056	2-8056	Some Class IE equipment in the Control Room Pressurization System was not included in PG&E's Environmental Report.	Dwg. 050909 titled as "Electrical Equipment Qualification List - Diablo Canyon Units 1 and 2," is the working file for environmental qualification related design.	Unit-2 Control Room Pressurization System Class IE equipment has been added to the PGandE EQ file (Dwg. 050909).	Complete	None
8057	2-8057	Control panels associated with AFWS and the Control Room Ventilation and Pressurization (CRVP) System contained circuits that did not strictly meet separation criteria established in the FSAR.	A procedure to review and implement separation of mutually redundant circuits and devices per misc. note 16 on Dwg. 050024 was developed.	Modifications to provide suitable circuit separation in the subject panels in accordance with licensing criteria have been identified and implemented.	Complete	Confirmatory walkdown inspection is continuing at the jobsite.

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ITP OIs and IDVP EOIs

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8058	2-8058	Two concerns were raised related to the environmental qualification of four control valves in the AFWS: (1) EQ of a capacitor in the actuator motors and (2) the reported failure of an actuator relief mechanism.	The qualification plan and the latest test results for the analogous Unit-2 Class IE valves are acceptable.	No corrective action was necessary.	Complete	None
8059	2-8059	The application of color-coded, Class IE conductors for non-safety-related functions was not addressed by the FSAR.	The FSAR was reviewed with respect to non-safety related circuit separation and color coding.	The FSAR is being revised to address color coding and isolation of safety and non-safety related conductors in raceway and enclosures.	Complete	FSAR update pending approval by NRC.
8060	2-8060	The auxiliary feedwater pumps, using runout control logic, could cause inadequate flow to the steam generators under certain operating conditions. This control scheme could result in dynamic instability during certain accident conditions. Also, pressure and level signals may be giving opposing signals to the valves.	DCP recalculated the pressure setpoint range for the actual horsepower ratings of the Unit-1 AFW pumps and instructed the field to make the adjustment accordingly. The Unit-1 Runout Control System was tested and proven stable.	The Unit-2 AFWS is identical to that of Unit-1. They have identical flow control schemes. It is expected that Unit-2 start-up tests will confirm the operability and stability of the AFWS.	Complete	Start-up testing is pending.
8061	2-8061	Documentation originally available for the AFW and CRVP system motors performance capability was inadequate to show that the motors could start at 80% of rated voltage as per licensing commitment.	Manufacturer's documentation was obtained that the subject motors could start at 80% voltage with their service condition loads. This documentation covers motors for both Units 1 and 2.	No corrective action was necessary.	Complete	None

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8062	2-8062	Three steam valves (FCV-95, -37 and -38) in the Auxiliary Feedwater Turbine Steam System were not designed to close against the differential pressures they might have across them for certain conditions.	The conditions under which these valves will be required to operate have been reviewed against their capabilities.	FCV-95 will be modified to operate against a maximum diff. pressure of 1150 psi. FCV-37 and -38 will not be modified as they are not required to be operated for safe shutdown of the plant.	Complete	Physical modifications are pending.
8063	2-8063	Overcurrent relays of the motor-driven auxiliary feedwater pumps were set so they would unnecessarily trip if required to operate at 90% voltage.	DCP recognized this problem and had issued a design change notice to change tap settings before the EOI was issued.	Unit-2 resolution is the same as Unit-1. The relay tap setting was changed to 4.5, which will change the trip value to 120% of full load current, allowing the pump to operate at 90% of rated voltage.	Complete	Modification is complete.
8064	2-8064	IDVP contended that four position transmitters (POMs) should be treated as Class IE and should be environmentally qualified.	PGandE analysis provides adequate assurances than an adverse failure of the POMs will not occur.	No corrective action was necessary.	Complete	None
8065	2-7002	IDVP considered four identified items to be jet impingement interactions with safety-related targets that could have potential safety significance. These items had not been identified as targets by DCP.	The subject four interactions are addressed in the Unit 2 review of jet impingement effects on safety related components inside containment.	The documented results of the Unit 2 overall HELB jet impingement and pipe whip review and safety evaluation include the subject four interactions.	Complete	None

