

ENCLOSURE 1

Updates Included In This Submittal

DIABLO CANYON EMERGENCY PLAN
IMPLMENTING PROCEDURES

Volume 3A

Updated Table of Contents
EP M-4, Revision 9

Volume 3B

Updated Table of Contents
EP OR-1, Revision 5

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ENCLOSURE 2

Location of Proprietary Information .

Procedure:

EP M-4 -- pp. 3, 6, and 11 of 50; Data Sheet
"Post Earthquake Evaluation Summary",
p. 1 of 1.

EP OR-1 -- Table 1, "Offsite Emergency Support
Organization Phone List," pp. 1-9 of 9

ENCLOSURE 3

Updates to Diablo Canyon
Emergency Plan Implementing Procedures

CURRENT
EMERGENCY PLAN
IMPLEMENTING PROCEDURES

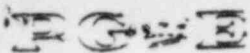
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Pacific Gas and Electric Company



DEPARTMENT OF NUCLEAR PLANT OPERATIONS

DIABLO CANYON POWER PLANT UNIT NO(S) 1 AND 2

EMERGENCY PROCEDURE
EARTHQUAKE

TITLE

APPROVED

R. E. Thibault
PLANT MANAGER

6-18-85
DATE

NUMBER EP M-4
REVISION 9
DATE 6/1/85
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IMPORTANT
TO
SAFETY

SCOPE

This procedure and changes thereto require PSRC review.

GENERAL

Earthquakes affect the plant by producing ground motion causing plant buildings and equipment to be stressed by induced vibration. This vibration is defined by a spectrum consisting of acceleration, frequency and duration. The values of these parameters used in the design of the Diablo Canyon Plant are given in Section 3.7 of the FSAR. Instrumentation at the site measures and records acceleration frequency and duration, but only the maximum acceleration along three perpendicular axes is indicated. The seismic instrumentation which meets the requirements of Technical Specification Table 3.3-7 is described in Appendix 1. Only accelerations of greater than 0.01 g's on the containment base slab are recorded on the triaxial time-history accelographs.

For purposes of this procedure, earthquakes are classified by the maximum acceleration indicated by the triaxial accelerometer located on the containment base slab.

<u>Maximum Acceleration (g's)</u>	<u>DCPP Earthquake Classification</u>	<u>NUREG-0654 Classification Criteria</u>	<u>NUREG-0654 Action Level</u>
Unmeasured to 0.01	Micro	Not detected in plant.	None
0.01 to 0.1	Moderate	Detected or felt in plant	Unusual event
0.1 to 0.2	Strong	Detected	Unusual event
0.2 to 0.6	Large	Greater than OBE levels	Alert
Greater than 0.6	Major	Greater than SSE levels	Site emergency

TITLE: EARTHQUAKE

Unmeasured to moderate earthquakes are expected at Diablo Canyon during the life of the plant. A strong, large or major earthquake is not expected. This is based on geological explorations and on the recorded seismic history of the site.

This procedure is to be followed in the event that an earthquake occurs which triggers the recording instruments or is felt in plant. In the event that damage occurs, follow the appropriate Emergency Operating Procedure to mitigate the consequences of the damage first, then follow this procedure for investigation of the plant for further damage and reporting. The operator response is graduated, based on the local acceleration indicated by the Earthquake Force Monitor (EFM) up to 0.5g or on the SMP-1 playback if greater than 0.5g.

MICRO EARTHQUAKE (Unmeasured to 0.01g)

Symptoms

1. The supplemental system (SS), Terra Technology DCS-302, is triggered but the basic system (BS) Kinematics SMA-3, is not triggered. This means alarm input no. 1186 is in alarm and alarm input no. 1112 is not in alarm on PK 15-24 ("Seismic Instr System").

NOTE 1: If ground motion is felt "in-plant" by the operations staff, discontinue this section and go to the Moderate Earthquake section.

NOTE 2: "In-plant" is inside the double fence (Plant Protected Area).

Automatic Actions

None expected.

Immediate Operator Actions

None.

TITLE EARTHQUAKE

Subsequent Actions

1. Subsequent Operator Action

- a. Notify the on-call Power Production Engineer (Nuclear), (EP G-2 Data Processor No. 2, on call rotation personnel), the next working day to retrieve the Supplemental System data.
- b. Document the activation of the Supplemental System with a Problem Report.

2. Subsequent Power Production Engineer Action

- a. Have the I&C department retrieve the data from the Supplemental Seismic Monitoring System.
 - 1) Perform a post-event calibration of the SS tapes.
 - 2) Make strip charts of the functional free field and trigger channels and others as directed by the Power Production Engineer (Nuclear).
 - 3) Install a new set of tapes in the SS recorder, at discretion of on-call Power Production Engineer (Nuclear).
 - 4) Perform pre-event calibration.
 - 5) Forward the strip charts and removed tapes to the on-call Power Production Engineer (Nuclear).
- b. Call the U.C. Berkeley Seismographic Station at [REDACTED] and obtain the epicenter location and magnitude of any earthquake which could account for the SS trigger. This recording is updated each weekday at 7:30 a.m. PST, and covers the previous 72 hour period.

NOTE: If no earthquake was recorded by the Berkeley Station, it may be desirable to contact the California Institute of Technology (Cal Tech) Seismic Center at [REDACTED] for possible epicenter location and magnitude information.

TITLE EARTHQUAKE

- c. Forward the strip charts and any information obtained from the Seismic Station to Civil Engineering, and request guidance as to the disposition of the SS tapes (i.e., erase and reuse, send to Terra Technology Corp., etc.).
- d. Retain the SS tapes until directed by Civil Engineering as to their disposition.

MODERATE EARTHQUAKE 0.01g to 0.1gSymptoms

1. Ground motion is felt "in-plant" (inside the double fence) by the Operations staff.
2. The "Seismic Instr System" annunciator is activated (PK 15-24).
3. The maximum acceleration on the containment base slab is indicated to be between 0.01 and 0.1g by the EFM.

Automatic Actions

None expected.

Immediate Operator Actions

1. Notify the Shift Foreman (Interim Site Emergency Coordinator).
2. Make a general survey of the Control Room instrumentation, with particular attention to annunciator and computer alarms, to verify that no apparent plant damage has occurred.

Subsequent Actions

1. Notify the shift CARP to make preparations for entering Containment to conduct a quick fire inspection.
2. General
 - a. Establish the onsite emergency organization for an Unusual Event as specified in EP G-2 "Establishment of the Onsite Emergency Organization."

TITLE

EARTHQUAKE

- b. Notify offsite organizations as specified in EP G-3 "Notification of Offsite Organizations."
- c. Instruct the on-call Power Production Engineer (Nuclear) (EP G-2 Data Processor No. 2, on-call rotation personnel) to come onsite and retrieve seismic data.

3. Subsequent Operator Action

- a. If a unit trip has occurred, maintain the unit in HOT STANDBY (MODE 3) until the Plant Manager authorizes a return to power.
- b. Within two hours following an earthquake exceeding 0.02g, inspect all zones listed in Technical Specification Table 3.3-11 for fires. (If the Kinematics SMA-3(BS) was not triggered, assume the earthquake to be less than 0.02g.)

NOTE: If a portion of the Fire Protection System is damaged by the earthquake, as indicated by visual inspection or flow annunciation, it should be isolated from the remainder of the system (see Appendix 3 for Fire System Isol. Valve numbers and locations).

- c. Complete the "Post-Earthquake Level Indicator Check List," (Form 69-9249) and give it to the Shift Foreman.
- d. The Unit(s) will be placed in HOT STANDBY if investigation reveals physical damage which could impair the operation of any Seismic Class I equipment.

4. Subsequent Power Production Engineer Action

NOTE: Sections a, d and f are not applicable if the Basic System has not triggered.

- e. Contact the I&C Department to retrieve the seismic data from the Kinematics SMA-3 basic seismic monitoring system (BS). (See STP I-37C.)
 - 1) Perform a post-event calibration of the BS tapes.
 - 2) Replace the tape cassettes in the SMA-3 and perform a pre-event calibration.

TITLE EARTHQUAKE

- 3) Reset the EFM.
 - 4) Play back the tapes removed from the SMA-3 on the SMP-1 and make strip charts.
 - 5) Forward tapes and strip charts to the on-call Power Production Engineer (Nuclear).
- b. Contact the I&C Department to retrieve additional seismic data from the supplemental seismic monitoring system.
- 1) Perform a post-event calibration of the SS tapes.
 - 2) Install a new set of tapes in the SS recorder and perform a pre-event calibration.
 - 3) Make strip charts of the functional free field, trigger, containment base slab and spring line channels.
 - 4) Forward tapes and strip charts to the on-call Power Production Engineer (Nuclear).
- c. Call the U.C. Berkeley Seismographic station at [REDACTED] and obtain the epicenter location and magnitude of the earthquake.
- d. Upon receiving the Basic System tapes and strip charts:
- 1) Determine if the earthquake exceeds 0.02g. If so, immediately notify the Shift Foreman and commence an engineering evaluation of the fire detection instrumentation in accordance with Technical Specification 3.3.3.8, ACTION b. This evaluation may include the performance of applicable system functional tests, but must be completed within 72 hours following the earthquake.
 - 2) Send a copy of the record play back to the Civil Engineering Department.
 - 3) Retain the cassette tapes for further analysis.

TITLE EARTHQUAKE

e. Upon receiving the Supplemental System tapes and strip charts:

- 1) Determine the maximum containment base slab acceleration of the earthquake.

NOTE: If the Basic System did not trigger, and the maximum free-field acceleration from the Supplemental System is less than .01g, notify the Shift Foreman that the event may be downgraded to a Micro Earthquake.

- 2) Send a copy of the strip charts and the information obtained from the Berkeley Seismographic station to the Civil Engineering Department and request guidance as to the disposition of the SS tapes.
- 3) Retain the SS tapes until directed by Civil Engineering as to their disposition.

f. Notify I&C to contact Kinometrics for an onsite recalibration of SMA-3 and SMP-1 equipment. This must be performed within five days following the initial event.

g. Gather local data in accordance with Appendix 1 Post Earthquake Checklist.

5. Close out with verbal summary to offsite authorities followed by a written summary to NRC within 24 hours. Document verbal summary on Form 69-9221, "Emergency Notification Record."

6. If the Basic System triggered, contact a Regulatory Compliance Engineer to prepare a Special Report in accordance with the requirements of Technical Specification 4.3.3.3.2, and document the notification in the Shift Foremans Log.

STRONG EARTHQUAKE (0.1 TO 0.2g)

Symptoms

1. The maximum acceleration on the containment base slab is indicated to be between 0.1g and 0.2g by the EFM.
2. The "Seismic Instr System" main annunciator is activated (PK 15-24).
3. The ground motion is strongly noticeable to operations personnel on shift.

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1 AND 2

NUMBER EP M-4
REVISION 9
DATE 6/1/85
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Automatic Actions

The Unit may trip due to induced vibration or spurious relay actuation.

Immediate Operator Actions

1. Notify the Shift Foreman (Interim Site Emergency Coordinator).
2. Make a general survey of the instrumentation in the Control Room with particular attention to the main annunciator and computer alarms, to verify that no readily apparent plant damage has occurred.

Subsequent Actions

1. Notify the shift CARP to make preparations for entering Containment to conduct a quick fire inspection.
2. General
 - a. Establish the onsite emergency organization for an Unusual Event as specified in EP G-2 "Establishment of the Onsite Emergency Organization."
 - b. Notify offsite organizations as specified in EP G-3 "Notification of Offsite Organizations."
 - c. Instruct at least two Power Production Engineers (Nuclear) (EP G-2 Data Processors No. 2 and 3, on call rotation personnel) to come to the plant to assist in the post-earthquake evaluation.
3. Subsequent Operator Action
 - a. If a Unit has tripped, maintain the Unit in the HOT STANDBY condition until the Plant Manager authorizes a return to power.

TITLE EARTHQUAKE

b. Follow-up Investigation

The follow-up investigation involves the performance of various tests and inspections of the plant. As each check is completed, the appropriate check or data sheets should be forwarded to the Shift Foreman for his review. Since some of the surveillance tests will take a considerable period to complete, the Shift Foreman has been provided with a post-earthquake evaluation summary sheet for this procedure (Form 69-9248) to help keep track of the progress of the investigation.

- 1) Complete the "Post-Earthquake Level Indicator Check List" (Form 69-9249). Return it to the Shift Foreman.
- 2) Within two hours following the earthquake, inspect all zones listed in Technical Specification Table 3.3-11 for fires.

NOTE: If a portion of the Fire Protection System is damaged by the earthquake, as indicated by visual inspection or flow annunciation, it should be isolated from the remainder of the system (see Appendix 3).

- 3) Complete the following "Post-Earthquake Area Inspection Check Lists," checking all indicated areas for structural and equipment damage. When inspecting the various areas, pay particular attention to chipped paint at pipe restraints and hanger clamps indicating pipe movement; spalled grouting at equipment support anchors attached to walls or floors; concrete cracks, especially near equipment support anchors; damaged pipe snubbers as evidenced by leakage from hydraulic reservoirs and/or broken or bent hardware.
 - a) Containment (outside missile shield);
 - b) Containment (inside missile shield, if unit is shutdown);
 - c) Auxiliary Building (main area);
 - d) Auxiliary Building (penetration areas);

TITLE EARTHQUAKE

- e) Fuel Handling Building (main area);
- f) Fuel Handling Building (vent. equipment areas);
- g) Turbine Building;
- h) Outside areas;
- i) Intake Structure.

The areas referred to on the check lists are shown on the plant drawings included as Attachment 1 to this procedure. Return the completed checklists to the Shift Foreman.

- 4) Complete the Post-Earthquake Surveillance Test Checklist (Form 69-9251). Forward all completed data sheets to the Shift Foreman.
- 5) Complete the Post-Earthquake Electrical Power Checklist (Form 69-9252). Forward completed data sheet to the Shift Foreman.
- 6) The Unit(s) will be placed in HOT STANDBY if investigation reveals physical damage which could impair the operation of any Seismic Class I equipment.
- 7) Contact a Regulatory Compliance Engineer to prepare a Special Report in accordance with the requirements of Technical Specification 4.3.3.3.2, and document the notification in the REMARKS section of the Post-Earthquake Evaluation Summary Sheet (Form 69-9248).

4. Subsequent Power Production Engineer Action

- a. Contact the I&C Department to retrieve seismic data from the Kinemetrics SMA-3 basic seismic monitoring system (BS). (See STP I-37C.)
 - 1) Perform a post-event calibration of the BS tapes.
 - 2) Replace the tape cassettes in the SMA-3 and perform a pre-event calibration.
 - 3) Reset the EFM.

TITLE EARTHQUAKE

- 4) Play back the tapes removed from the SMA-3 on the SMP-1, and make strip charts.
- 5) Forward the tapes and strip charts to the on-call Power Production Engineer (Nuclear).
- b. Contact the I&C Department to retrieve additional seismic data from the supplemental seismic monitoring system.
 - 1) Perform a post-event calibration of the SS tapes.
 - 2) Play back and make strip chart records of all channels.
 - 3) Install a new set of tapes in the SS recorder and perform a pre-event calibration.
 - 4) Forward the SS tapes and strip charts to the on-call Power Production Engineer (Nuclear).
- c. Call the U.C. Berkeley Seismographic station at [REDACTED] and obtain the epicenter location and magnitude of the earthquake.
- d. Upon receiving the Basic System tapes and play back records the PPE on call should:
 - 1) Send a copy of the play back records to Civil Engineering.
 - 2) Retain the cassette tapes for further analysis.
- e. Upon receiving the Supplemental System tapes and strip charts the PPE on call should:
 - 1) Send a copy of the strip charts and the information obtained from the Berkeley Seismographic station to Civil Engineering and request guidance as to the disposition of the SS tapes.
 - 2) Retain the SS tapes until directed by Civil Engineering as to their disposition.
- f. Notify I&C to contact Kinometrics for an onsite recalibration of SMA-3 and SMP-1 equipment. This must be performed within five days following the initial event.

TITLE

EARTHQUAKE

- g. Gather local data in accordance with Appendix 1 Post Earthquake Checklist.
 - h. Commence an engineering evaluation of the fire detection instrumentation in accordance with Technical Specification 3.3.3.8, ACTION b. This evaluation may include the performance of applicable system functional tests, but must be completed within 72 hours following the earthquake.
5. Close out with verbal summary to offsite authorities followed by a written summary to NRC within 24 hours. Document verbal summary on Form 69-9221.

LARGE EARTHQUAKE (between 0.2g and 0.6g)Symptoms

1. The "Seismic Instr System" main annunciator is activated (PK 15-24).
2. The maximum acceleration indicated by the Earthquake Force Monitor or the SMP-1 tape playback strip chart is greater than 0.2g but less than 0.6 g's.
3. Seismic reactor trip (PK 04-15).

Automatic Actions

1. The Unit may trip due to induced vibration.
2. Seismic Reactor trip at greater than or equal to 0.35g.

Immediate Operator Actions

1. Notify the Shift Foreman (Interim Site Emergency Coordinator).
2. Make a general survey of the instrumentation in the control room, with particular attention to the main annunciator and computer alarms, to verify that no readily apparent plant damage has occurred.
3. Begin appropriate action to place the unit(s) into HOT STANDBY on a controlled basis.

TITLE EARTHQUAKE

Subsequent Actions

1. Notify the shift CARP to make preparations for entering Containment to conduct a quick inspection for fires.
2. General
 - a. Sound the Emergency Signal.
 - b. Declare an ALERT.
 - c. Establish the onsite emergency organization as specified in EP G-2 "Establishment of the Onsite Emergency Organization."
 - d. Notify offsite personnel and agencies as specified in EP G-3 "Notification of Offsite Organizations."
3. 10CFR100 requires the unit be placed in a shutdown condition following earthquakes in excess of the OBE. Plant shutdown to COLD SHUTDOWN should commence at the direction of the Site Emergency Coordinator.
4. Subsequent Operator Action.
 - a. Perform the same procedure as for a STRONG earthquake (0.1 to 0.2g).
5. Subsequent Power Production Engineer Actions
 - a. Perform the same procedure as for a STRONG earthquake (0.1 to 0.2g).
6. Close out with verbal summary to offsite authorities followed by a written summary to NRC within 24 hours. Document verbal summary on Form 69-9221.

MAJOR EARTHQUAKE (GREATER THAN 0.6g's)Symptoms

1. The "Seismic Instr System" main annunciator is activated (PK 15-24).
2. The maximum acceleration indicated by the earthquake force monitor is pegged at 50%g.

TITLE EARTHQUAKE

3. The maximum acceleration on the SMP-1 playback strip chart is greater than 0.6 g's.

4. Seismic reactor trip (PK 04-15).

Automatic Actions

Seismic reactor trip.