UNIT 2 IRP
DETAILED RESOLUTION TABLE
SSER 20 OPEN AND FOLLOW-UP ITEMS

OI/FI NO.	UNIT 2 IRP PACKAGE NO.	DESCRIPTION OF ITEM	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MODS., OP. PROC. CHG., FSAR REVISION
SSER OI-1	2-1014	Confirm that the freehand averaging procedures for spectra used on Unit 2 are the same as used on Unit 1; otherwise, justify the differences	The methodology for averaging spectra is described in PGandE letter to the NRC dated 8/30/83 and IRP package 2-1014.	The methodology for averaging of spectra is the same for Units 1 and 2.	Complete	None
SSER OI-2	2-1014	In the seismic analysis of the Unit 2 containment annulus, justify the cut-off frequency used to generate floor spectra.	Cut-off frequency justification included in PGandE letter DCL-84-101 and IRP package 2-1014.	The cut-off frequency for vertical motions is 33Hz while for horizontal motions it is 20Hz. These criteria are used in both the Unit 1 and 2 analyses.	Complete	None
SSER OI-3	N/A	Assess the applicability of the AISC and ASME (Section III) codes to the design of penetrations in the containment shell.	The containment design was shown to satisfy both codes for Unit 1. The design criteria are contained in DCM C-47 for both units.	Because the two containments are of identical design, this concern is already resolved for Unit 2. No further Unit 2 review required.	N/A	N/A
SSER OI-4	N/A	Assess the adequacy of design of the containment equipment hatch opening structure.	The containment design was shown to be adequate in this area for Unit 1.	Because the two containments are of identical design, this concern is already resolved for Unit 2. No further Unit 2 review required.	N/A	N/A
SSER OI-5	N/A	Assess the assumptions used in the Auxiliary Building seismic analysis to determine floor slab flexibility.	This item was resolved for Unit 1. DCM C-36 provides design criteria for Auxiliary Building verification.	Because the Auxiliary Building is a common structure, no further Unit 2 review required.	N/A	N/A

TABLE (Cont'd.)

UNIT 2 IRP
DETAILED RESOLUTION TABLE
SSER 20 OPEN AND FOLLOW-UP ITEMS

OI/FI NO.	UNIT 2 IRP PACKAGE NO.	DESCRIPTION OF ITEM	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MODS., OP. PROC. CHG., FSAR REVISION
SSER OI-6	N/A	Justify the use of the ACI code for evaluating the floor slabs and walls of the Auxiliary Building.	This item was already resolved for Unit 1. DCM C-36 provides design criteria for Auxiliary Building verification.	Because the Auxiliary Building is a common structure, no further Unit 2 review required.	N/A	N/A
SSER OI-7	N/A	Assess the soil spring influence on the seismic response of the Auxiliary Building.	This item was already resolved for Unit 1. DCM C-36 provides design criteria for Auxiliary Building verification.	Because the Auxiliary Building is a common structure, no further Unit 2 review required.	N/A	N/A
SSER OI-8	N/A	Document the use of Auxiliary Building motions as input to the Fuel Handling Building (FHB) seismic analysis.	This item was already resolved for Unit 1. DCM C-35 provides design criteria for FHB verification.	Because the FHB is a common structure, no further Unit 2 review required.	N/A	N/A
SSER OI-9	N/A	Justify the reduction in the number of dynamic degrees of freedom used in the FHB seismic analysis.	This item was already resolved for Unit 1. DCM C-35 provides design criteria for FHB verification.	Because the FHB is a common structure, no further Unit 2 review required.	N/A	N/A
SSER OI-10	N/A	Justify the load combination equation used to seismically qualify the Turbine Building.	This item was already resolved for Unit 1. DCM C-42 provides design criteria for both Unit 1 and Unit 2 Turbine Building verification.	Because the load combination criteria used in the Unit 2 Turbine Building analysis is identical to that used in the Unit 1 analysis, no further Unit 2 review required.	N/A	N/A

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UNIT 2 IRP
DETAILED RESOLUTION TABLE
SSER 20 OPEN AND FOLLOW-UP ITEMS

OI/FI NO.	UNIT 2 IRP PACKAGE NO.	DESCRIPTION OF ITEM	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MODS., OP. PROC. CHG., FSAR REVISION
SSER OI-11	2-0122	Confirm that the same analytical model of roof trusses was used for both the Unit 1 and Unit 2 portions of the Turbine Building.	Method of Turbine Building roof truss modeling is described in PGandE letter DCL-84-052.	The method of roof truss modeling applies to both Unit 1 and Unit 2 portions of the Turbine Building.	Complete	None
SSER OI-12	2-0123	Confirm that the same model was used in the vertical seismic analysis for both Unit 1 and Unit 2 portions of the Turbine Building.	The Unit 2 Turbine Building vertical seismic analysis was reviewed for similarity to the Unit 1 model.	The same model is used in the separate vertical seismic analyses for both Units 1 and 2 portions of the Turbine Building.	Complete	None
SSER OI-13	2-0123	Confirm that the number of degrees of freedom for the nodes above elevation 140-ft. of all models for the roof trusses is consistent with Turbine Building response and meets the licensing criteria.	The Unit 2 Turbine Building analysis was reviewed for validity of degrees of freedom used.	The number of degrees of freedom used in the Unit 2 Turbine Building analysis is consistent with the building response and satisfied the licensing criteria, same as for Unit 1.	Complete	None
SSER OI-14	N/A	Concern regards the acceptability of alternative procedures for modal combinations by the SRSS method in the Turbine Building seismic analysis.	This item was already resolved for Unit 1. DCM C-42 provides design criteria for both Unit 1 and Unit 2 Turbine Building verification.	Because the methodology for modal combinations is the same for both Unit 1 and Unit 2 portions of the Turbine Building, no further Unit 2 review required.	N/A	N/A
SSER OI-15	N/A	Justify the use of the AISC code, 8th edition, in determining allowable stresses in the Turbine Building.	This item was already resolved for Unit 1. DCM C-42 provides design criteria for both Unit 1 and Unit 2 Turbine Building verification.	Because the same codes are applicable to Unit 1 and Unit 2 portions of the Turbine Building, no further Unit 2 review required.	N/A	N/A

TABLE 2 (Cont'd.)

UNIT 2 IRP
DETAILED RESOLUTION TABLE
SSER 20 OPEN AND FOLLOW-UP ITEMS

OI/FI NO.	UNIT 2 IRP PACKAGE NO.	DESCRIPTION OF ITEM	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MODS., OP. PROC. CHG., FSAR REVISION
SSER OI-16	2-0037	Confirm that the stress ratio for a sample of Unit 2 large bore pipe supports and their components is less than 1 and that they meet all licensing criteria.	Included in separate Unit 2 piping analysis.	This criteria is included in the Unit 2 pipe supports review. No modification can be attributed soley to this concern.	Complete	No modifications attributable solely to this concern
SSER OI-17	2-0037	Confirm that Unit 2 support compressive stresses satisfy code allowable buckling load requirements for linear supports in the same manner as justified for Unit 1.	Included in separate Unit 2 piping analysis.	While modifications may be required as a result of Unit 2 pipe support analyses, they cannot be attributed solely to this specific concern.	Complete	No modifications attributable solely to this concern
SSER OI-18	N/A	Calculations for selected piping systems identified in ITRs 12 and 17 should be repeated.	This item is enveloped by separate Unit 2 piping analysis.	No further Unit 2 review of this specific item is required.	N/A	N/A
SSER OI-19	N/A	Additional clarification was needed to determine the actual extent of the DCP review of small bore pipe.	This item is enveloped by separate Unit 2 piping analysis.	No further Unit 2 review of this specific item is required.	N/A	N/A
SSER OI-20	See Review column.	Review certain mechanical equipment seismic qualifications for nozzle loads and component configurations.	All Unit 2 seismic analyses for the mechanical equipment are complete. The analyses were done per project approved criteria memorandas, and include verification of equipment, location, applicable response spectra, nozzle loads and equipment configuration.	All mechanical equipment is qualified, except a limited number of components for which DCN's were issued to reduce nozzle loads or change equipment mounting details.	Complete	Physical modifications are pending

TABLE (Cont'd.)

UNIT 2 IRP
DETAILED RESOLUTION TABLE
SSER 20 OPEN AND FOLLOW-UP ITEMS

OI/FI NO.	UNIT 2 IRP PACKAGE NO.	DESCRIPTION OF ITEM	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MODS., OP. PROC. CHG., FSAR REVISION
SSER OI-21	N/A	Evaluate stresses at interfaces between valve nozzles and pipes.	This item is enveloped by separate Unit 2 piping analysis.	No further Unit 2 review of this specific item is required.	N/A	N/A
SSER OI-22	2-0124	Confirm that pump flange stresses of certain Unit 2 pumps are within allowables.	Field walkdown of Unit 2 AFW, CCW, ASW and make-up water transfer pumps was performed to confirm that there were no flat-to-flat face flange installations.	No flat-to-flat face flange installations were found on the subject Unit 2 pumps and therefore no potential for overstresses in the pump nozzle flanges is expected as was the case for the common fire pumps.	Complete	None
SSER OI-23	2-0983	Confirm that the cable tray seismic analyses treat the coupling of the trays and supports as a system and that the trays are qualified.	Checked the Unit 2 cable tray support systems analysis methodology to confirm that analytical coupling of the trays and supports is included.	The Unit 2 cable tray support seismic analyses include the coupling of the tray and supports to determine a system frequency using the same methodology as used for Unit 1.	Complete	None
SSER OI-24	2-0102	Review of cable trays supported by superstrut material.	Checked the Unit 2 Superstrut support seismic analysis to confirm that it reflects spot weld allowables determined by field tests.	The spot weld allowable Units are reflected in the Unit 2 superstrut support seismic qualification analysis.	Complete	None
SSER OI-25	N/A	Evaluate the lateral forces on, and resistance to, sliding of the Intake Structure.	This item has already been resolved for Unit 1 since the Intake Structure is common to both units.	No further Unit 2 review required.	N/A	N/A

TABLE 2 (Cont'd.)