Immediate Operator Actions

1. Check reactor(s) tripped and unit(s) in HOT STANDBY. If not, trip reactor(s) manually.
2. Notify the Shift Foreman (Interim Site Emergency Coordinator).
3. Make a general survey of the instrumentation in the control room, with particular attention to the main annunciator and computer alarms, to verify that no readily apparent plant damage has occurred.

Subsequent Actions

1. Notify shift CARP to make preparations for entering Containment to conduct a quick inspection for fires.
2. General
 - a. Sound site emergency signal.
 - b. Declare a SITE EMERGENCY.
 - c. Establish the onsite emergency organization as specified in EP G-2 "Establishment of the Onsite Emergency Organization."
 - d. Notify offsite personnel and agencies as specified in EP G-3 "Notification of Offsite Organizations."
3. 10CFR100 requires the unit be placed in a shutdown condition following earthquakes in excess of the OBE. Plant shutdown to COLD SHUTDOWN should commence at the direction of the Site Emergency Coordinator.

TITLE EARTHQUAKE

4. Subsequent Operator Actions

- a. Perform the same procedure as for a STRONG earthquake (0.1 to 0.2g).

5. Subsequent Power Production Engineer Actions

- a. Perform the same procedure as for a STRONG earthquake (0.1 to 0.2g).

6. Close out with verbal summary to offsite authorities followed by a written summary to NRC within 24 hours. Document verbal summary on Form 69-9221.

REFERENCES

1. 10 CFR 100, Appendix A, Section VI (a) (3).
2. AEC Regulatory Guide 1.12, "Instrumentation for Earthquakes."
3. ANSI Standard N16.5, "Earthquake Instrumentation Criteria for Nuclear Power Plant."
4. Diablo Canyon FSAR, Section 3.7.
5. PGandE Drawing No. 443296, "Seismic Instrumentation."
6. PGandE Drawing No. 452417, "Diagram of Connections, Seismic Instrumentation System."
7. "Seismic Instrumentation System," PGandE Record Dwg. File No. 683697.
8. NUREG-0610, "Draft Emergency Action Level Guidelines for Nuclear Power Plants," September 1979.

ATTACHMENTS

1. Form 69-9221, "Emergency Notification Record", 3/82.
2. Form 69-9248, "Post-Earthquake Evaluation Summary", 9/84.
3. Form 69-9249, "Post-Earthquake Level Indicator Check Lists", 9/84 (10 pages).

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4. Form 69-9250, "Post-Earthquake Area Inspection Check Lists", 4/84 (10 pages).
5. Form 69-9251, "Post-Earthquake Surveillance Check List", 4/84.
6. Form 69-9252, "Post-Earthquake Electrical Power Check List", 9/84.
7. Form 69-10291, "Data Sheets for Peak Shock Recorders S/N 701, 710, 728", 9/84.
8. Form 69-9283, "Data Sheet for Engdahl Peak Acceleration Recorder", 9/84.

TITLE EARTHQUAKE

APPENDIX 1SEISMIC INSTRUMENTATION DESCRIPTION AND POST EARTHQUAKE CHECKLISTDESCRIPTION

1. General

There are three types of seismic sensors: 1) Engdahl peak shock records; 2) Engdahl peak acceleration recorders, and 3) Kinematics triaxial accelerometers. The different sensors are provided at plant locations as shown on PGandE drawing 443296, 443043, and 443044.

INSTRUMENTS AND SENSOR LOCATIONS

<u>MEAS.</u>	<u>NO. OF</u>	<u>DWG.</u>
<u>RANGE</u>	<u>INSTR.</u>	<u>DESIG.</u>

1. Triaxial Response-Spectrum Recorders (Engdahl)

a. Containment Base Slab, El. 69, 180°	1.6-90g 2-25.4 Hz	1	6
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2. Triaxial Peak Accelerographs (Engdahl)

a. Containment Base Slab, El. 89, 180°	±2g	1	3b
b. Top Unit 1 Containment, El. 303.5, 225°	±5g	1	3a
c. Intake near ASW Pump 1-2 Bay, El. 2	±2g	1	3f
d. Turbine Building, El. 85, Machine Shop	±2g	1	3e
e. Auxiliary Building, El. 140, Hot Shop	±2g	1	3k
f. Auxiliary Building, El. 140, near Control Room Door	±2g	1	3m

3. Triaxial Time-History Accelerographs (Kinematics)

a. Unit 1 Containment Base Slab, El. 89, 180°	±1g	1	1b
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TITLE EARTHQUAKE

INSTRUMENTS AND SENSOR LOCATIONS

MEAS. RANGE	NO. OF INSTR.	DWG. DESIG.
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b. Top Unit 1 Containment, El. 303.5, 225°	±2g	1	1a
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c. Auxiliary Building, El. 64	±1g	1	1p
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2. Triaxial Response - Spectrum Recorders (Engdahl)

Each of these units contains twelve spring steel reeds of different lengths and weights. A diamond-tipped stylus is attached to the free end of each reed. A flat plate is mounted adjacent to each stylus such that in the event of an earthquake, the vibrating stylus inscribes a permanent record of its deflection on the plate. Since each reed has a different resonant frequency, this arrangement provides the earthquake acceleration (as measured by reed displacement) at twelve different frequencies.

There are actually three individual shock recorder units on the containment base slab with one unit oriented along the three perpendicular (x, y, z) axes.

3. Triaxial Peak Accelerographs or Peak Acceleration Recorder (Engdahl PAR's)

The accelerograph records by scribing a line on the surface of a record plate. Three record plates are included in each unit, oriented along the three perpendicular axes. The lines are inscribed by a contact diamond stylus, one for each axis. The peak acceleration is measured as the maximum deflection from the zero baseline.

4. Triaxial Time - History Accelerographs (Kinometrics)

Each triaxial accelerometer unit contains three accelerometers oriented along the three perpendicular axes. Each accelerometer is a damped spring-mass device which is fed to a mechanical-electrical transducer. The signals from the accelerometers are fed to one or both of two units (see Figure 1). The first is a SMA-3 magnetic tape cassette recording system. This system has a starter unit which automatically starts the cassettes at a present level (0.01 g) and shuts it off when the acceleration drops below this level (the unit is then ready for a succeeding earthquake). The tapes can be played back on a SMP-1 playback which is rack mounted with the SMA-3 unit. This provides a strip chart record of the acceleration.

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TITLE EARTHQUAKE

The base slab accelerometer output also goes to an earthquake force monitor unit (EFM-1), which simply contains three indicators (one each axis) which read out in percent of g. The indicator pointer is held at its maximum reading until reset, so peak acceleration can be determined.

DC0036 191X

TITLE EARTHQUAKE

APPENDIX 1 (Continued)POST-EARTHQUAKE CHECK

NOTE: Spare cassettes and plates are stored in the chart room adjacent to the control room.

1. Replace the cassettes in the SMA-3 recording system following the retrieval instructions on page 9 of Record No. 683697-15. Insure that a post-earthquake calibration is put on tape before removal. Play back the cassettes and record the peak acceleration. Since the SMA-3 is a higher class instrument than EFM-1, base subsequent action on the peak "base-slab" acceleration recorded by the SMA-3 if this reading is greater than the EFM-1. Keep the strip charts with the other records of the quake. Send the cassettes to the Supervising Nuclear Generation Engineer in the Department of Nuclear Plant Operations with instructions to pass on to the Civil Engineering Department.

If the indicated acceleration on the EFM is 0.5 g's, determine the actual peak acceleration from unit containment base slab as follows:

- a. Play back the tapes on position #1 of the play back recorder gain selector switch.
 - b. Find the highest peak (either positive or negative) for the highest acceleration.
 - c. Convert to g's. The scaling on this range is $\pm 1.0g$ full scale when the playback recorder gain selector switch is on position #1. The scaling for switch position 2 is $\pm 0.5 g$'s full scale; for switch position #4, $\pm 0.25 g$'s full scale; for switch position #10, $\pm 0.1 g$'s full scale.
 - d. To convert to g's for recordings made from the accelograph atop Unit 1 containment, scaling would be as follows:
playback recorder gain selector switch position #1 - $\pm 2.0 g$ full scale; selector switch position #2 - $\pm 1.0g$ full scale; switch position #4 - $\pm 0.5 g$ full scale; switch position #10 - $\pm 0.2 g$ full scale.
2. If the maximum acceleration indicated by the earthquake force monitor is greater than $0.1g$, replace the recording plates in the Engdahl peak shock recorders (PSR's) and peak acceleration recorders (PAR's).

TITLE EARTHQUAKE

APPENDIX 1 (Continued)

3. Measure to the nearest hundredth of an inch the length of the scribe marks (maximum distance of the scratched record from the zero line) on each plate from the peak shock recorder using the magnifying scale provided. Record the length of the scribe on the appropriate attached data sheet noting the recorder serial number and the reed number. Convert the scribe length in inches to the equivalent static acceleration by multiplying by the acceleration sensitivity. Record this value on the data sheet. Forward one copy of the data sheet, as well as the plates, to the Department of Nuclear Plant Operations for transmittal to the Civil Engineering Department. Retain each original copy for the plant records.

4. When removing or installing PAR record plates, use the following procedure.

- a. Remove the record access plugs from the PAR housing.
- b. Remove or install the PAR record plates.

CAUTION: It is important not to move the scribe arms of the PAR in the measurement axis direction while removing or installing PAR record plates. This will avoid false indications on the record plates.

- c. Record the serial numbers of all PAR record plates and corresponding PAR location following removal on the data sheet.
 - d. Record the time and date of removal on the PAR record plates and data sheet.
5. Measure, to the nearest thousandth of an inch, the length of the scribe mark (maximum distance of the scratched record from the zero line) on each record plate from the PAR's using the magnifying scale provided. Record the length of the scribe on the appropriate attached data sheet noting the PAR number and the record plate serial numbers. Convert the scribe length, in inches, to the equivalent static acceleration by multiplying by the acceleration sensitivity of the PAR. Record this value on the data sheet. Forward one copy of the data sheet, as well as the PAR record plates, to the Department of Nuclear Plant Operations, Supervising Nuclear Generation Engineer, for transmittal to the Civil Engineering Department. Retain the original copy for the plant records.

DIABLO CANYON POWER PLANT UNIT NO(S)

1 AND 2

NUMBER EP M-4
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DATE 6/1/85
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TITLE

EARTHQUAKE

The nominal acceleration sensitivities for Engdahl PAR's model number PAR400-1 (2g) and PAR400-2 (5g) are 10 g/inch and 25 g/inch, respectively.*

*Based on a nominal full scale deflection of 0.200 inches.

TITLE EARTHQUAKE

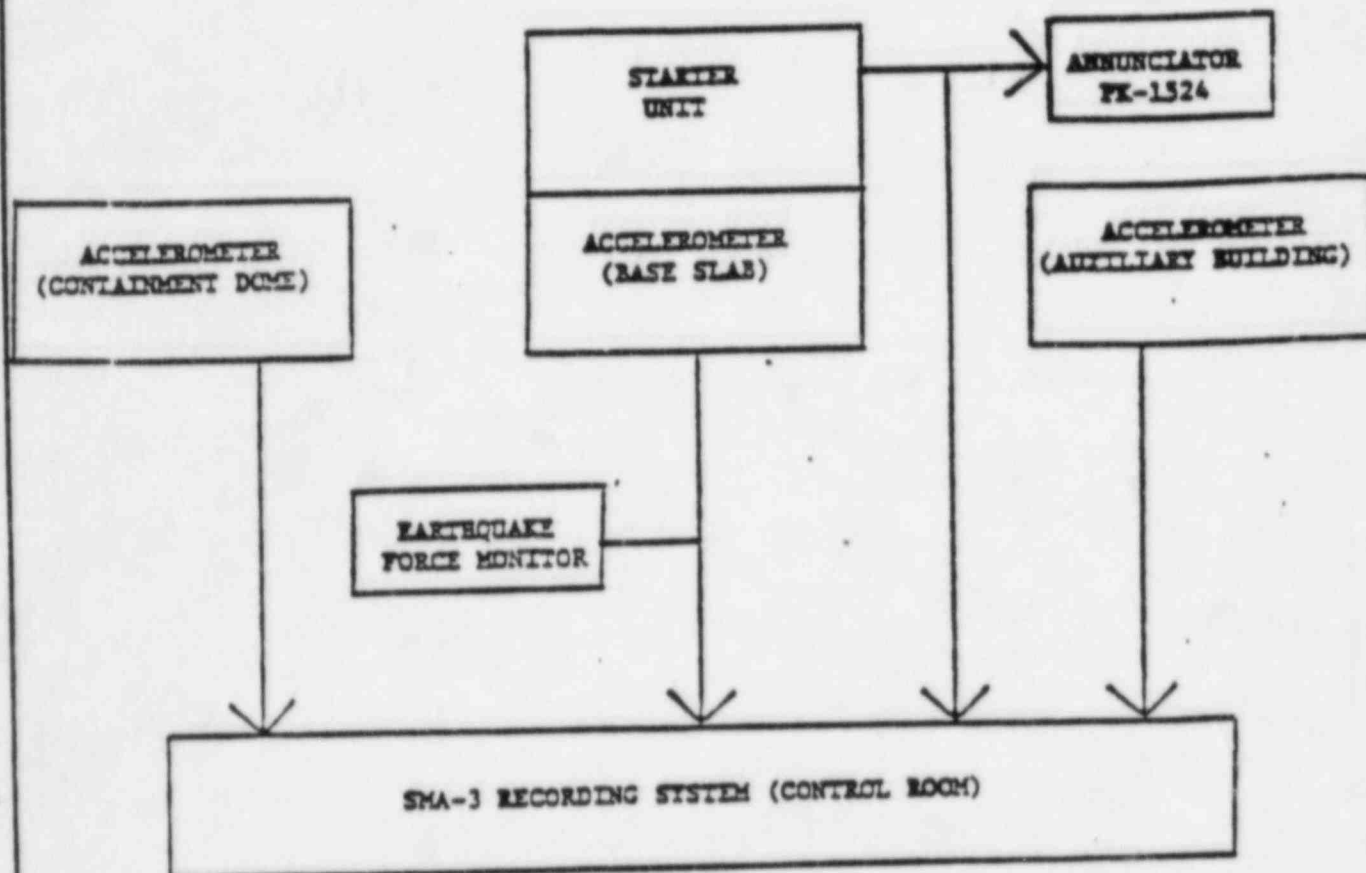
APPENDIX 1 (Continued)

FIGURE 1
BLOCK DIAGRAM OF KINEMATICS ACCELEROMETER UNITS

DIABLO CANYON POWER PLANT UNIT NO(S)

1 AND 2

NUMBER

EP M-4

REVISION

9

DATE

6/1/85

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TITLE

EARTHQUAKE

APPENDIX 2SUPPLEMENTAL SEISMIC SYSTEM (Terra Technology DCS-302)Locations of DetectorsTable A2-1

Recorder No.	Max. g	Unit	Location	Elev. (Ft.)	CHANNEL ORIENTATION		
					1	2	3
1-1	1	1	Containment NW.	89	Vert.	120	30
1-2	1	1	Containment NE.	89	Vert.	240	150
1-3	2	1	Containment NNW.	140	Vert.	180	90
1-4	2	1	Containment SSE.	140	Vert.	0	270
2-1	1	1	Containment Base,S.	89	Vert.	0	270
2-2	3	1	Containment NE. (springline)	231	Vert.	60	330
2-3	3	1	Containment S. (springline)	231	Vert.	180	90
2-4	1	1	Containment Cntr.	91	--	--	Vert.
	2	1	Containment S.	140	90	180	--
3-1	2	1	Containment W.	140	180	90	--
3-2	3	1	Containment NW. (springline)	231	Vert.	300	210
3-3	1	1	Auxiliary Bldg. 9.7-U	100	Vert.	0	270
3-4	1	1	Auxiliary Bldg. 18-H	100	Vert.	270	180
4-1	1	1	Auxiliary Bldg. 18-U	100	Vert.	90	0
4-2	1	2	Turbine Bldg. 35-D*	85	Vert.	180	90
4-3	1	2	Containment N.	89	Vert.	90	--
	1	1	Turbine Bldg. 1-D	140	--	--	0
4-4	1	2	Containment SE.	89	Vert.	210	--
	1	1	Turbine Bldg. 1-D	140	--	--	270

TITLE EARTHQUAKE

APPENDIX 2 (continued)SUPPLEMENTAL SEISMIC SYSTEM (Terra Technology DCS-302)Locations of DetectorsTable A2-1

Recorder No.	Max g	Unit	Location	Elev. (Ft.)	CHANNEL ORIENTATION		
					1	2	3
5-1	1	2	Containment SW.	89	Vert.	330	--
5-2	1	1	Turbine Bldg. 1-D	85	Vert.	0	270
5-3	1	FF	Raw Water Reservoir	Grnd.	Vert.	0	270
5-4	1	FF	Meteorological Tower	Grnd.	Vert.	90	0
6-1	1	FF	G.C. Warehouse	Grnd.	Vert.	180	90

* NOTE: Channel Orientation is azimuths from plant north (which is 23° counter-clockwise from the north).

TITLE EARTHQUAKE

 APPENDIX 3
 POST EARTHQUAKE FIRE SYSTEM ISOLATION VALVES
 (Reference P&ID's 102018 and 108018 & OVID 106718)

Operating Valve ID No.	P&ID SHT No	OVID SHT No	OVID Coord	System/Area
FP-0-20	3	3	32-B	Pkg. Blr. 0-1 & 0-2 Rm. Fire Sys. Isolation (Isol.)
FP-0-19A	3	3	32-B	Pkg. Blr. 0-1 Samp. Cooler Isol.
FP-0-304	3	3	36-B	Fire Pp. 0-1 Mini Recirc 1st Off
FP-0-305	3	3	35-B	Fire Pp. 0-1 Mini Recirc 2nd Off
FP-0-302	3	3	36-C	Fire Pp. 0-2 Mini Recirc 1st Off
FP-0-303	3	3	35-C	Fire Pp. 0-2 Mini Recirc 2nd Off
FP-1-42	4	4	40-B	Unit 1 Turbine Building (T/B) N. Sprinkler Heater Isol.
FP-1-50	4	4	44-B	Unit 1 T/B So. Spr. Header Isol.
FP-2-59	4	4	46-B	Unit 2 T/B N. Spr. Header Isol.
FP-2-66	4	4	49-B	Unit 2 T/B So. Spr. Header Isol.
FP-1-44	4	4	40-B	Unit 1 T/B Loop Dividing Valve
FP-1-49	4	4	44-B	Unit 1 T/B Loop Dividing Valve
FP-1-332	5	6	61-E	Aux. Bldg. Units 1 and 2 - 100' Elev/ Unit 1 FH Bldg - 100' Elev/Aux. FW Pp. 1-1 Spr. Sys. Isol.
FP-1-335	5	6	61-D	Unit 1 Area GE/GW Elev. 115' Spr. Sys. Isol.
FP-1-338	5	6	62-D	Unit 1 Area GE/GW Elev. 100' Spr. Sys. Isol.