UNIT 2 IRP
DETAILED RESOLUTION TABLE
SSER 20 OPEN AND FOLLOW-UP ITEMS

OI/FI NO.	UNIT 2 IRP PACKAGE NO.	DESCRIPTION OF ITEM	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MODS., OP. PROC. CHG., FSAR REVISION
SSER OI-26	N/A	Additional analysis of the buried diesel fuel oil tank.	This item has already been resolved for Unit 1 since the buried DFO tank is common to both units.	No further Unit 2 review required.	N/A	N/A
SSER OI-27	2-8018	Confirm that the operators and control circuits for FCV-37 and -38 have been reclassified as safety-related.	The Unit 2 Technical Specifications and drawings for FCV-37 and -38 were reviewed for safeguards classification.	The valve operators and control circuits for FCV-37 and -38 have been reclassified as instrument Class 1A.	Complete	None
SSER OI-28	2-8047	Confirm that a redundant safety-related relay has been installed in the control circuit of Unit 2 blowdown valves.	The Unit 2 blowdown valve control circuit schematics were reviewed.	Resolution is the same as for Unit 1. A redundant safety-related relay is included in the design of the Unit 2 blowdown valves control circuit.	Complete	Physical mods complete. Installed redundant relay 3AFWPA with one contact in each blowdown valve control circuit.
SSER OI-29	2-7002	Confirm that jet impingement loads have been considered inside the Unit 2 containment.	Jet impingement loads inside containment were evaluated per DCM M-65 and procedure MEP-1 in accordance with Licensing criteria.	The results of the Unit 2 HELB jet impingement and pipe whip review and safety evaluation is documented. Modifications to assure safeguard functions are identified.	Complete	Physical modifications are pending.
SSER OI-30	2-6002	Confirm that the rupture restraints installed in Unit 2, including crushable bumpers, are designed with sufficient capacity to perform their intended function.	Unit 2 rupture restraints including crushable bumpers have been reviewed to same acceptance criteria as Unit 1.	Rupture restraints have been provided at all required locations and crushable bumpers designed to satisfy rupture restraints design criteria. Some modifications to adjust gaps may be expected following hot functional walkdowns.	Complete	Physical mods are pending.

TABLE [illegible]nt'd.)

UNIT 2 IRP
DETAILED RESOLUTION TABLE
SSER 20 OPEN AND FOLLOW-UP ITEMS

OI/FI No.	UNIT 2 IRP PACKAGE NO.	DESCRIPTION OF ITEM	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MODS., OP. PROC. CHG., FSAR REVISION
SSER OI-31	N/A	Clarify methods of combining responses in the Turbine Building.	The methods for combining responses in the Turbine Building analyses was clarified for Unit 1.	Because the method of combining responses used in the Unit 2 Turbine Building analysis is identical to that used in the Unit 1 analysis, no further Unit 2 review required.	N/A	N/A
SSER FI-1	2-8060	Determine necessity of adjusting controller setpoints to maintain feed flow in the event of a Unit 2 S/G depressurization.	Unit 1 startup testing determined the feed flow to be stable under all conditions.	The Unit 2 pressure controller setpoints have been specified as on Unit 1. Startup tests will determine system operating stability for the conditions of concern.	Complete	Start-up testing is pending
SSER FI-2	2-8027	Confirm that a steam trap is not needed on Unit 2 steam line #593.	No further review was required for Unit 2 since the same fix made on Unit 1 was also implemented concurrently on Unit 2.	The quick start failures experienced on Unit 1 was due to a faulty governor in the AFW pump turbine and not condensate formation in the steam supply line. Steam trap not required. Faulty turbine governor was replaced.	Complete	None
SSER FI-3	2-8055 2-8057 2-8059	Cable color coding and circuit separation concerns.	A procedure to review and implement separation of mutually redundant circuits was developed. The FSAR was reviewed for cable color coding and low energy circuit separation criteria.	A proposed FSAR revision addresses color coding of conductors in same raceway, Class IE conductors for non-safety related functions and circuit separation. Modifications were implemented to provide AFW and CRVP system control circuit separation in accordance with revised FSAR criteria.	Complete	FSAR update pending approval by the NRC.

TABLE (Cont'd.)

UNIT 2 IRP
DETAILED RESOLUTION TABLE
SSER 20 OPEN AND FOLLOW-UP ITEMS

OI/FI NO.	UNIT 2 IRP PACKAGE NO.	DESCRIPTION OF ITEM	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MODS., OP. PROC. CHG., FSAR REVISION
SSER FI-4	2-8052	Confirm appearance on Q list and environmental qualification of AFWS flow transmitter FT-78 and valve FCV-95.	The Units 1 and 2 models and locations were checked for similarity.	The common electrical equipment qualification list includes both devices. The devices in Units 1 and 2 are identical models and located in identical areas. Both are environmentally qualified.	Complete	None
SSER FI-5	2-8058	Confirm that LCVs-110, 111, 113, and 115 and their motor actuators are qualified for harsh environments based on their being identical to the analogous Unit 1 valves.	The Units 1 and 2 models and locations were checked for similarity.	The subject valves are identical models and installed in identical locations in Units 1 and 2. The environmental qualifications apply to both units.	Complete	None
SSER FI-6	2-8028	Confirm that the FSAR reflects that the steam supply line to the turbine driven AFW pump is normally depressurized and therefore not subject to break analysis.	The proposed FSAR revision stating that no design basis breaks or crack breaks are postulated downstream of valve FCV-95 because this portion of the steam supply line is normally not pressurized was reviewed for applicability to Unit 2.	The revised FSAR Section applies equally to both units.	Complete	FSAR update pending the NRC approval
SSER FI-7	2-8031	Confirm that the FSAR reflects that the environmental temperature due to a Unit 2 steam line break will not cause failure of LCVs 113 and 115.	The proposed FSAR revision adding an alternate method for calculating jet temperatures as described in ANSI/ANS 58.2 was reviewed for applicability to Unit 2.	The revised FSAR section applies equally to both units.	Complete	FSAR update pending approval by NRC

TABLE [illegible]nt'd.)

UNIT 2 IRP
DETAILED RESOLUTION TABLE
SSER 20 OPEN AND FOLLOW-UP ITEMS

OI/FI NO.	UNIT 2 IRP PACKAGE NO.	DESCRIPTION OF ITEM	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MODS., OP. PROC. CHG., FSAR REVISION
SSER FI-8	2-8014	Review FSAR licensing commitments and provisions to protect AFWS valves (LCVs 108, 109, 113, 115 and FCVs 436 and 437) from a moderate energy line break (MELB).	Reevaluated requirement to protect motor operators on valves LCV-108, -109, -113, -115, and FCV-436 and -437 from a MELB spray.	Resolution is the same as for Unit 1. No protection from MELB spray is required since the manual handwheels on FCV-436 and -437 are sufficient for long term back-up water supply service, and one of the redundant AFW supply trains containing valves LCV-108, -109, -113, and -115 has sufficient capacity for initial plant cooldown.	Complete	None
SSER FI-9	2-0112 2-8009 2-8010 2-8062	Confirm adequacy of certain valve designs for operability during anticipated differential pressures. Also, confirm procedures to adjust AFWS pump turbine during startup testing.	Review of safety-related system pressure/temperatures and power-operated valve differential pressures is included in Unit 2 generic system reviews. Instructions to lower the AFWS pump turbine overspeed trip set-point during plant startup have been issued.	Some modifications have been identified including the replacement of AFWS valves, lowering the AFWS pump turbine overspeed trip setpoint, modifying Steam Supply System valves for higher differential pressure operation, replacing or modifying equipment and piping components for higher pressure/temperature service and providing restriction orifices or making valve adjustments to limit maximum service conditions.	Complete	Physical modifications are pending
SSER FI-10	2-8001	Confirm applicability of assumptions made in P/T analyses for HELB events outside containment.	Reviewed Unit 2 physical configurations to confirm assumptions used in analysis of worst case environmental conditions due to HELB are valid for Unit 2.	Appropriate modifications are being implemented to assure that analysis assumptions regarding door positions, wall/floor openings, system integrity, and ventilation barriers are valid.	Complete	Physical modifications are pending

TABLE [illegible] (Cont'd.)

UNIT 2 IRP
DETAILED RESOLUTION TABLE
SSER 20 OPEN AND FOLLOW-UP ITEMS

OI/FI NO.	UNIT 2 IRP PACKAGE NO.	DESCRIPTION OF ITEM	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MODS., OP. PROC. CHG., FSAR REVISION
SSER FI-11	2-8001	Confirm that required modifications are made to assure that the P/T conditions during a HELB outside containment are within the conditions to which Unit 2 safety-related equipment is qualified.	Review status of completion modifications referenced in SSER FI-10.	Design change documentation for required modifications has been issued to the field for implementation and involve replacing doors and ventilation louvers, providing pressure retaining sealant and air-tight barriers, modifying flashing and access panels in walls/floors, and completing pipe break detection and isolation system.	Complete	Physical modifications are pending.
SSER FI-12	See Review Column	Review the environmental qualification of Unit 2 equipment for the latest HELB conditions outside containment. Confirm that all Unit 2 safety-related equipment is qualified to the worst case conditions.	The environmental qualification of all safety-related electrical equipment and instrumentation are checked to confirm that they are qualified to the worst case conditions. Also refer to IRP Package Nos. 2-8011, -8028, -8031, -8044, -8058.	All Unit 2 Class IE equipment environmental qualifications are reviewed and updated as HELB worst case conditions affecting them are revised.	Complete	None
SSER FI-13	N/A	Revise the FSAR to incorporate the use of ANS 58.2 jet impingement temperature calculations methods.	Jet impingement calculation procedures are common to both units. This item is already resolved for Unit 1.	No further Unit 2 review required.	N/A	FSAR update pending NRC approval
SSER FI-14	2-8011	Confirm that all Class 1E cables in Unit 2 AFWS and CRVP system are qualified to worst case HELB environments and jet impingement conditions.	The Unit 2 cable types and worst case HELB conditions were reviewed for similarity to Unit 1.	The subject cables and wires are of the same 4 types used on Unit 1. These are qualified to the worst case environments.	Complete	None
SSER FI-15	2-8050	Confirm that the impact of a moderate energy line break (MELB) on the CRVP system will not prevent safe plant shutdown.	The FSAR description of hot shutdown panel operation was reviewed for applicability to Unit 2.	The revised FSAR section is equally applicable to both units. Safe shutdown from the hot shutdown panel can be achieved in the event that the control room becomes uninhabitable.	Complete	FSAR update pending NRC approval