TITLE EARTHQUAKE

 POST EARTHQUAKE FIRE SYSTEM ISOLATION VALVES
 (Reference P&ID's 102018 and 108018 & OVID 106718)
 (Page 2)

Operating Valve ID No.	P&ID SHT No	OVID SHT No	OVID Coord	System/Area
FP-1-341	5	6	63-C	Unit 1 Aux. Bldg. Fan Rm & Cont. Rm. HVAC Equip. Rm. Spr. Sys. Isol.
FP-1-30	5	6	61-C	Unit 1 Aux. Bldg. Serv. Wtr. Isol. (from Hose Reel Header)
FP-1-32	5	6	60-C	Unit 1 Aux. Bldg. Serv. Wtr. Isol. (from Aux. Bldg. Fire Loop)
FP-1-37	5	6	62-E	Chemical Lab. Rm. Spr. Sys. Isol.
FP-1-346	5	6	61-B	Unit 1 Charging, CCW Pps. Spr. Sys. Isol.
FP-2-352	5	6	67-E	Unit 2 FH Bldg. 100' Elev. Spr. Sys. Isol.
FP-2-860	N/S*	6	67-E	Aux. FW Pp. 2-1 Spr. Sys. Isol.
FP-2-861	N/S*	6	65-C	Unit 2 Area GE/GW Elev. 100' Spr. Sys. Isol.
FP-2-30	5	6	66-D	Unit 2 Area GE/GW Elev. 115' Spr. Sys. Isol.
FP-2-359	5	6	68-D	Security Diesel Spr. Sys. Isol.
FP-2-857	5	6	66-C	Unit 2 Serv. Wtr. Isol. from Fire Line Elev. 140' (1st Off)
FP-2-32	5	6	66-C	Unit 2 Aux. Bldg. Serv. Wtr. Isol. (from Unit 2 Aux. Bldg. Fire Loop)
FP-2-349	5	6	67-B	Unit 2 Charging, CCW Pps. Spr. Sys. Isol.

* Not Shown.

DC0036 271X

TITLE EARTHQUAKE

POST EARTHQUAKE FIRE SYSTEM ISOLATION VALVES
(Reference P&ID's 102018 and 108018 & OVID 106718)
(Page 3)

Operating Valve ID No.	P&ID SHT No	OVID SHT No	OVID Coord	System/Area
FP-1-177	7	8	88-A	Unit 1 Containment (Cont.) Fire Water Sys. Manual Isol.
FP-1-193	7	8	85-D	Unit 1 RCP 1-1 Spr. Sys. Isol.
FP-1-203	7	8	83-D	Unit 1 RCP 1-2 Spr. Sys. Isol.
FP-1-189	7	8	82-C	Unit 1 RCP 1-3 Spr. Sys. Isol.
FP-1-184	7	8	84-B	Unit 1 RCP 1-4 Spr. Sys. Isol.
FP-1-181-A	7	8	85-B	Vent Line #1 Isol. off Unit 1 Cont. Fire Water Header
FP-1-197	7	8	84-D	Vent Line #3 Isol. off Unit 1 Cont. Fire Water Header
FP-1-188-A	7	8	83-B	Vent Line #2 Isol. off Unit 1 Cont. Fire Water Header
FP-2-864	7	8A	81A-B	Unit 2 Cont. Fire Water Sys. Manual Isol.
FP-2-891	7	8A	84A-D	Unit 2 RCP 2-1 Spr. Sys. Isol.
FP-2-883	7	8A	86A-D	Unit 2 RCP 2-2 Spr. Sys. Isol.
FP-2-880	7	8A	87A-C	Unit 2 RCP 2-3 Spr. Sys. Isol.
FP-2-874	7	8A	85A-B	Unit 2 RCP 2-4 Spr. Sys. Isol.
FP-2-870	7	8A	84A-B	Vent Line #1 Isol. off Unit 2 Cont. Fire Water Header
FP-2-877	7	8A	86A-B	Vent Line #2 Isol. off Unit 2 Cont. Fire Water Header
FP-2-887	7	8A	85A-D	Vent Line #3 Isol. off Unit 2 Cont. Fire Water Header

TITLE EARTHQUAKE

POST EARTHQUAKE FIRE SYSTEM ISOLATION VALVES
(Reference P&ID's 102018 and 108018 & OVID 106718)
(Page 4)

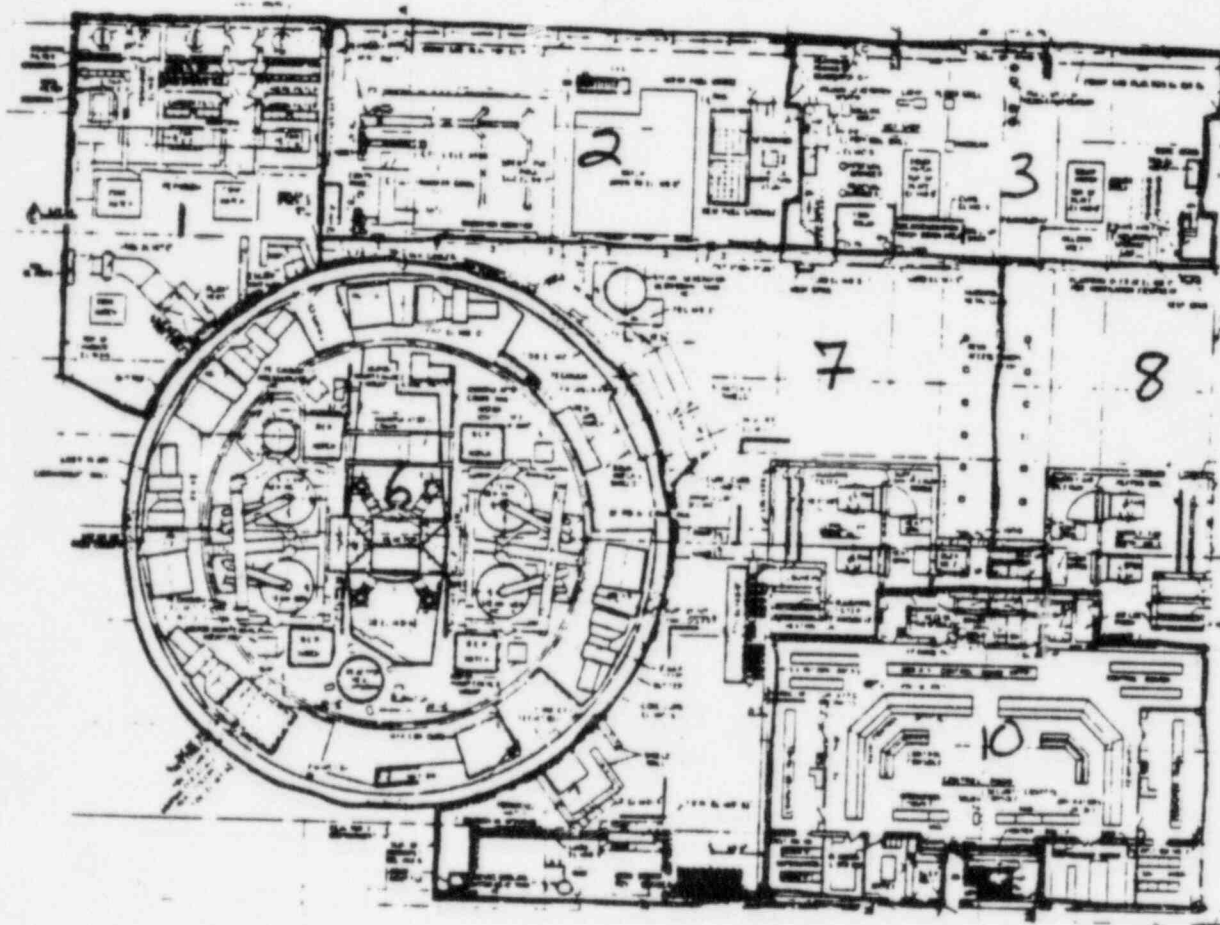
Operating Valve ID No.	P&ID SHT No	OVID SHT No	OVID Coord	System/Area
FP-1-24	5	6	60-E	Temp Unit 2 Isol. ***
FP-2-27	5	6	66-E	Temp Unit 2 Isol. ***
FP-2-26	5	6	63-C	Temp Unit 2 Isol. ***
FP-2-345	7	6	67-E	Temp Unit 2 Isol.

To be removed from list when Unit 2 goes on-line.

TITLE EARTHQUAKE

ATTACHMENT 1

POST-EARTHQUAKE INSPECTION AREA IDENTIFICATION

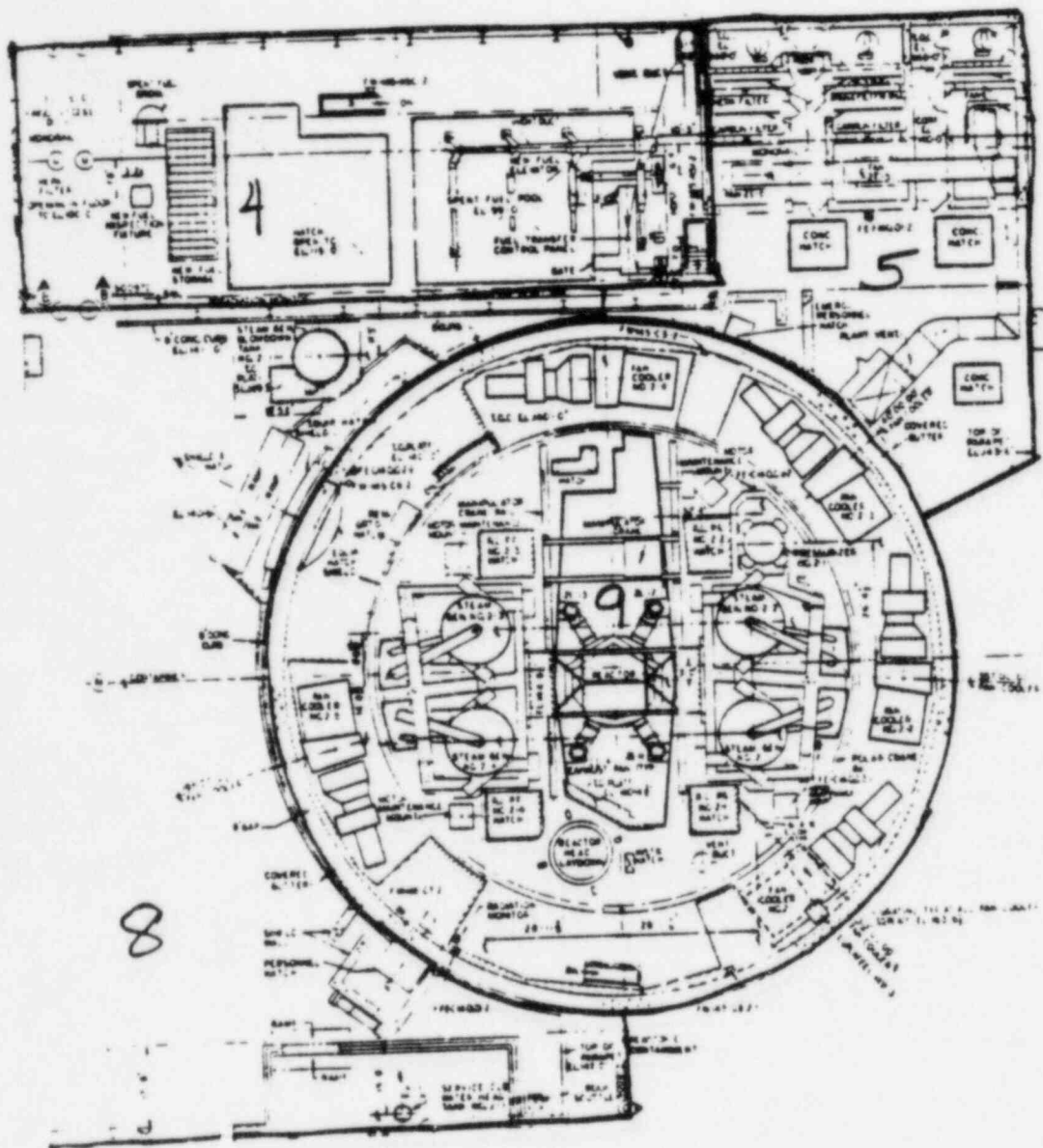


10A - ROOF AREA AND EQUIPMENT ABOVE CONTROL ROOM (ELEV. 167')

UNIT 1 - CONTAINMENT, AUXILIARY & FUEL HANDLING BUILDINGS, ELEV. 140'

TITLE EARTHQUAKE

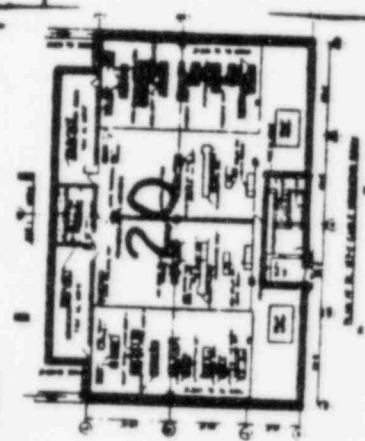
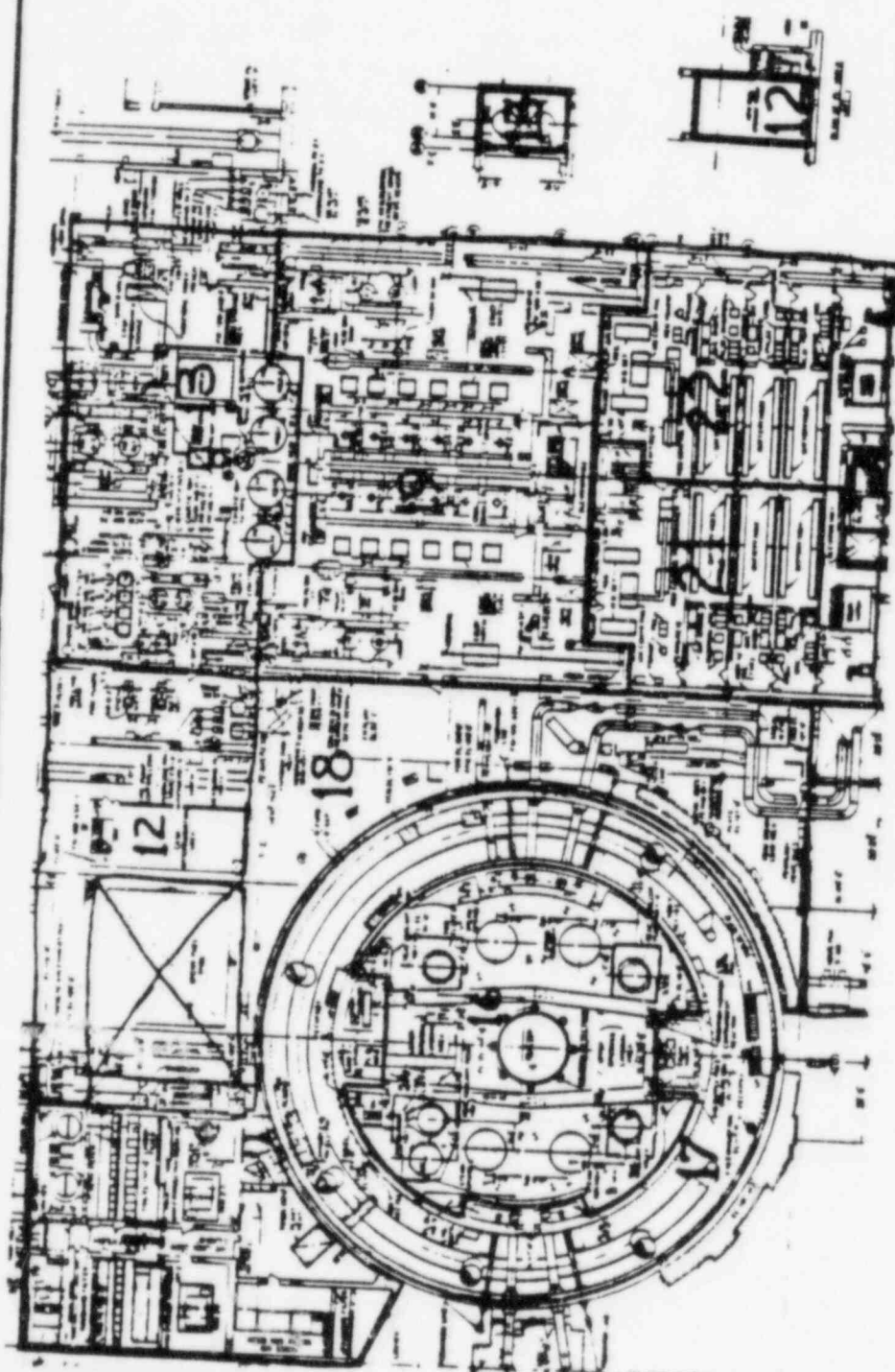
ATTACHMENT 1 (Cont'd)



UNIT 2 - CONTAINMENT & FUEL HANDLING BUILDING, ELEV. 140'

TITLE EARTHQUAKE

ATTACHMENT 1 (Cont'd)



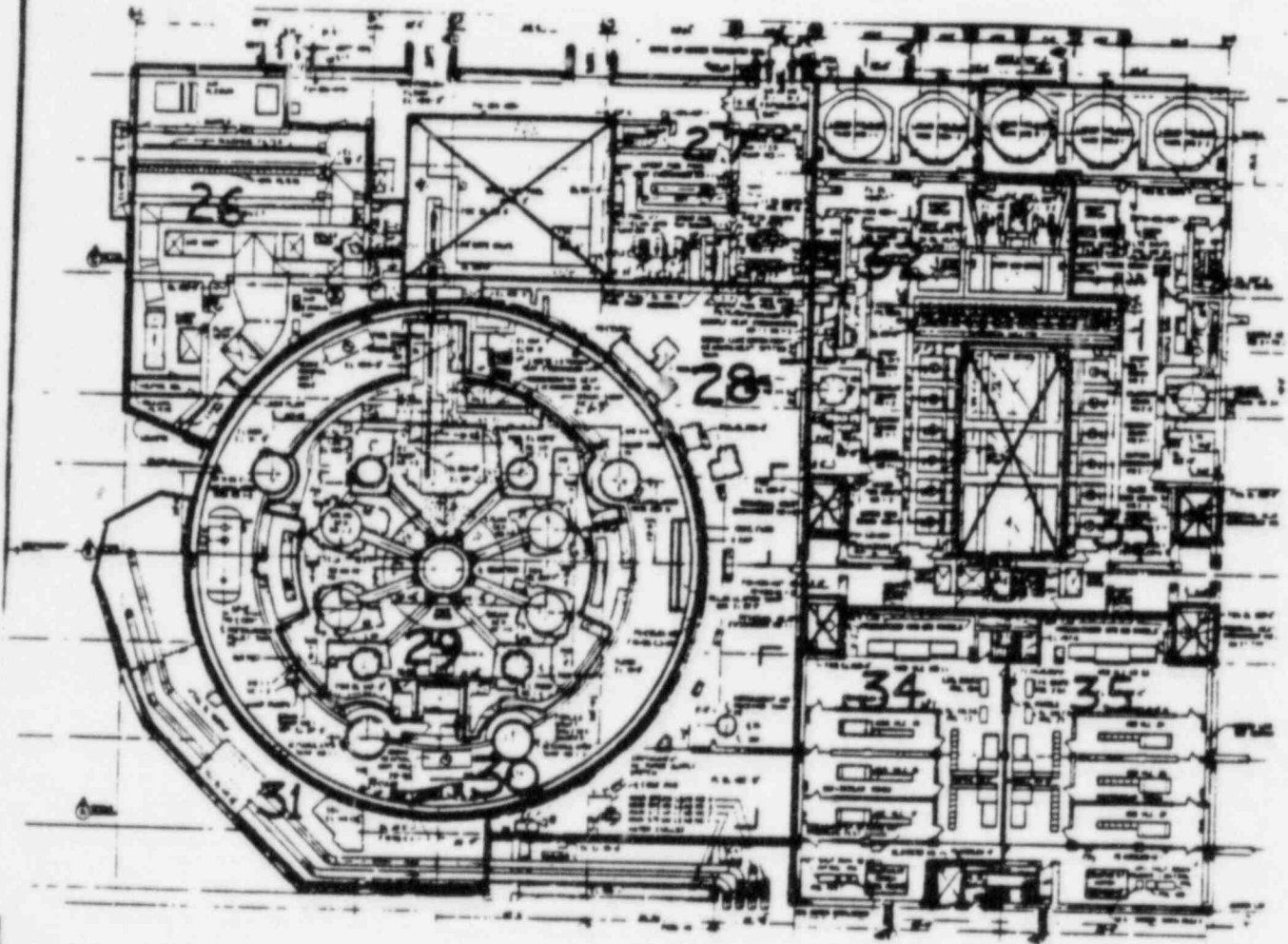
UNIT 1 - CONTAINMENT, AUXILIARY & FUEL HANDLING BUILDINGS, ELEV. 115'

DC0036 24IV

DC0036 251V

TITLE EARTHQUAKE

ATTACHMENT 1 (Cont'd)

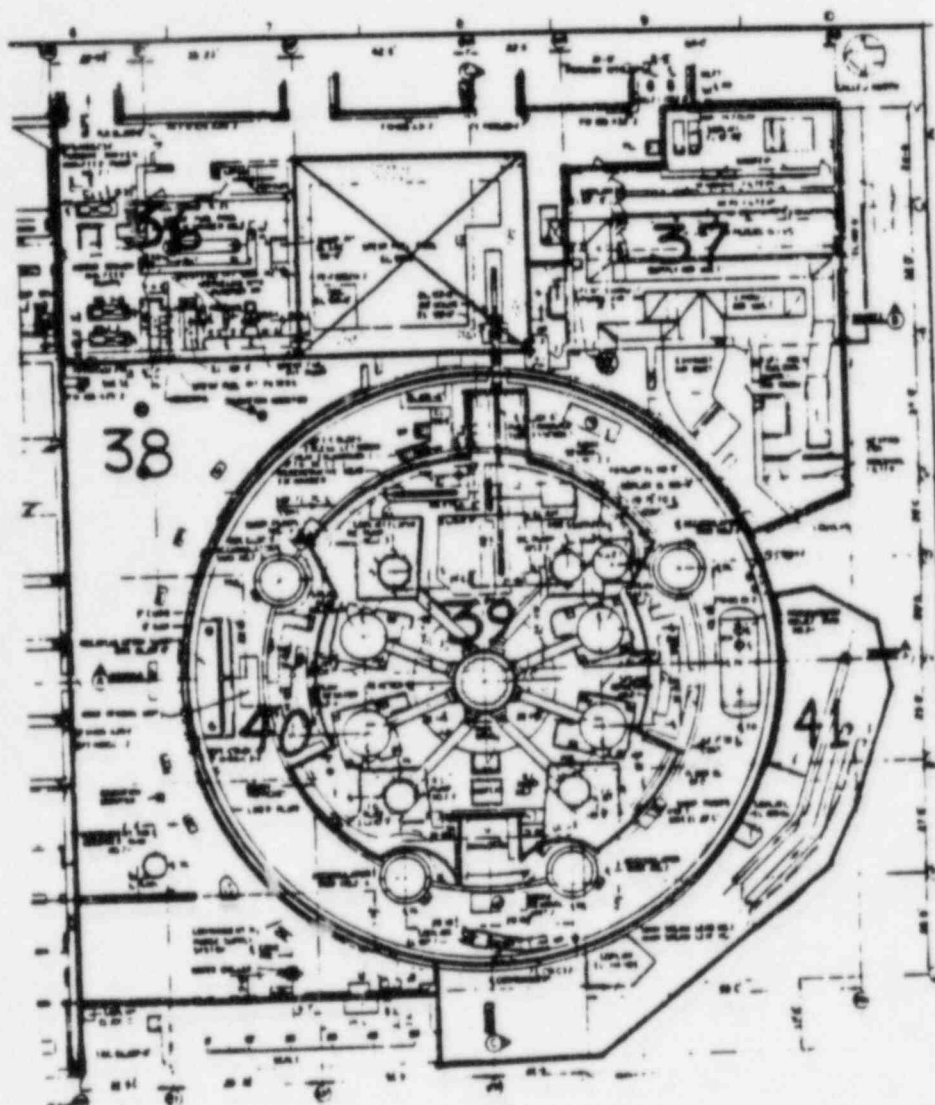


UNIT 1 - CONTAINMENT, AUXILIARY & FUEL HANDLING BUILDING, ELEV. 91' & 100'

DC0036 26IV

TITLE EARTHQUAKE

ATTACHMENT 1 (Cont'd)

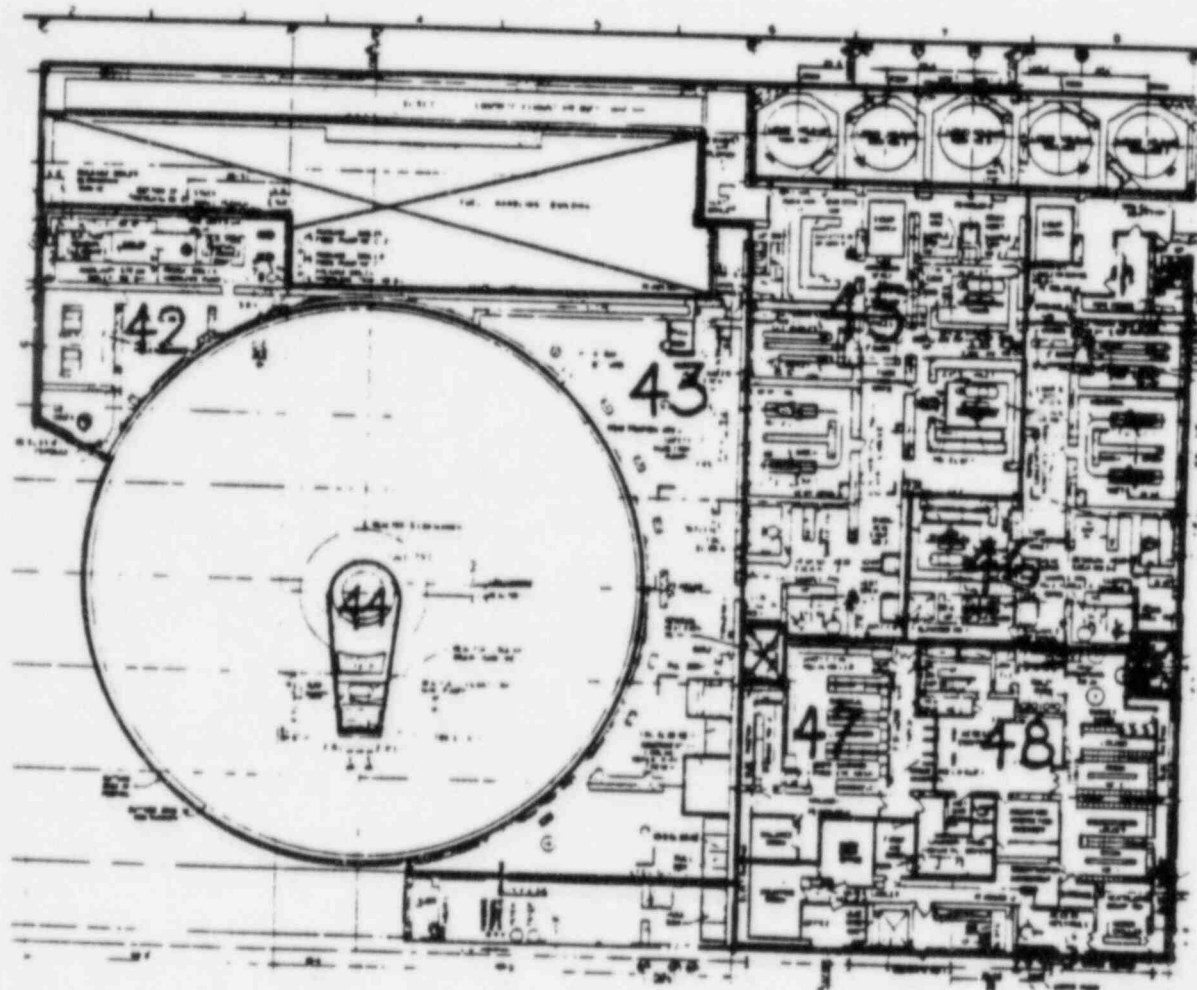


UNIT 2 - CONTAINMENT & FUEL HANDLING BUILDING, ELEV. 85', 91', & 100'

DC0036 27IV

TITLE EARTHQUAKE

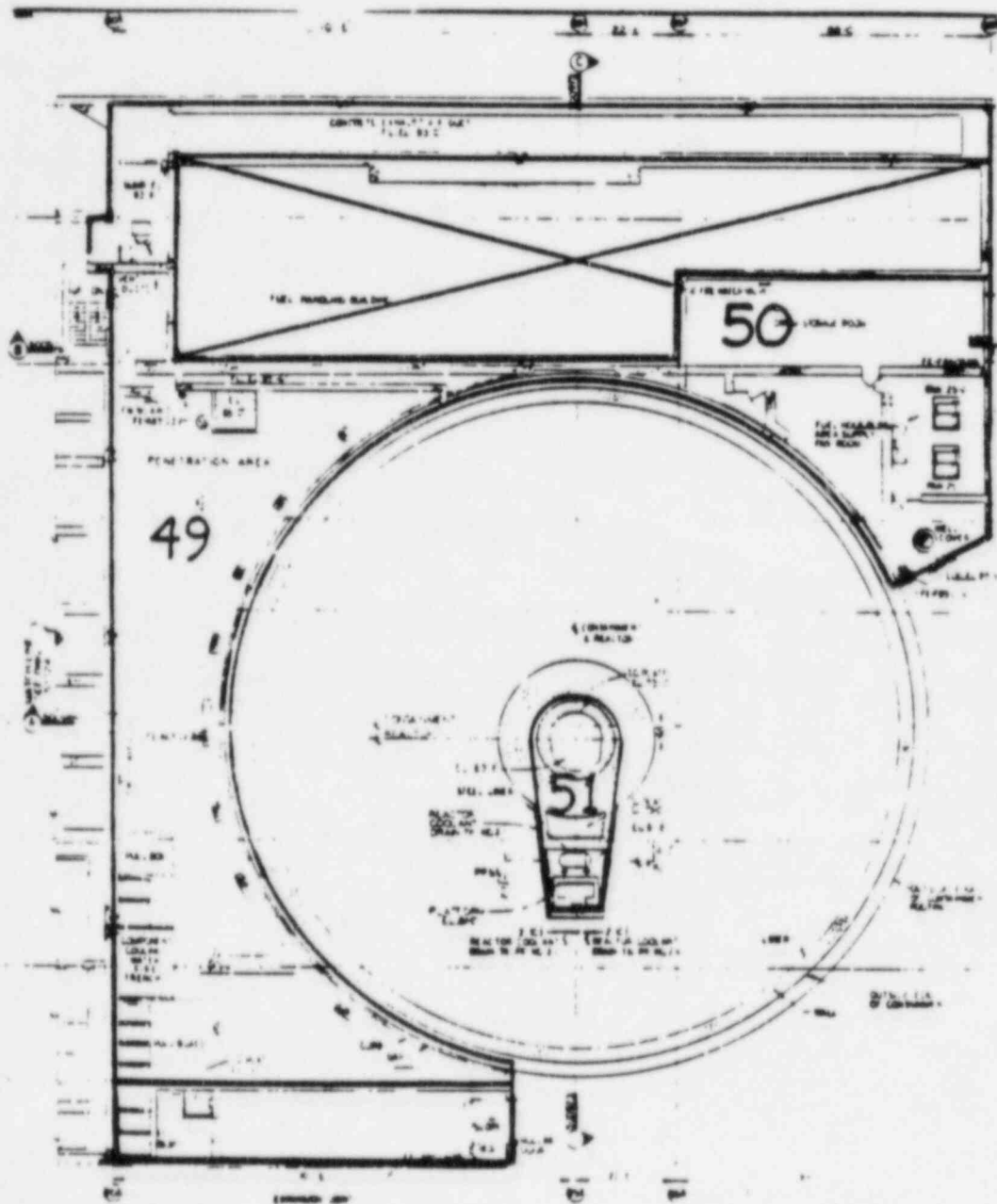
ATTACHMENT 1 (Cont'd)



UNIT 1 - CONTAINMENT & AUXILIARY BUILDING, ELEV. 85'

TITLE EARTHQUAKE

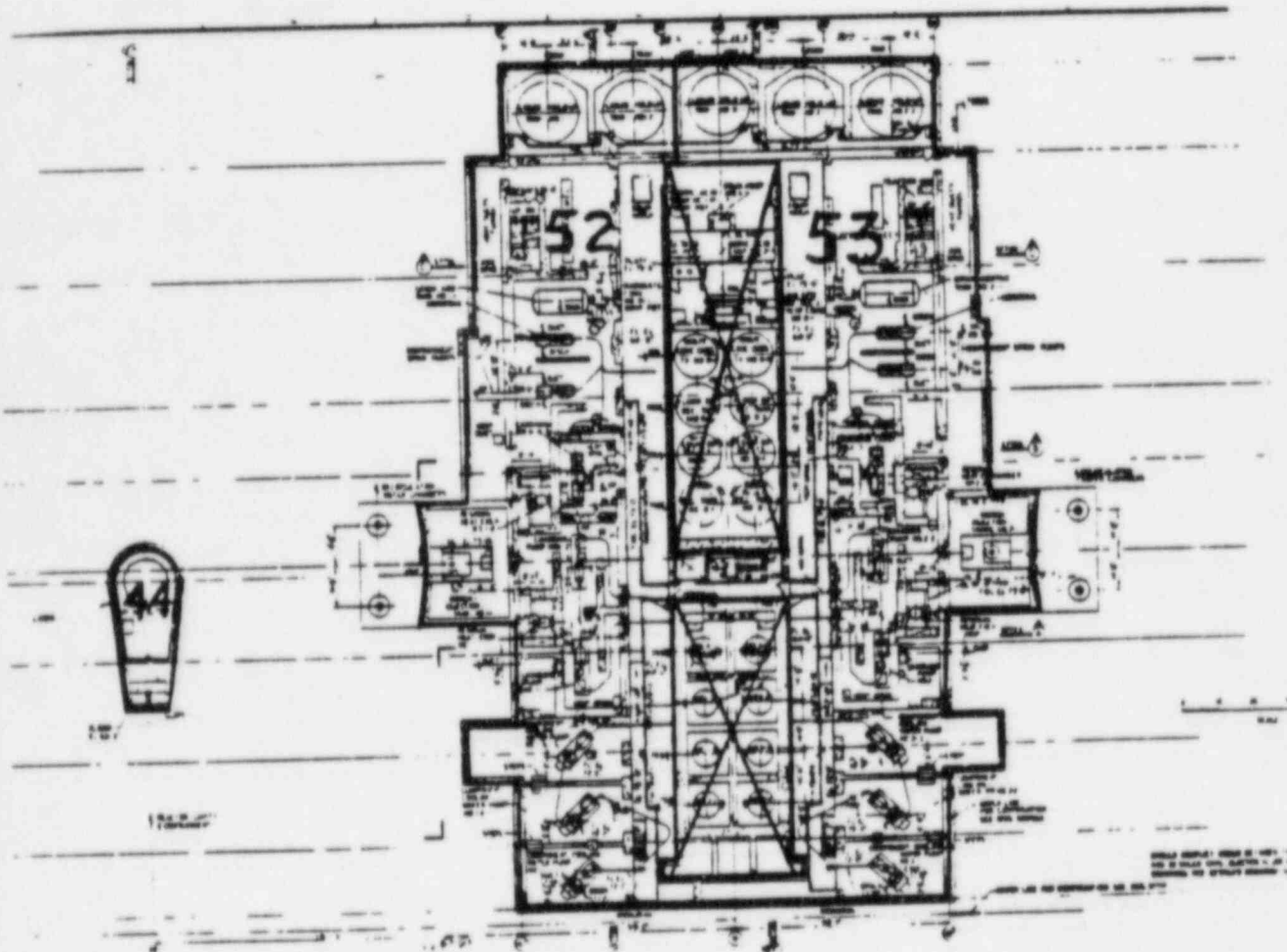
ATTACHMENT 1 (Cont'd)



UNIT 2 - CONTAINMENT & FUEL HANDLING BUILDING, ELEV. 85'

TITLE EARTHQUAKE

ATTACHMENT 1 (Cont'd)