TABLE 3

T-2 IRP
DETAILED RESOLUTION TABLE
Other Verification Program Related Items

UNIT 2 IRP PKG. NUMBER	SOURCE REF.	DESCRIPTION OF CONCERN	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP.PROC.CHG., FSAR REV.
2-0100	SWEC letter DCS-121 10/26/82	There were discrepancies between applicable piping area drawings and the as-built piping of the main steam system.	The subject lines (1400,2392, 3883 and 3885) are 2-in. Class E lines that were field routed.	These lines do not require seismic or high energy line break (HELB) analysis. They are shown on area drawings only to locate supports.	Complete	None
2-0101	Letter, PG&E to NRC 6/27/83	Acceptability of CCW system air-operated valve position upon loss of instrument air.	Cancelled. Subject covered in IRP Package 2-0040.	Resolution of this item is documented in IRP package 2-0040.	N/A	N/A
2-0102	PG&E Letter 7/1/83	Strength of spot welded superstrut material used for electrical conduit and cable tray supports.	Random samples from Units 1 and 2 were taken and tested in accordance with paragraph 2.1.2 of the Outline for Sampling, Preparation and Testing of Spot-Welded Superstrut Members.	No corrective action was necessary. Allowable limits for the spot welds established by the test program are reflected in the Unit 2 superstrut support qualifications.	Complete	None
2-0103	ITR#4 Rev. 0	The field locations, and therefore, the target test spectra were in doubt for certain Group VI Class 1E electrical equipment qualified by shake table testing.	A generic program is being performed by the Unit 1 Electrical Group to verify the seismic qualification of all Class 1E electrical equipment for both Units 1 and 2. Unit 1 I&C Group is doing the same for instrumentation. The diesel generator qualification work for Unit 2 is being done by Unit 2 Mechanical Group and is documented in IRP Pkg. 2-0109.	The electrical equipment and instrumentation in both Units 1 and 2 are seismically qualified for the worst case conditions of either Unit 1 or Unit 2.	Complete	None
2-0104	ITR#54 Rev. 1	Compatibility of Unit-2 polar crane as-built configuration with the design documents.	Cancelled. This subject is covered in IRP Package 2-0019.	Resolution of this item is documented in IRP package 2-0019.	N/A	N/A

TABLE t'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
Other Verification Program Related Items

UNIT 2 IRP PKG. NUMBER	SOURCE REF.	DESCRIPTION OF CONCERN	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP.PROC.CHG., FSAR REV.
2-0105	ITR#63 Rev. 1 PP23-28	Issues raised about the seismic qualification analyses for Class 1 HVAC duct supports.	The issues raised in the referenced ITR are unique to Unit 1. Also, an independent evaluation of all Unit-2 HVAC supports is being made and documented in IRP package 2-1003.	No further Unit 2 review of these specific issues required.	N/A	N/A
2-0106	ITR#63 Rev. 1 PP35-40	Issues raised about the seismic qualification analysis for Class 1E electrical raceway supports.	The issues raised in the referenced ITR are unique to Unit 1. Also, an independent evaluation of all Unit-2 raceway supports is being made and documented in IRP package 2-0983.	No further Unit 2 review of these specific issues required.	N/A	N/A
2-0107	ITR#63 Rev. 1 pp48-52	Issues raised about the seismic qualification analyses for Class 1 instrument tubing supports.	Reviewed subject issues as they relate to Unit 2 instrument tubing supports qualification.	The Unit-2 Class I instrument tubing support seismic analyses are considered acceptable based on the Unit-1 resolution of the same issues.	Complete	None
2-0108	PG&E Letter to NRC 6/24/83 p AS-13	Confirmation that for Unit-2 seismically analyzed instrument panels, the actual locations and mountings are reflected in the seismic qualification based on as-built drawings.	The location and arrangement of each panel is being verified by reviewing the actual installed conditions on as-built drawings. The seismic qualification is then checked against the as-built information.	Results will be determined on the basis of as-built drawings prepared by the General Construction (GC) Dept.	In Progress	None Expected
2-0109	PG&E Letter to NRC 6/24/83 p AS-14	Confirmation that Unit-2 seismically qualified mechanical equipment is qualified to its as-built conditions.	A complete review of the seismic qualification of Unit-2 mechanical equipment including field walkdowns to determine as-built conditions was performed.	While no evaluation was made of the reasons why some modifications are required, they are believed to be due to changes in response spectra and nozzle loads, and not due to discrepancies in as-built and qualification conditions.	Complete	No physical modifications resulting from the specific concern.