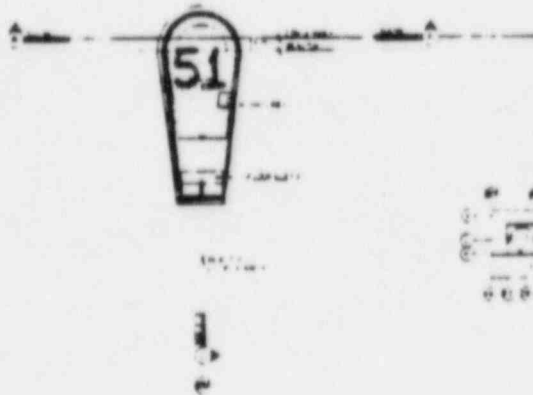


UNIT 1 - CONTAINMENT & AUXILIARY BUILDING, ELEV. 73'

DCOC36 301V

TITLE EARTHQUAKE

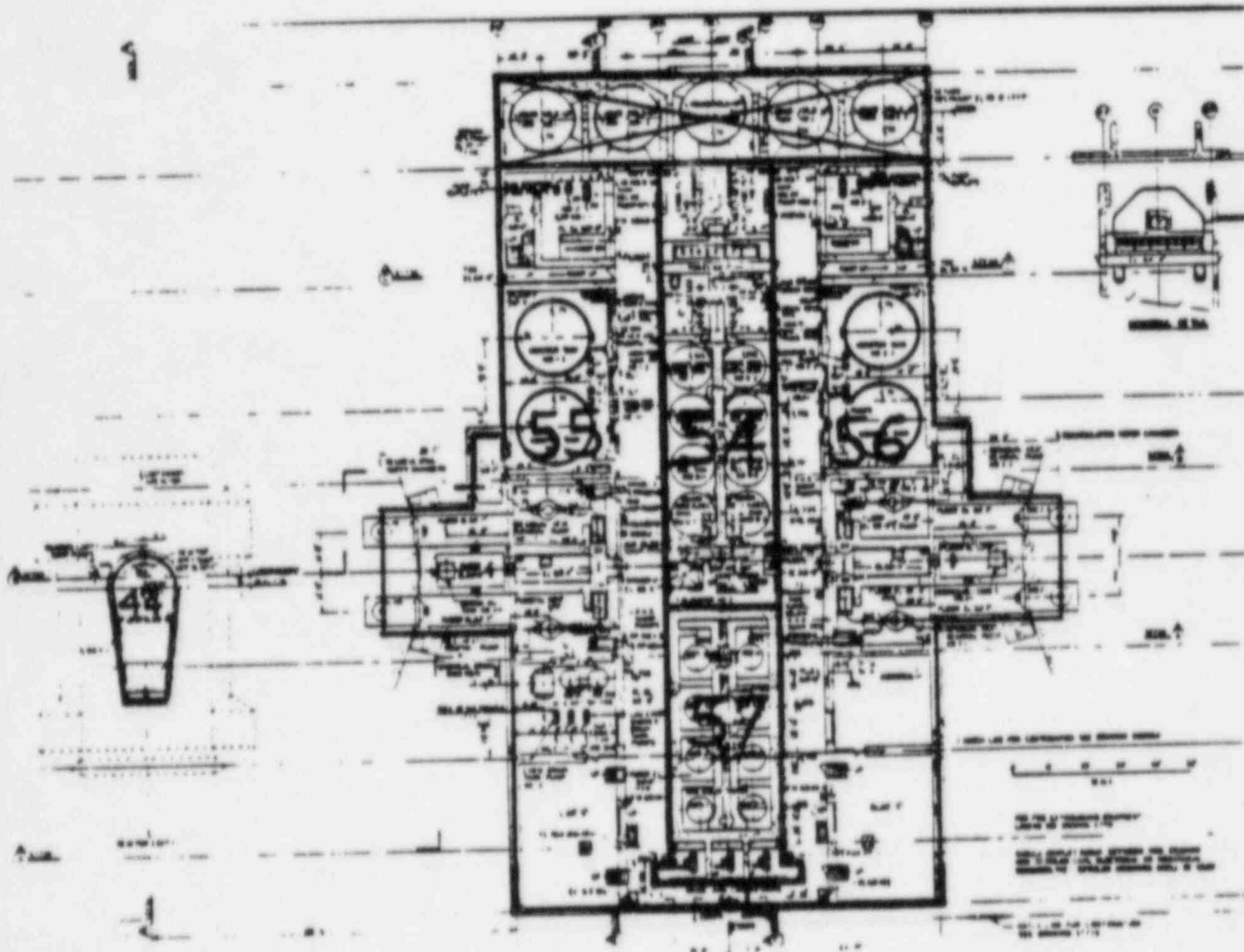
ATTACHMENT 1 (Cont'd)



UNIT 2 - CONTAINMENT, ELEV. 61', 61' & 73'

TITLE EARTHQUAKE

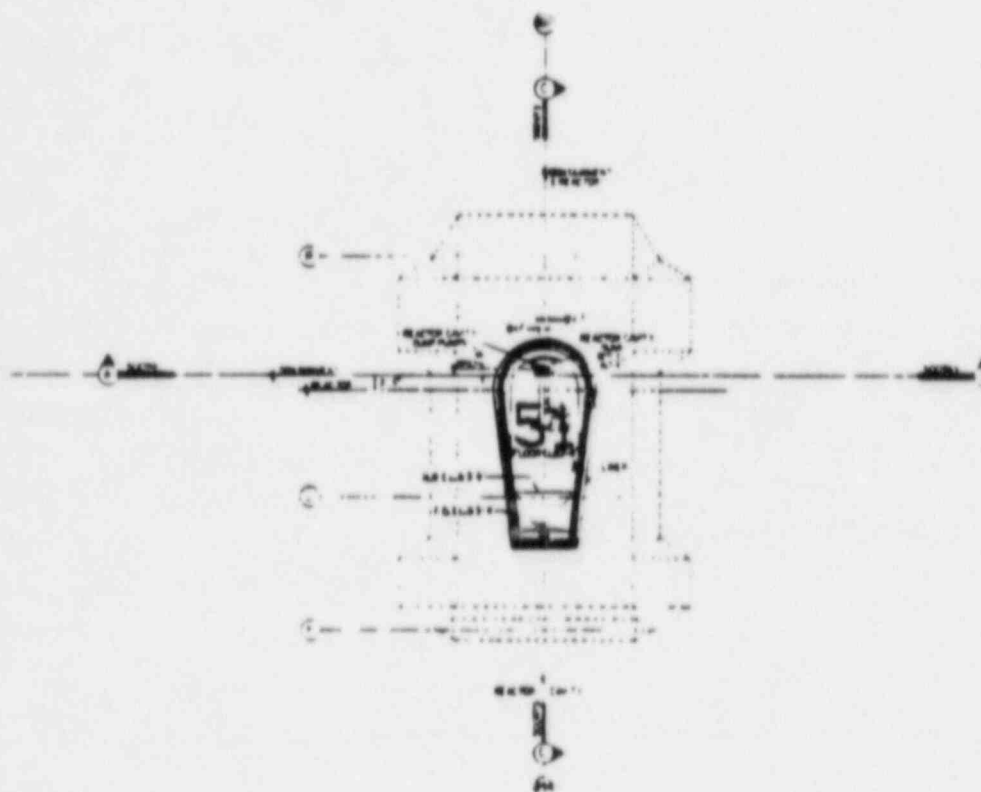
ATTACHMENT 1 (Cont'd)



UNIT 1 - CONTAINMENT & AUXILIARY BUILDINGS, ELEV. 60' & 64'

TITLE EARTHQUAKE

ATTACHMENT 1 (Cont'd)

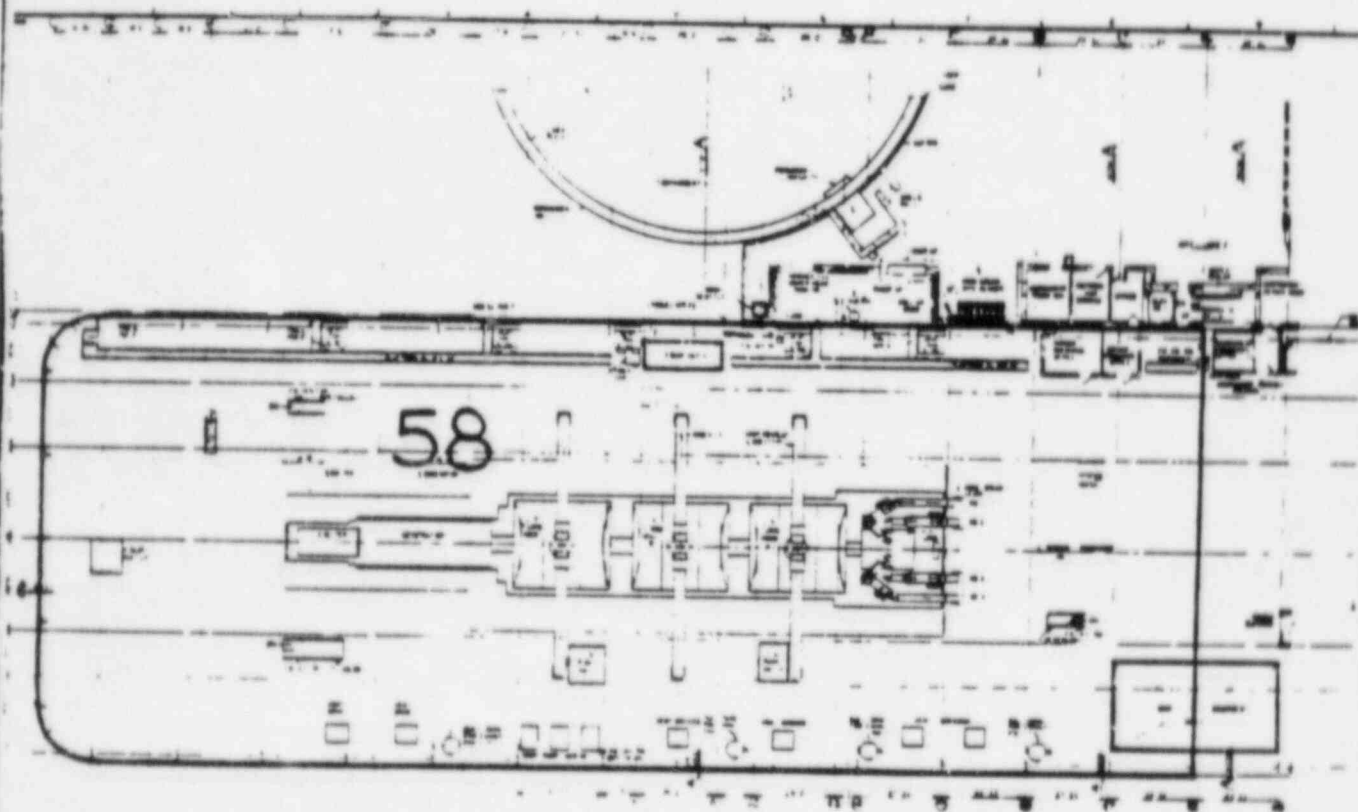


UNIT 2 - CONTAINMENT & AUXILIARY BUILDING, ELEV. 60' & 64'

DC0036 331V

TITLE EARTHQUAKE

ATTACHMENT 1 (Cont'd)



UNIT 1 - TURBINE BUILDING, ELEV. 140'

DIABLO CANYON POWER PLANT UNIT NO(S)

1 AND 2

NUMBER EP M-4

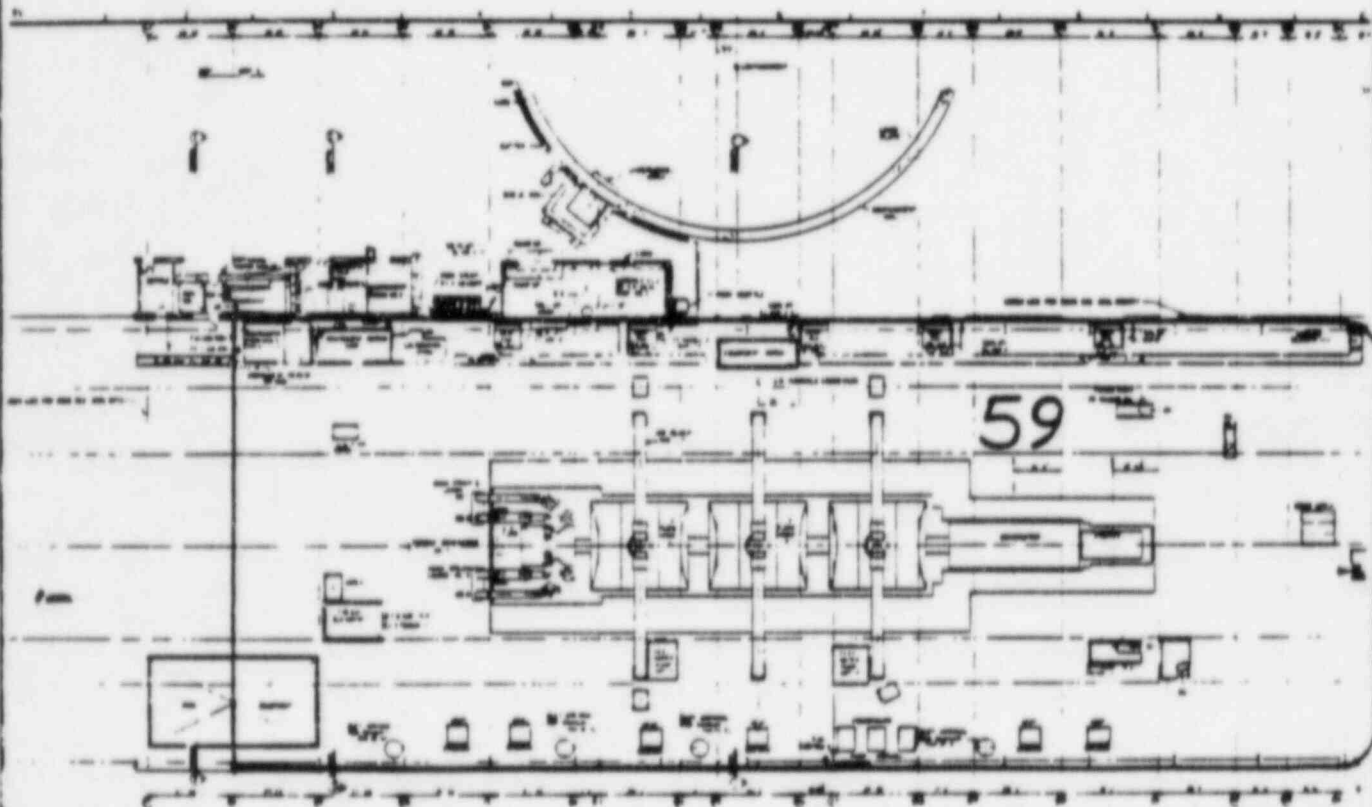
REVISION 9

DATE 6/1/85

PAGE 43 OF 50

TITLE EARTHQUAKE

ATTACHMENT 1 (Cont'd)

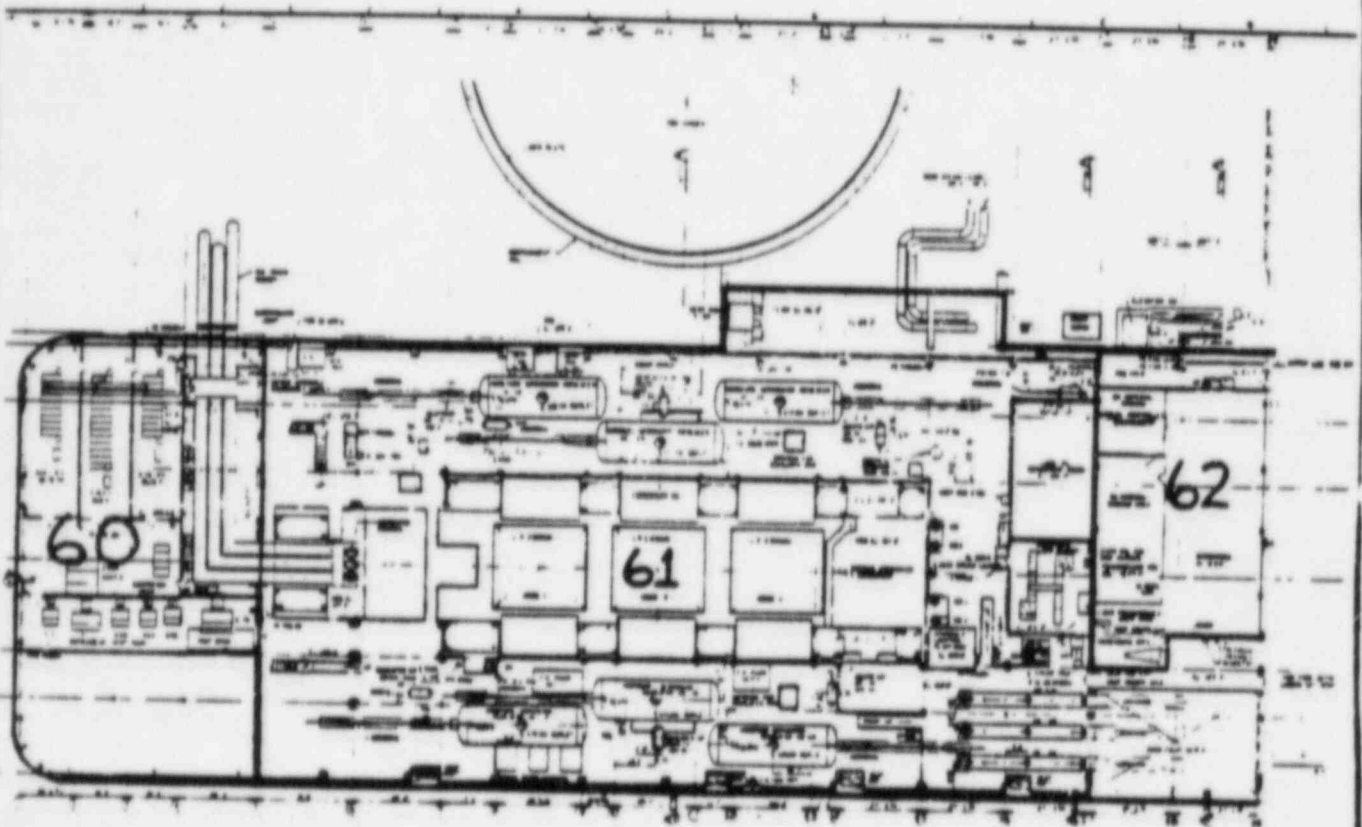


UNIT 2 - TURBINE BUILDING, ELEV. 140'

DC0036 351V

TITLE EARTHQUAKE

ATTACHMENT 1 (Cont'd)



UNIT 1 - TURBINE BUILDING, ELEV. 119'