TABLE t'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
Other Verification Program Related Items

UNIT 2 IRP PKG. NUMBER	SOURCE REF.	DESCRIPTION OF CONCERN	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP.PROC.CHG., FSAR REV.
2-0110	DCP Unit-2 Meeting Notes 8/12/83	The acceptability of different Unit-2 specific support configurations for identical MS and FW lines inside containment	Comparison was made between Unit 1 and Unit 2 main steam and feedwater line configuration and support designs.	A different quantity and type of supports was used on Unit 2 than on Unit 1. The Unit 2 main steam and feedwater lines and pipe supports have been verified to be seismically qualified in accordance with the applicable criteria.	Complete	None
2-0111	ITR#60 Rev. 1 pp31-35 & ITR#61 pp21-29 37-42.	Issues raised in the references on Class 1 small bore pipe and supports.	Review being performed by Plant Design Group.		In Progress	
2-0112	PG&E Letter to NRC 8/30/83	Verification of safety-related system pressure/temperature design ratings and power-operated valve operability under expected differential pressure conditions.	Verification of the safety-related system pressure/temperatures and power-operated valve differential pressures is the subject of a Unit 2 generic review program.	Verification of the basic safety-related system design is complete. Various modifications and adjustments to some of the systems have been identified and associated DCNs issued. Some of these are also discussed in IRP Pkgs. 2-8009, 2-8010 and 2-8062. Future verifications and associated modifications will be implemented as required in accordance with project procedures to satisfy system design evolutions.	Complete	Physical modifications are pending. These involve replacing equipment and piping components with new items rated for higher pressure or modifying them for higher pressure/temperature service as well as providing restriction orifices or making valve adjustments to limit max. service conditions.

TABLE (Cont'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
Other Verification Program Related Items

UNIT 2 IRP PKG. NUMBER	SOURCE REF.	DESCRIPTION OF CONCERN	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP.PROC.CHG., FSAR REV.
2-0113	NRC IE Info. Notice 83-80 11/23/83 NRC Memo to Commissioners 9/29/83 Enc. 1	Inclusion of localized pipe stress effects due to interaction between Class 1 pipe walls and pipe clamps.	A review of the applicability of IE Information Notice 83-80 is being performed by Plant Design Group.		In Progress	
2-0114	RLCA to PG&E RFI# 1078	Confirmation of allowable stresses used in seismic analyses for equipment with cast iron components.	The concern for the CCW pump and L.O. cooler is resolved in IRP Package 2-1130. The concern for common equipment was resolved by Unit 1 analyses. Stress analyses by Unit-2 were performed for Unit-2 specific equipment.	No corrective action is necessary since stresses are within allowables or cast-iron parts are not critical to the seismic analyses.	Complete	None
2-0115	SSER#21 Allegation #8	Seismic qualification of intake/exhaust systems of the emergency diesel generators.	Review of the Unit-2 D/G intake and exhaust systems is being performed to confirm that they meet Hosgri qualification.		In Progress	
2-0116	SSER#21 Allegaton #31	Reliability of structural design computer programs with respect to quality assurance.	All structural design computer programs were reviewed for compliance with EMP 3.3 Rev. 5 as amplified and modified by PEI 17.	All programs were verified to meet the applicable QA requirements.	Complete	None
2-0117	SSER#s 13 & 21 Allegation #45	Provisions for detecting degradation of RHR flow during long term recirculation.	The NRC staff recommended that a low flow alarm and RHR pump bypass control be installed in Unit 1 to satisfy license commitment.	The NRC Staff recommendation for RHR pump low flow alarm in conjunction with the bypass control is also included in the Unit 2 design.	Complete	Physical modifications involving the addition of the low flow alarm are pending.

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
Other Verification Program Related Items