DIABLO CANYON POWER PLANT UNIT NO(S)

1 AND 2

NUMBER EP M-4

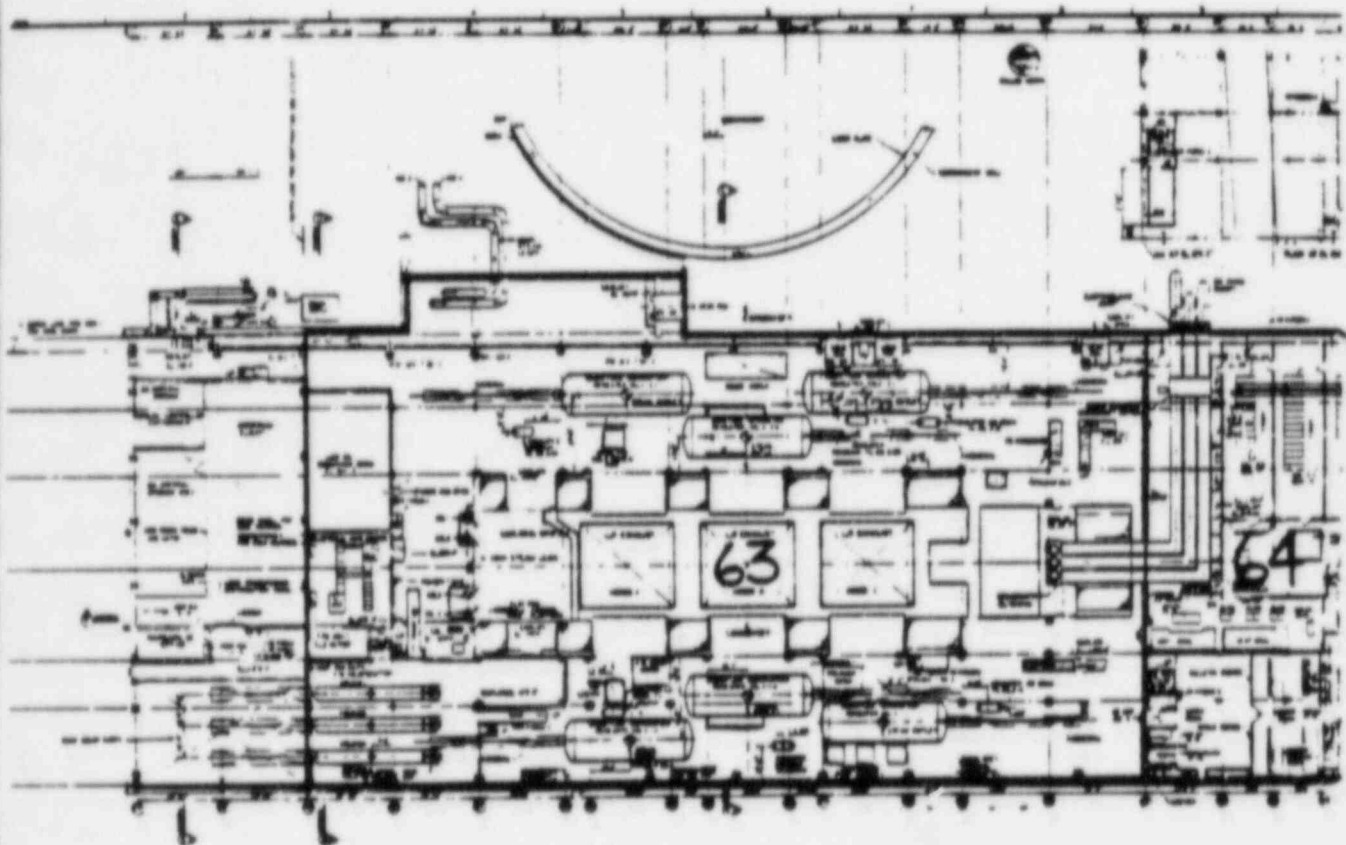
REVISION 9

DATE 6/1/85

PAGE 45 OF 50

TITLE EARTHQUAKE

ATTACHMENT 1 (Cont'd)

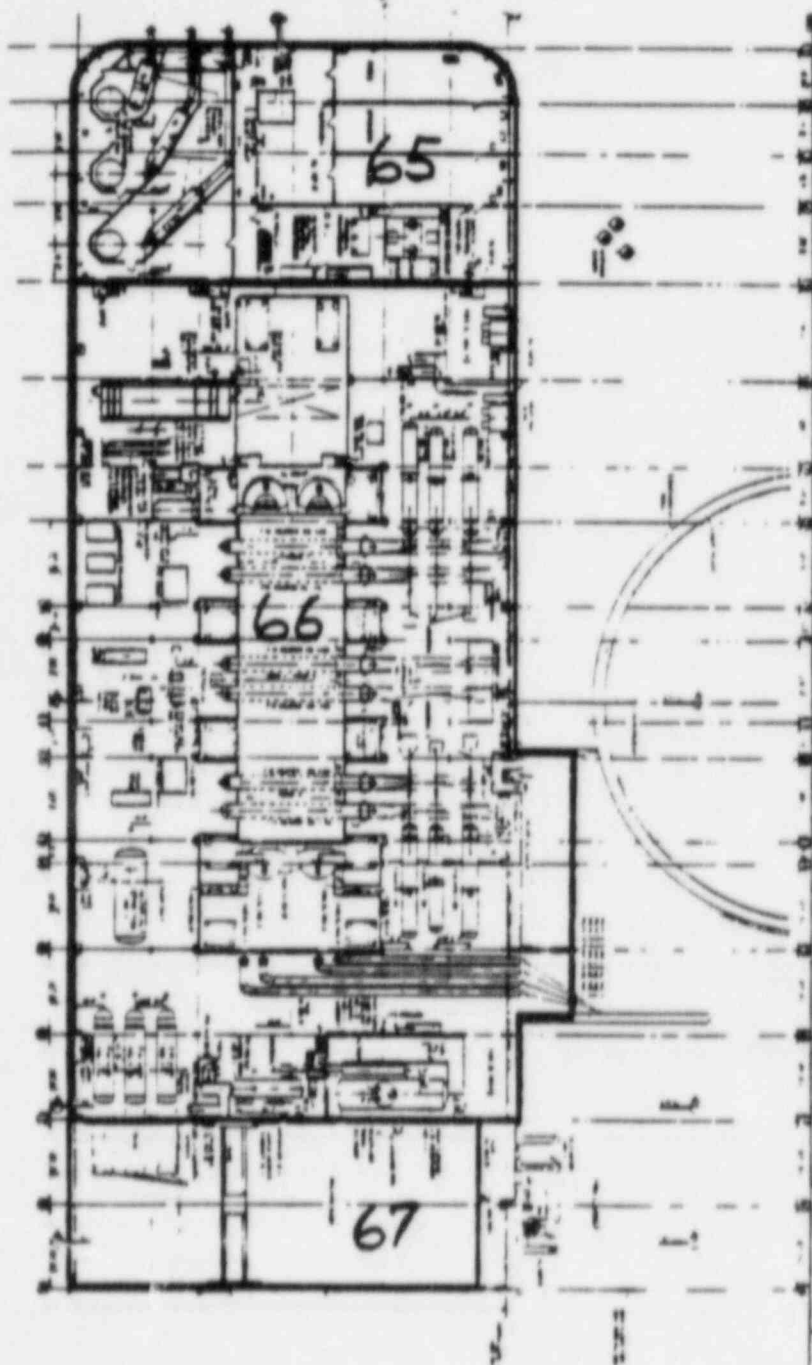


UNIT 2 - TURBINE BUILDING, ELEV. 119'

DC0036 371V

TITLE EARTHQUAKE

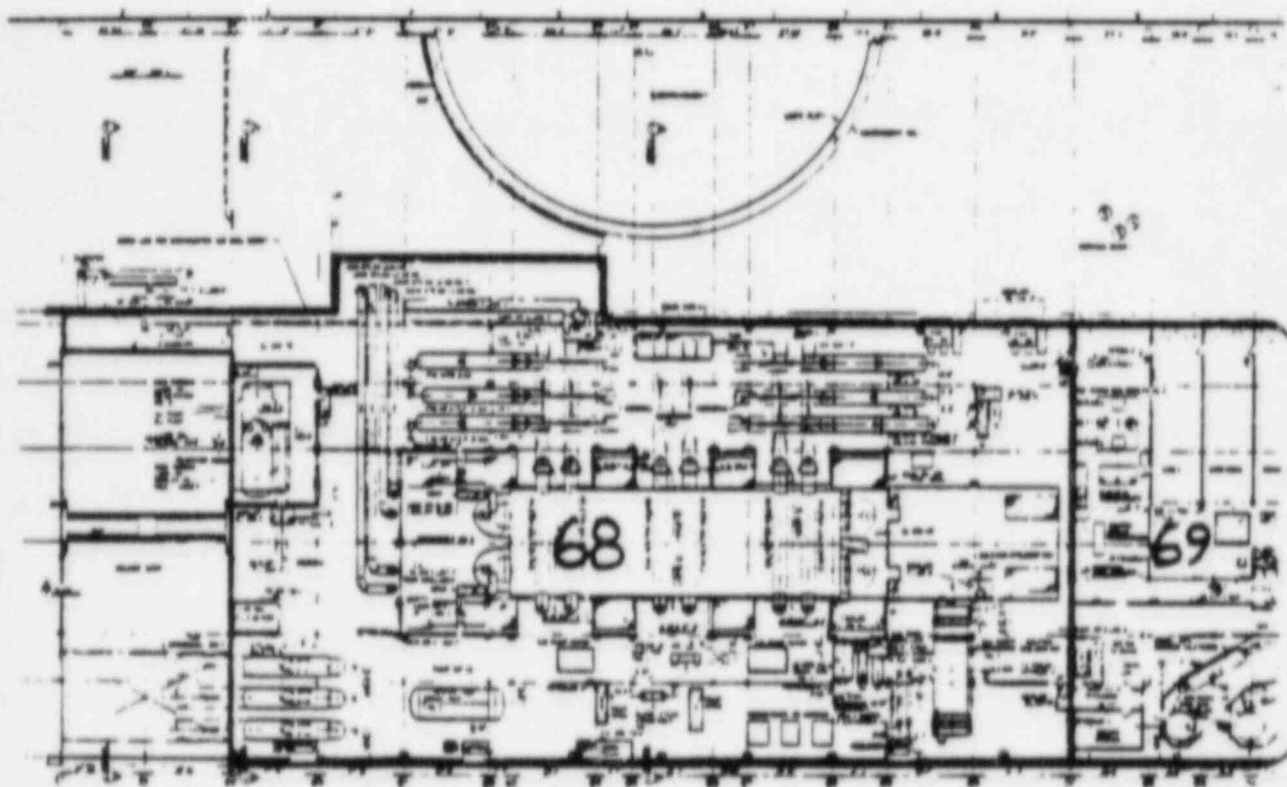
ATTACHMENT 1 (Cont'd)



UNIT 1 TURBINE BUILDING, ELEV. 104'

TITLE EARTHQUAKE

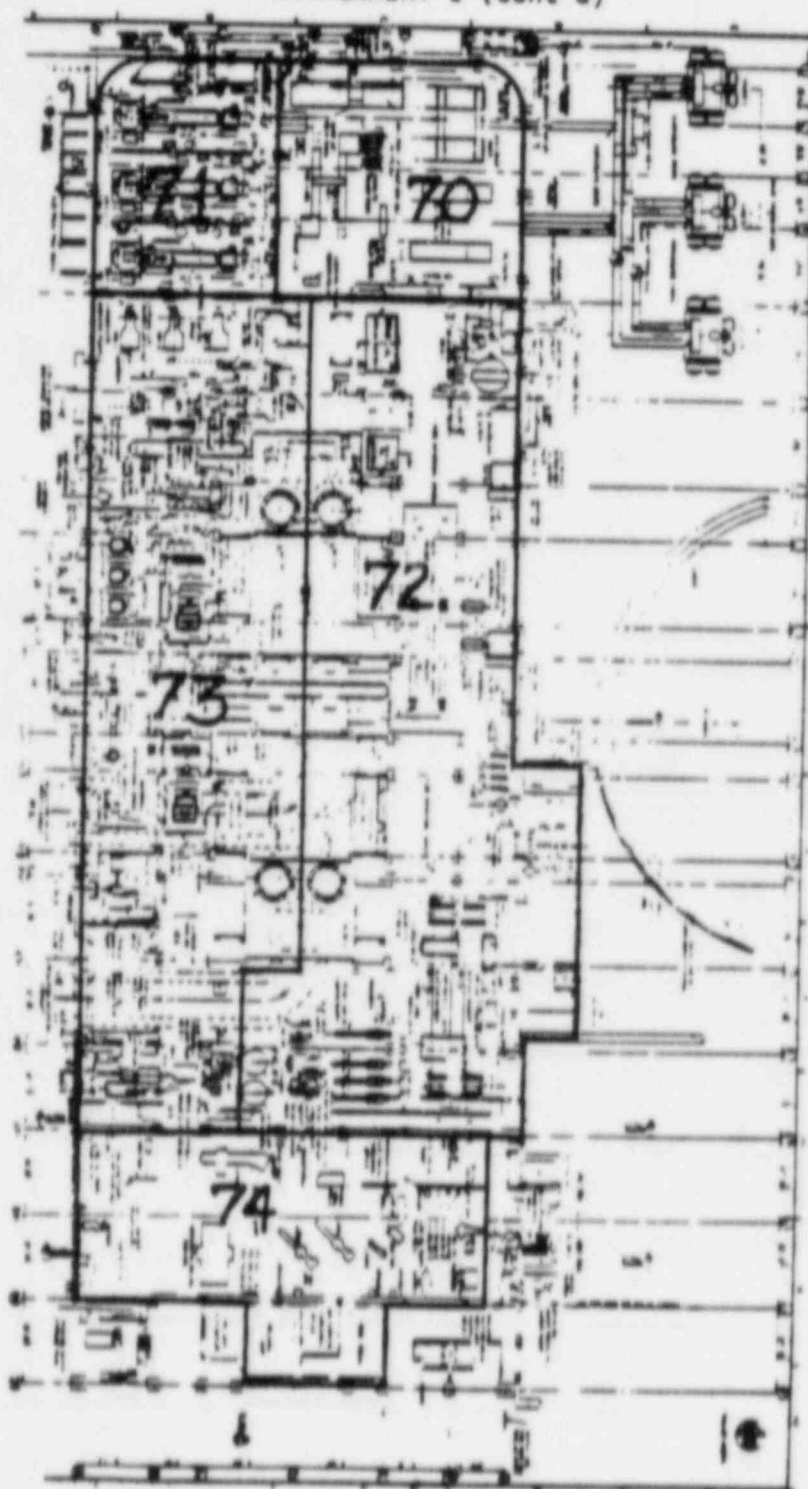
ATTACHMENT 1 (Cont'd)



UNIT 2 - TURBINE BUILDING, ELEV. 104'

TITLE EARTHQUAKE

ATTACHMENT 1 (Cont'd)



UNIT 1, TURBINE BUILDING, ELEV. 85'

DC0036 401V

DIABLO CANYON POWER PLANT UNIT NO(S)