UNIT 2 IRP PKG. NUMBER	SOURCE REF.	DESCRIPTION OF CONCERN	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP.PROC.CHG., FSAR REV.
2-0118	PG&E Letter to NRC DCL-84-164 Encl.2 and 3	Stresses associated with Class I piping rigid supports and snubbers in close proximity to other rigid supports or anchors. [License Condition 2.C.(11), Items 2 and 3].	Identifying all "close proximity" rigid supports and snubbers and evaluating affected stress analyses for over-stress conditions. Support gaps to be verified and shimmed as required during plant heat-up.	Identification of Unit 2 proximate rigid supports and proximate snubbers for further review and possible shimming is continuing.	In Progress	
2-0119	PG&E Letter to NRC DCL-84 -244 6/29/84	Effects of seismic accelerations on pipe support stresses in the directions of restraints. [License Condition 2.C.(11), Items 1 and 7].	All Unit 2 small bore and large bore seismic Category I pipe supports are being reviewed for the appropriate attributes of Item 7 of the subject License Condition.	The Unit 2 review of approximately 4,000 small bore and 3,500 large bore pipe supports is continuing.	In Progress	
2-0120	PG&E Letter to NRC DCL-84 -244 6/29/84	Identification of pipe supports for which thermal gaps are included and ISI program to assure that thermal gaps will be maintained throughout operating life. [License Condition 2.C.(11), Item 4].	The Unit 2 piping/pipe support analyses were reviewed to identify all thermal gaps included.	No thermal gaps have been included in the Unit 2 piping/pipe supports, and therefore, no ISI program is required.	Complete	None
2-0121	PG&E Letter to NRC DCL-84 -244 6/29/84	Procedures, schedules and results of hot walkdown of the main steam system piping. [License Condition 2.C.(11), Item 5].	Procedures and schedules for hot walkdown of Unit 2 main steam piping were developed to confirm that the piping and supports perform properly and generally as predicted during heat-up conditions.	Walkdown results will be documented upon completion of hot walkdowns.	Complete	None expected.

TABLE (t'd)

UNIT-2 IRP
DETAILED RESOLUTION TABLE
Other Verification Program Related Items

UNIT 2 IRP PKG. NUMBER	SOURCE REF.	DESCRIPTION OF CONCERN	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP.PROC.CHG., FSAR REV.
2-0122	SSER#20 ppC.3-7 & 8 PG&E letter DCL-84 -052	Verification of cascade analysis procedure for computation of Turbine Building roof truss member forces.	The method of Turbine Bldg. roof truss modeling described in letter DCL-84-052 applies to both Units 1 and 2.	No additional action is required since the same method of modeling was used in the analyses for both Units 1 and 2	Complete	None
2-0123	SSER#20 Open Items 12 & 13	Verification of the vertical seismic analysis modeling of the Turbine Building.	Review of Unit 2 analysis to confirm the following: 1. same models used for Unit 1 apply to Unit-2 2. exterior wall creates no coupling 3. amplification of ground motion is insignificant 4. number of degrees of freedom for roof trusses is consistent with bldg. response and licensing criteria.	The same modeling was used in the Unit 2 vertical seismic analysis as that used for the Unit 1 portion of the Turbine Building.	Complete	None
2-0124	SSER#20 Open Item #22	Confirmation that nozzle flange stresses for Unit-2 pumps are within allowable limits.	Field walkdown of Unit 2 AFW, CCW, ASW and make-up water transfer pumps was performed to confirm that there were no flat-to-flat face flange combinations.	No flat-to-flat face flange installations were found on the subject Unit 2 pumps, and therefore, no potential for overstresses in the pump nozzle flanges is expected as was the case for the common fire pumps.	Complete	None
2-0125	PG&E Letter to NRC DCL-84 -244 6/24/84	Review of the as-built seismic qualification of Unit-2 HVAC equipment.	Reevaluate HVAC equipment qualification based on Unit 2 as-built locations and mounting conditions. When identical equipment is installed in various locations throughout the plant, worst case conditions are used in the seismic analysis to cover all the same equipment.	Unit 2 HVAC equipment was seismically qualified based on walkdown information. Seismic qualification analyses will be checked after receipt of as-built drawings for equipment affected by modifications.	Complete	None expected.

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UNIT-2 IRP
DETAILED RESOLUTION TABLE
Other Verification Program Related Items

UNIT 2 IRP PKG. NUMBER	SOURCE REF.	DESCRIPTION OF CONCERN	REVIEW SUMMARY	FINDINGS AND RESOLUTIONS	RESOLUTION STATUS	PHYS. MOD., OP.PROC.CHG., FSAR REV.
2-0126	Various DCP IOMs	Confirmation of the QA programs and interface control of off-project design subcontractors.	Confirm that safety-related final design performed by off-project subcontractors unique to Unit 2 is in accordance with approved QA program.	All safety-related final design performed by NUTECH (only unique Unit 2 design subcontractor) was done under a project approved QA program.	Complete	None
2-0127	PG&E Letter to NRC DCL-84 -203 6/1/84	Review of Unit 2 PSDTC and Diablo Problem (DP) system activities. [License Condition 2.C.(11), Item 6].	No specific review of the PSDTC program is considered necessary for Unit 2. All Unit 2 piping and pipe support related DP's are being reviewed to insure that for those containing design information, the changes were properly documented in design documents and calculations.	The PSDTC program has been replaced by a Field Change Request (FCR) procedure on Unit 2. Engineering acceptance of pipe support as-built drawings will insure acceptability of any modifications authorized by previous PSDTC's. Review of a total 422 Unit 2 piping or pipe support related DP's is in progress. For approximately 50% reviewed, none contained design related information.	In Progress	