1 AND 2

NUMBER EP M-4

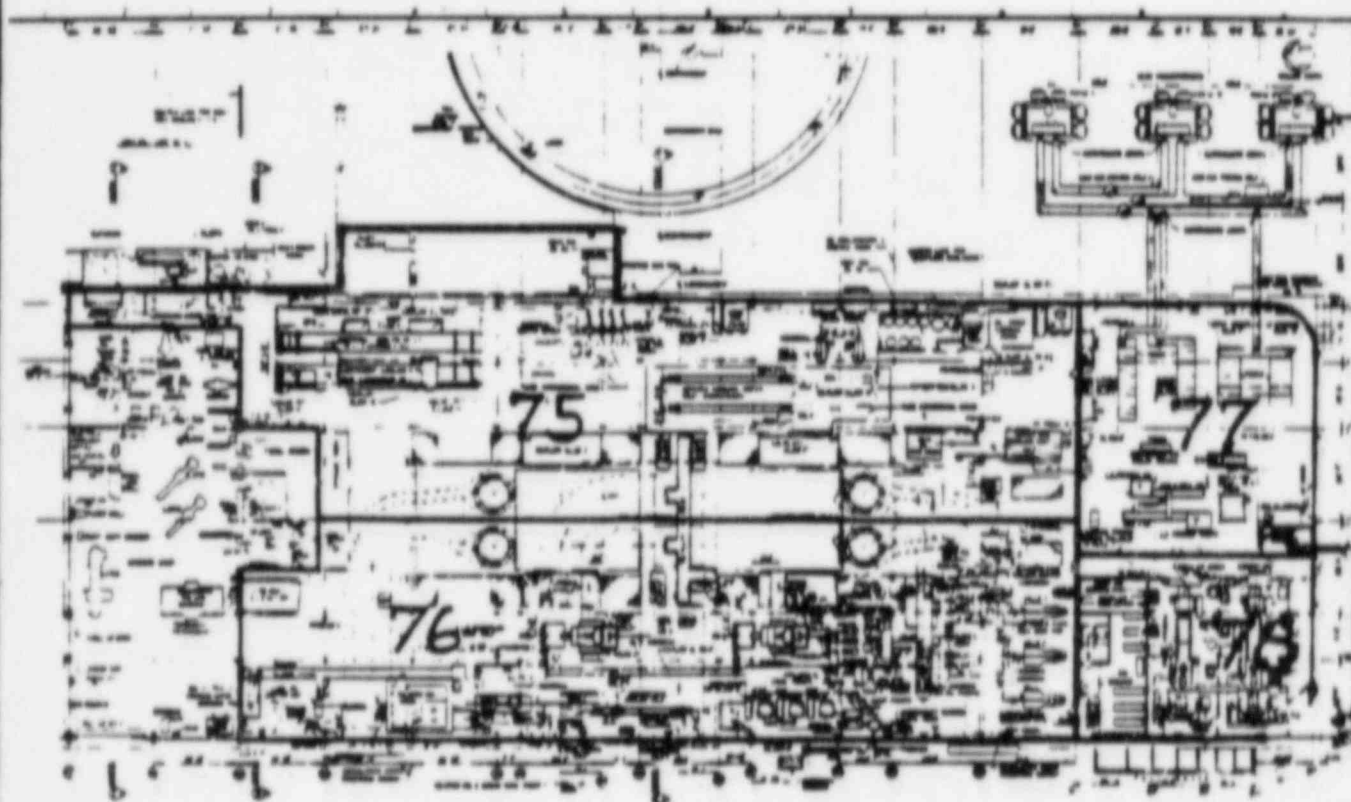
REVISION 9

DATE 6/1/85

PAGE 49 OF 50

TITLE EARTHQUAKE

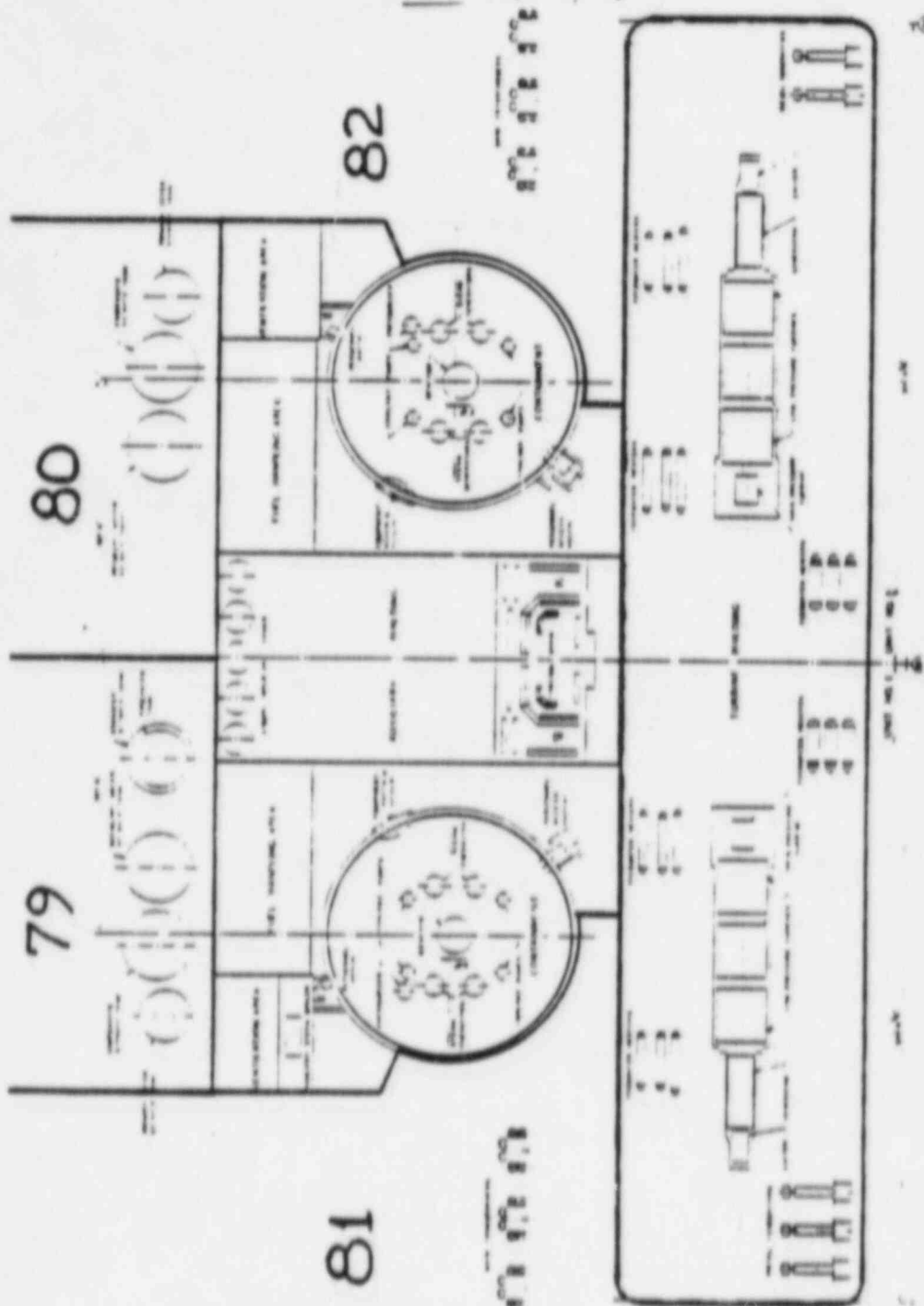
ATTACHMENT 1 (Cont'd)



UNIT 2 - TURBINE BUILDING, ELEV. 85'

TITLE EARTHQUAKE

ATTACHMENT 1 (Cont'd)



UNITS 1 & 2 - LAYOUT

DEPARTMENT OF NUCLEAR PLANT OPERATIONS
DIABLO CANYON POWER PLANT

EMERGENCY NOTIFICATION RECORD

[illegible]

DEPARTMENT OF NUCLEAR PLANT OPERATIONS
DIABLO CANYON POWER PLANT UNITS 1 AND 2

DATA SHEET: POST-EARTHQUAKE EVALUATION SUMMARY, EP M-4

1. DATE/TIME OF QUAKE _____/_____-_____
2. POWER LEVELS: UNIT 1 _____ MWE, UNIT 2 _____ MWE
3. PEAK ACCELERATION (FROM EFM-1 or SMA-3)
NORTH-SOUTH _____ G: EAST-WEST _____ G: VERTICAL _____ G
4. CHECK LISTS

	TIME	/	INITIALS
a. Seismic Instrument Procedure	_____	/	_____
b. Level Indicator Check List	_____	/	_____
c. Surveillance Test Check List	_____	/	_____
d. Electrical Power Check List	_____	/	_____
e. Area Inspection Check List	_____	/	_____

REMARKS: _____

5. Epicenter: _____ Magnitude _____

Obtain day after the earthquake from U.C. Berkeley Seismographic Station.

Reviewed by:

Power Production Engineer _____

Date/Time _____/_____

DEPARTMENT OF NUCLEAR PLANT OPERATIONS
DIABLO CANYON POWER PLANT UNITS 1 AND 2DATA SHEET: POST-EARTHQUAKE LEVEL INDICATOR CHECK LIST, EP M-4

UNIT _____ DATE _____

INSTRUCTIONS: Check the indicators twice, at about 15 minutes to one hour apart. Inform the Shift Foreman of any reading outside of its normal range, or which changes by more than expected in the interval.

UNIT 1LEVEL / TIMEVertical Board 1

Reading 1 Reading 2

LI-139 CCW Surge Tank 1-1A

/ /

LI-140 CCW Surge Tank 1-1E

/ /

LI-931 Spray Additive Tank

/ /

LI-940 Containment Recirc Sump

/ /

LI-941 Containment Recirc Sump

/ /

Vertical Board 2

LI-920 Refueling Water Storage Tank (S.T.)

/ /

LI-921 Refueling Water S.T.

/ /

LI-922 Refueling Water S.T.

/ /

LI-112 Volume Control Tank

/ /

LI-149 Primary Water Storage Tank

/ /

Vertical Board 3

LI-148 Condensate Storage Tank 1-1

/ /

LI-147 Transfer Tank 0-1

/ /

LI-144 Raw Water Res. 01A (West)

/ /

LI-145 Raw Water Res. 01B (East)

/ /

LI-146 Fire Water S.T.

/ /

CommonAux. Bldg. Control Panel

LI-180 Monitor Tank 1-1

/ /

LI-181 Monitor Tank 1-2

/ /

LI-188 RCDT 1-1

/ /

LI-60 Containment Structure Sump 1-1

/ /

LI-61 Containment Structure Sump 1-2

/ /

LI-62 Reactor Cavity Sump, Unit 1

/ /

LI-229 Waste Conc. Holding Tank 0-1

/ /

DATA SHEET: POST-EARTHQUAKE LEVEL INDICATOR CHECK LIST, EP. M-4UNIT 1LEVEL / TIMEAux. Bldg. Control Panel (Cont'd)

.Reading 1 Reading 2

LI-170 Liquid Holdup Tank 1-1
 LI-168 Liquid Holdup Tank 1-2
 LI-167 Liquid Holdup Tank 0-1
 LI-168 Liquid Holdup Tank 2-1
 LI-170 Liquid Holdup Tank 2-2
 LI-165 Concentrate Holding Tank
 LI-158 Equip. Drain Receiver (Rec.) 0-1
 LI-160 Equip. Drain Rec. 0-2
 LI-162 Floor Drain Rec. 0-1
 LI-164 Floor Drain Rec. 0-2
 LI-180 Monitor Tank 2-1
 LI-181 Monitor Tank 2-2
 LI-188 RCDT 2-1
 LI-60 Containment Structure Sump 2-1
 LI-61 Containment Structure Sump 2-2
 LI-62 Reactor Cavity Sump, Unit 2

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UNIT 2Vertical Board 1

LI-139 CCW Surge Tank 2-1A
 LI-140 CCW Surge Tank 2-1B
 LI-931 Spray Additive Tank
 LI-940 Containment Recirc Sump
 LI-941 Containment Recirc Sump

/	/
/	/
/	/
/	/
/	/

Vertical Board 2

LI-920 Refueling Water Storage Tank
 LI-921 Refueling Water Storage Tank
 LI-922 Refueling Water Storage Tank
 LI-112 Volume Control Tank
 LI-149 Primary Water Storage Tank

/	/
/	/
/	/
/	/
/	/

DATA SHEET: POST-EARTHQUAKE LEVEL INDICATOR CHECK LIST, EP N-4UNIT 2LEVEL / TIMEVertical Board 3

Reading 1 Reading 2

LI-148 Condensate Storage Tank 2-1

/ /

LI-144 Raw Water Res. 01A (West)

/ /

LI-145 Raw Water Res. 01B (East)

/ /

Data Taken By: _____

REMARKS: _____

Reviewed By:

Shift Foreman: _____ Date/Time _____ / _____

DEPARTMENT OF NUCLEAR PLANT OPERATIONS
DIABLO CANYON POWER PLANT UNITS 1 AND 2DATA SHEET: POST-EARTHQUAKE AREA INSPECTION CHECK LIST CONTAINMENT (OUTSIDE
MISSILE SHIELD), EP M-4

UNIT 1	CHECKED BY	TIME/DATE
AREA - 6* (ELEV. 140' & ABOVE) INCLUDING DOME & LINER, SPRAY HDRS. & PIPING, ETC.		/
AREA - 17 (ELEV. 117')		/
AREA - 30 (ELEV. 91')		/
UNIT 2	CHECKED BY	TIME/DATE
AREA - 9 (ELEV. 140' & ABOVE) INCLUDING DOME & LINER, SPRAY HDRS. & PIPING, ETC.		/
AREA - 25 (ELEV. 117')		/
AREA - 40 (ELEV. 91')		/

REMARKS: _____

Reviewed By:

Shift Foreman _____

Time/Date _____ / _____

*Area designations refer to Attachment 1 to Emergency Procedure M-4.

DATA SHEET: POST-EARTHQUAKE AREA INSPECTION CHECK LIST CONTAINMENT (INSIDE MISSILE SHIELD), EP M-4NOTE: TO BE COMPLETED ONLY IF UNIT IS SHUT DOWN.

<u>UNIT 1</u>	<u>CHECKED BY</u>	<u>TIME/DATE</u>
AREA - 16* (ELEV. 117')	_____	_____/____/____
AREA - 29 (ELEV. 91')	_____	_____/____/____
AREA - 44 (BELOW ELEV. 91')	_____	_____/____/____

<u>UNIT 2</u>	<u>CHECKED BY</u>	<u>TIME/DATE</u>
AREA - 24 (ELEV. 117')	_____	_____/____/____
AREA - 29 (ELEV. 91')	_____	_____/____/____
AREA - 51 (ELEV. 91')	_____	_____/____/____

REMARKS: _____

Reviewed By: _____

Shift Foreman _____

Time/Date _____/____/____

*Area designations refer to Attachment 1 to Emergency Procedure M-4.

DATA SHEET: POST-EARTHQUAKE AREA INSPECTION CHECK LIST AUXILIARY BUILDING
(MAIN AREA), EP M-4

UNITS 1 & 2	CHECKED BY	TIME/DATE
AREA - 10* (ELEV. 140')		/
AREA - 10A (ROOF AREA & EQUIP. ABOVE ELEV 140')		/
AREA - 13 (ELEV. 115' & 126')		/
AREA - 19 (ELEV. 115')		/
AREA - 20 (ELEV. 127')		/
AREA - 21 (ELEV. 115')		/
AREA - 22 (ELEV. 115')		/
AREA - 32 (ELEV. 100')		/
AREA - 33 (ELEV. 100')		/
AREA - 34 (ELEV. 100')		/
AREA - 35 (ELEV. 100')		/
AREA - 45 (ELEV. 85')		/
AREA - 46 (ELEV. 85')		/
AREA - 47 (ELEV. 85')		/
AREA - 48 (ELEV. 85')		/
AREA - 52 (ELEV. 73')		/
AREA - 53 (ELEV. 73')		/
AREA - 54 (ELEV. 60' & 64')		/
AREA - 55 (ELEV. 60' & 64')		/
AREA - 56 (ELEV. 60' & 64')		/
AREA - 57 (ELEV. 64')		/

REMARKS: _____

Reviewed By: _____

Shift Foreman _____

Time/Date _____ / _____

*Area designations refer to Attachment 1 to Emergency Procedure M-4.

DATA SHEET: POST-EARTHQUAKE AREA INSPECTION CHECK LIST AUXILIARY BUILDING
(PENETRATION AREAS), EP M-4

UNIT 1	CHECKED BY	TIME/DATE
AREA - 7 (ELEV. 140')		/
AREA - 16 (ELEV. 115')		/
AREA - 28 (ELEV. 100')		/
AREA - 43 (ELEV. 85')		/

UNIT 2	CHECKED BY	TIME/DATE
AREA - 8 (ELEV. 140')		/
AREA - 23 (ELEV. 115')		/
AREA - 38 (ELEV. 100')		/
AREA - 49 (ELEV. 85')		/

REMARKS: _____

DATA SHEET: POST-EARTHQUAKE AREA INSPECTION CHECK LIST FUEL HANDLING BUILDING
(MAIN AREA), EP M-4

UNIT 1	CHECKED BY	TIME/DATE
AREA -2 (ELEV. 140')		/
AREA - 3 (ELEV. 140') HOT SHOP AREA		/
AREA - 12 (ELEV. 115' & 126')		/
AREA - 27 (ELEV. 100')		/

UNIT 2	CHECKED BY	TIME/DATE
AREA - 4 (ELEV. 140')		/
AREA - 14 (ELEV. 115' & 126')		/
AREA - 36 (ELEV. 100')		/

REMARKS: _____

DATA SHEET: POST-EARTHQUAKE AREA INSPECTION CHECK LIST FUEL HANDLING BUILDING
(VENT EQUIPMENT AREAS), EP M-4

UNIT 1	CHECKED BY	TIME/DATE
AREA - 1 (ELEV. 140')		/
AREA - 11 (ELEV. 115')		/
AREA - 26 (ELEV. 100')		/
AREA - 42 (ELEV. 85')		/

UNIT 2	CHECKED BY	TIME/DATE
AREA - 5 (ELEV. 140')		/
AREA - 15 (ELEV. 115')		/
AREA - 37 (ELEV. 100')		/
AREA - 50 (ELEV. 85')		/

REMARKS:

DATA SHEET: POST-EARTHQUAKE AREA INSPECTION CHECK LIST UNIT 1 TURBINE
BUILDING, EP M-4

UNIT 1	CHECKED BY	TIME/DATE
AREA - 58 (ELEV. 140')		/
AREA - 60 (ELEV. 107' & 119')		/
AREA - 61 (ELEV. 119' & 125')		/
AREA - 62 (ELEV. 119' & 123')		/
AREA - 65 (ELEV. 107')		/
AREA - 66 (ELEV. 104' & 108')		/
AREA - 67 (MACH. SHOP OVERHEAD)		/
AREA - 31 (ELEV. 109') MN. STM. LINE PLTFM.		/
AREA - 70 (ELEV. 85' & BELOW)		/
AREA - 71 (ELEV. 85')		/
AREA - 72 (ELEV. 85' & BELOW)		/
AREA - 73 (ELEV. 85' & BELOW)		/
AREA - 74 (ELEV. 85')		/

REMARKS: _____

DATA SHEET: POST-EARTHQUAKE AREA INSPECTION CHECK LIST UNIT 2 TURBINE
BUILDING, EP M-4

UNIT 2	CHECKED BY	TIME/DATE
AREA - 59 (ELEV. 140')		/
AREA - 63 (ELEV. 119' & 125')		/
AREA - 64 (ELEV. 107' & 119')		/
AREA - 68 (ELEV. 104' & 108')		/
AREA - 41 (ELEV. 109') MI. STM. LINE PLATFM.		/
AREA - 69 (ELEV. 107')		/
AREA - 75 (ELEV. 85' & BELOW)		/
AREA - 76 (ELEV. 85' & BELOW)		/
AREA - 77 (ELEV. 85' & BELOW)		/
AREA - 78 (ELEV. 85')		/

REMARKS: _____

DATA SHEET: POST-EARTHQUAKE AREA INSPECTION CHECK LIST OUTSIDE AREAS,
EP M-4

	CHECKED BY	TIME/DATE
AREA - 79 (UNIT 1 F.H. BLDG. EXTERIOR, STOR. TKS, STOR. AREAS, ETC.)	_____	_____/____/____
AREA - 80 (UNIT 2 F.H. BLDG. EXTERIOR, STOR. TKS, STOR. AREAS, ETC.)	_____	_____/____/____
AREA - 81 (UNIT 1 BLDG. EXTERIORS, MN, AUX. & STUP. XFMR. BKS. & STRUCTURES, ETC.)	_____	_____/____/____
AREA - 82 (UNIT 2 BLDG. EXTERIORS, MN, & AUX. XFMR. BKS. & STRUCTURES, ETC.)	_____	_____/____/____
AREA - 83 (UNITS 1 & 2 DISCH. STRUCTURE)	_____	_____/____/____
AREA - 84 (230 KV SWYD. & LINES)	_____	_____/____/____
AREA - 85 (RAW WTR. STOR. PONDS)	_____	_____/____/____
AREA - 86 (500 KV SWYD. & LINES)	_____	_____/____/____

REMARKS: _____

DATA SHEET: POST-EARTHQUAKE AREA INSPECTION CHECK LIST INTAKE STRUCTURE,
EP M-4

	CHECKED BY	TIME/DATE
AREA - 87 (ELEV. 17.5')		/
AREA - 88 (ELEV. -2')		/
AREA - 89 (AUX. SALT WATER PUMP COMPARTMENTS & VENT. SHAFTS)		/
AREA - 90 (PIPE & DISCHARGE VALVE GALLERIES)		/

REMARKS: _____

DEPARTMENT OF NUCLEAR PLANT OPERATIONS
DIABLO CANYON POWER PLANT UNITS 1 AND 2DATA SHEET: POST-EARTHQUAKE SURVEILLANCE TEST CHECK LIST, EP M-4

UNIT _____ DATE _____

INSTRUCTIONS: Check the data sheet when the time test is completed and the initials of the person performing the test.

TIME / INITIALS

A. Instrument Surveillance Tests

1. 1-1, Channel Check (shift and daily portions only)
 - a. Shift Data Sheet
 - b. Daily Data Sheet
2. 1-29, Emergency Signals and Communications System Functional Test

_____/_____
_____/_____
_____/_____
_____/_____

B. Reactor and Auxiliaries

1. R-1A, Exercising Full Length Control Rods
2. R-10, Reactor Coolant System Leakage Evaluation.

_____/_____
_____/_____

C. Miscellaneous and Integrated Tests

1. M-16B Operation of Slave Relays K604A and K604B (Safety Injection).
2. M-16C Operation of Slave Relay K606A (Safety Injection).
3. M-16D Operation of Slave Relay K608B (Safety Injection).
4. M-16E Operation of Slave Relay K633A and K609A (Safety Injection and Auxiliary FW Pump Start).
5. M-16F Operation of Slave Relay K633B and K609B (Safety Injection and Auxiliary FW Pump Start).
6. M-16I Operation of Slave Relays K606A and K606B (Phase A Containment Isolation).

_____/_____
_____/_____
_____/_____
_____/_____
_____/_____
_____/_____

REMARKS: _____

_____Reviewed By: _____
Shift Foreman _____
Time/Date _____

PACIFIC GAS AND ELECTRIC COMPANY
DEPARTMENT OF NUCLEAR PLANT OPERATIONS
DIABLO CANYON POWER PLANT UNIT NOS. 1 AND 2DATA SHEET: POST-EARTHQUAKE ELECTRICAL POWER CHECK LIST, EP M-4

DATE: _____

INSTRUCTIONS: Insure that the lines indicated are functioning properly. Insure that the batteries are undamaged and that the chargers continue to supply the load. Start all diesels and bring them to rated voltage.

	TIME / INITIALS
A. 500 KV System	
1. Midway #2 line	_____ / _____
2. Midway #3 line	_____ / _____
3. Gates line	_____ / _____
4. Tie line to Unit 1	_____ / _____
5. Tie line to Unit 2	_____ / _____
6. 500 KV Switchyard	_____ / _____
B. 230 KV System	
1. Morro Bay-Diablo line	_____ / _____
2. Morro Bay-Mesa line	_____ / _____
3. Tie line to startup bank 1-1	_____ / _____
4. Tie line to startup bank 2-1	_____ / _____
5. 230 KV Switchyard	_____ / _____
C. Station Batteries & Chargers	
1. Battery 1-1	_____ / _____
2. Battery 1-2	_____ / _____
3. Battery 1-3	_____ / _____
4. Battery 2-1	_____ / _____
5. Battery 2-2	_____ / _____
6. Battery 2-3	_____ / _____
D. Diesel Generators	
1. Generator 1-1	_____ / _____
2. Generator 1-2	_____ / _____
3. Generator 1-3	_____ / _____
4. Generator 2-1	_____ / _____
5. Generator 2-2	_____ / _____

REMARKS: _____

_____Reviewed By: _____
Shift Foreman _____ Time/Date _____ / _____

PACIFIC GAS AND ELECTRIC COMPANY
DEPARTMENT OF NUCLEAR PLANT OPERATIONS
DIABLO CANYON POWER PLANT UNIT NOS. 1 AND 2

TITLE: CALIBRATION AND TEST DATA SHEET, EP M-4

PEAK SHOCK RECORDER TMPSR1200 - H (NORTH/SOUTH)RECORDER S/N 701 CALIBRATION DATE 5/3/84 INITIALS RECORD PLATES S/N SURFACE

REED NUMBER	FREQUENCY (Hertz)	ACCELERATION SENSITIVITY (g/inch)	DISPLACEMENT (inches)	EQUIVALENT STATIC ACCELERATION (g)
1	1.96	0.351		
2	2.56	0.550		
3	3.23	0.810		
4	3.97	1.19		
5	5.18	2.23		
6	6.38	3.24		
7	8.10	5.08		
8	10.2	7.63		
9	12.7	11.6		
10	16.1	19.2		
11	20.2	27.8		
12	25.6	48.5		

Damping: 2% viscous damping (C of 25)

TESTER TEST DATE TEST LOCATION PREPARED BY TEST NUMBER DATE *Values based on Kinematics Calibration Test Report and Certification for DCP
Seismic Instrumentation.

TITLE: CALIBRATION AND TEST DATA SHEET, EP M-4

PEAK SHOCK RECORDER TMPSR1200 - H (East/West)RECORDER S/N 710 CALIBRATION DATE 5/3/84 INITIALS RECORD PLATES S/N SURFACE

REED NUMBER	FREQUENCY (Hertz)	ACCELERATION SENSITIVITY (g/inch)	DISPLACEMENT (inches)	EQUIVALENT STATIC ACCELERATION (g)
1	1.92	0.343		
2	2.50	0.537		
3	3.13	0.823		
4	3.97	1.17		
5	5.20	2.20		
6	6.40	3.22		
7	7.96	4.94		
8	10.1	11.7		
9	12.7	12.2		
10	16.1	19.4		
11	20.3	30.8		
12	25.4	45.5		

Damping: 2% viscous damping (Q of 25)

TESTER TEST DATE TEST LOCATION PREPARED BY TEST NUMBER DATE

TITLE: CALIBRATION AND TEST DATA SHEET, EP M-4

PEAK SHOCK RECORDER TMPSR1200 - V (VERT.)RECORDER S/N 728 CALIBRATION DATE 5/3/84 INITIALS RECORD PLATES S/N SURFACE

REED NUMBER	FREQUENCY (Hertz)	ACCELERATION SENSITIVITY (g/inch)	DISPLACEMENT (inches)	EQUIVALENT STATIC ACCELERATION (g)
1	1.92	0.315		
2	2.49	0.493		
3	3.23	0.816		
4	3.83	1.10		
5	5.15	2.08		
6	6.43	3.13		
7	8.08	4.98		
8	10.2	7.55		
9	12.7	12.5		
10	16.1	18.2		
11	20.2	28.6		
12	25.4	44.4		

Damping: 20 viscous damping (Q of 25)

TESTER TEST DATE TEST LOCATION PREPARED BY TEST NUMBER DATE

PACIFIC GAS AND ELECTRIC COMPANY
DEPARTMENT OF NUCLEAR PLANT OPERATIONS
DIABLO CANYON POWER PLANT UNIT NOS. 1 AND 2

TITLE: CALIBRATION AND TEST DATA SHEET - PEAK ACCELERATION RECORDER, EP M-4

DATE _____ TIME _____ PAR 400- 1 RECORDER S/N 669RECORD PLATE S/N _____ CAL. DATE 10/1/81

LOCATION: CONTAINMENT BASE SLAB UNIT 1, EL. 39', 180°

SENSOR	ACCELERATION SENSITIVITY		DISPLACEMENT		ACCELERATION	PERFORMED BY
	g/in	g/mm	Inches	mm	(g)	
L	16.3	0.640				
T	16.1	0.635				
V	15.4	0.606				

DATE _____ TIME _____ PAR 400- 2 RECORDER S/N 654RECORD PLATE S/N _____ CAL. DATE 10/1/81

LOCATION: TOP OF UNIT 1 CONTAINMENT, EL. 303.5', 225°

SENSOR	ACCELERATION SENSITIVITY		DISPLACEMENT		ACCELERATION	PERFORMED BY
	g/in	g/mm	Inches	mm	(g)	
L	32.5	1.28				
T	30.1	1.18				
V	32.3	1.27				

DATE _____ TIME _____ PAR 400- 1 RECORDER S/N 673RECORD PLATE S/N _____ CAL. DATE 10/1/81

LOCATION: INTAKE NEAR ASW PUMP 1-2 BAY, EL. 2'

SENSOR	ACCELERATION SENSITIVITY		DISPLACEMENT		ACCELERATION	PERFORMED BY
	g/in	g/mm	Inches	mm	(g)	
L	13.1	0.515				
T	15.4	0.606				
V	13.8	0.543				

TITLE: CALIBRATION AND TEST DATA SHEET - PEAK ACCELERATION RECORDER, EP M-4

DATE _____ TIME _____ PAR 400- 1 RECORDER S/N 672

RECORD PLATE S/N _____ CAL. DATE 10/1/81

LOCATION: TURBINE BUILDING, MACHINE SHOP EL. 85'

SENSOR	ACCELERATION SENSITIVITY		DISPLACEMENT		ACCELERATION	PERFORMED BY
	g/in	g/mm	Inches	mm	(g)	
L	16.2	0.635				
T	15.6	0.615				
V	14.2	0.558				

DATE _____ TIME _____ PAR 400- 1 RECORDER S/N 682

RECORD PLATE S/N _____ CAL. DATE 10/1/81

LOCATION: AUXILIARY BUILDING, HOT SHOP EL. 140'

SENSOR	ACCELERATION SENSITIVITY		DISPLACEMENT		ACCELERATION	PERFORMED BY
	g/in	g/mm	Inches	mm	(g)	
L	15.3	0.601				
T	15.4	0.608				
V	12.7	0.500				

DATE _____ TIME _____ PAR 400- 1 RECORDER S/N 683

RECORD PLATE S/N _____ CAL. DATE 10/1/81

LOCATION: AUXILIARY BUILDING NEAR CONTROL ROOM DOOR, EL. 140'

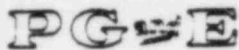
SENSOR	ACCELERATION SENSITIVITY		DISPLACEMENT		ACCELERATION	PERFORMED BY
	g/in	g/mm	Inches	mm	(g)	
L	16.2	0.635				
T	16.0	0.630				
V	14.3	0.562				

CURRENT
EMERGENCY PLAN
IMPLEMENTING PROCEDURES
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Volume 3B

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RB-16B2	SPASS Undiluted Liquid Sampling From Reactor Coolant (Not Intended to Meet The 3-Hour Time Limit)	1
RB-16B3	SPASS Reactor Coolant Stripped Gas Sampling (Not Intended to Meet The 3-Hour Time Limit)	1
RB-16B4	SPASS Diluted Liquid Sampling From Radwaste (Not Intended to Meet The 3-Hour Time Limit)	2
RB-16B5	SPASS Undiluted Liquid Sampling From Radwaste (Not Intended to Meet The 3-Hour Time Limit)	2
RB-16C	SPASS Containment Air Sampling (Not Intended to Meet the 3-Hour Time Limit)	1
RB-16D	SPASS Gas Chromatographic Hydrogen Analysis (Not Intended to Meet the 3-Hour Time Limit)	1
RB-16E	SPASS Liquid and Gas Sample Handling (Not Intended to Meet The 3-Hour Time Limit)	1
RB-16F	SPASS Data Analysis (Not Intended to Meet The 3-Hour Time Limit)	0
RB-16G	SPASS Ion Chromatographic Chloride Analysis (Not Intended to Meet The 3-Hour Time Limit)	1
RB-16H	SPASS Ph/Conductivity Dissolved Oxygen (Not Intended to Meet The 3-Hour Time Limit)	1
RB-16I	SPASS Undiluted Containment Air Sampling (Not Intended to Meet The 3-Hour Time Limit)	0
RB-16J	SPASS Sample Storage and Disposal (<u>Not</u> Intended to Meet The 3-Hour Time Limit)	0



Pacific Gas and Electric Company



DEPARTMENT OF NUCLEAR PLANT OPERATIONS
DIABLO CANYON POWER PLANT UNIT NO(S) 1 AND 2

EMERGENCY PROCEDURE
TITLE: OFFSITE SUPPORT AND ASSISTANCE

NUMBER EP OR-1
REVISION 5
DATE 5/15/85
PAGE 1 OF 2

APPROVED: _____

R. C. Thompson
PLANT MANAGER

7-5-85
DATE

IMPORTANT
TO
SAFETY

SCOPE

This procedure provides a functional list of non-PGandE organizations which are available for emergency response support and assistance. Telephone numbers are provided which are to be used for initial notification of the need for emergency support. Organizations required to be notified of an emergency are addressed in the procedures referenced below or in the procedure dealing with the type of event. This procedure and changes thereto requires PSRC review.

GENERAL

1. Requests for support or assistance from non-company organizations should be specific concerning the nature of the support or assistance requested, the location where needed, when it is needed, and the phone number to use to return a call. Requests may be made to mobilize support on a standby basis.
2. All initial request for support shall be approved by the Site Emergency Coordinator or the Recovery Manager at the EOF. Subsequent requests shall receive the same approval if they require additional resources. Requests for assistance from organizations supporting San Luis Obispo County also require County Emergency Services Director approval prior to making the request.
3. Emergency response organizations are listed in Appendix 1 under the following functional titles:

Radiological Emergency Protective Actions
Medical Emergency
Fire Emergency
Health Physics/Assessment Support
Plant Operation/Repair Support
Offsite Emergency Response Support

Law enforcement emergency contact means are addressed in the appropriate security procedures.

DIABLO CANYON POWER PLANT UNIT NO(S) 1 AND 2

NUMBER EP OR-1
REVISION 5
DATE 5/15/85
PAGE 2 OF 2

TITLE: OFFSITE SUPPORT AND ASSISTANCE

SUPPORTING PROCEDURES

NPAP C11, and its supplements, "Non-routine Notification and Reporting to the NRC and Other Governmental Agencies"

EP G-3 "Notification of Offsite Organizations"

ATTACHMENTS

1. Attachment 1 - Offsite Support and Assistance Functional Description
2. Table 1 - Offsite Emergency Support Organization Phone List.

PACIFIC GAS AND ELECTRIC COMPANY
DEPARTMENT OF NUCLEAR PLANT OPERATIONS
DIABLO CANYON POWER PLANT UNIT NOS. 1 AND 2

ATTACHMENT 1

TITLE: OFFSITE SUPPORT AND ASSISTANCE CONTACT LIST - EP OR-1

I. Radiological Emergency Protection Actions

The organizations listed in Table 1 under this heading provide support to the San Luis Obispo County Emergency Organization in implementing protective actions for the general public.

All support requests from these organizations should be coordinated with San Luis Obispo County. Direct requests for support would not ordinarily be required, but exceptions to this may be necessary in the event of an initial notification to San Luis Obispo County requiring immediate protective actions in the low population zone (6 mile radius) or beyond in the affected sectors.

II. Medical Emergency

The organizations listed in Table 1 under this heading provide assistance in the transportation or treatment of persons injured and contaminated with radioactive material, and/or overexposed to radiation or radioactive materials. Persons so injured will normally be treated at French Hospital in San Luis Obispo, however, Saint Francis Memorial Hospital is also available should the need for additional hospital services arise.

III. Fire Emergency

The organizations listed in Table 1 under this heading provide backup fire fighting support to the California Department of Forestry (CDF), in the site area. Assistance is coordinated through CDF in all cases.

— IV. Health Physics/Assessment Support

The organizations listed in Table 1 under this heading provide assistance in on or offsite monitoring, radiation protection or radiological accident assessment. Requests for assistance are coordinated through the Emergency Radiological Advisor for onsite or near site activities and with San Luis Obispo County for offsite activity.

V. Plant Operation/Repair Support

The organizations listed in Table 1 under this heading provide assistance in technical assessment of plant conditions, and in maintenance/repair projects. Only those organizations with defined emergency response roles are included. Assistance from these organizations and from the resources of PGandE, other utilities and vendors are available through the Corporate Emergency Response Organization.

TITLE: OFFSITE SUPPORT AND ASSISTANCE CONTACT LIST - EP OR-1VI. Offsite Emergency Response Support

The organizations listed in Table 1 under this heading provide offsite response support to the San Luis Obispo County Emergency Organization, or are available for support of PGandE offsite operations. These support organizations are categorized as:

- 1) Transportation
- 2) Law Enforcement
- 3) Traffic Control
- 4) Public Alerting and Care

PACIFIC GAS AND ELECTRIC COMPANY
DEPARTMENT OF NUCLEAR PLANT OPERATIONS
DIABLO CANYON POWER PLANT UNIT NOS. 1 AND 2

TABLE 1

TITLE: OFFSITE EMERGENCY SUPPORT ORGANIZATION PHONE LIST - EP OR-1

<u>Organization</u>	<u>Function(s)</u>	<u>Location(s)</u>	<u>Phone Number(s)</u>
<u>I. Radiological Emergency Protective Actions</u>			
US Coast Guard	1) Clear craft from water near DCPD	Marine Safety Office	
	2) Shipboard radiological monitoring	San Francisco or Monterey Operation	
	3) Vessel decontamination		
State Department of Parks & Recreation	Protective actions in State Parks & Beaches: Montana De Oro	San Luis Obispo Headquarters	
	Avila State Beach	Hearst Castle	
	Pismo State Beach	Pismo Ranger Station	
	Morro Bay State Park	Pismo Dunes Station	
	Atascadero State Beach		
State Department of Public Health-Radiological Health Section	Ingestion pathway monitoring coordination and food stuff interdiction as required.	744 "P" St. Sacramento, CA	
<u>II. Medical Emergency (See procedures M-1 and R-1 also)</u>			
San Luis Ambulance Service, Inc.	Onsite ambulance service.	358 Santa Rosa San Luis Obispo	
Air Ambulance, Inc.	Air Transportation (fixed wing or helicopter) from site or airport (under PGandE contract).	701 Skyway San Carlos, CA	
California Air National Guard	Medivac	Hunter Liggett	



TITLE: OFFSITE EMERGENCY SUPPORT ORGANIZATION PHONE LIST - EP OR-1 (continued)

<u>Organization</u>	<u>Function(s)</u>	<u>Location(s)</u>	<u>Phone Number(s)</u>
San Francisco Ambulance Service	Ambulance Service in the San Francisco Area.	2829 California Street San Francisco	
French Hospital	Emergency Medical Treatment	1911 Johnson Ave. San Luis Obispo	
Dr. Fred Mettler (REMS Corp.)	Consultant on Radiological Injuries	VA Hospital Albuquerque, New Mexico - or - 3004 La Mancha St N.W. Albuquerque, NM	
Saint Francis Memorial Hospital	Emergency Medical Treatment	900 Hyde Street San Francisco	
<u>III. Fire Emergency</u>			
California Department of Forestry	Primary Site Fire Fighting Response	Highway 1 San Luis Obispo Air Attack Base Paso Robles Airport	
Arroyo Grande Fire Department	Backup fire fighting support.	140 Traffic Way Arroyo Grande	
Pismo Beach Fire Department	Backup fire fighting support.	1000 Bello Ave. Pismo Beach	
San Luis Obispo Fire Department	Backup fire fighting support.	Garden & Pismo Streets San Luis Obispo	
South Bay Fire Department	Backup fire fighting support.	2315 Bayview Heights Drive Los Osos	
Morro Bay Fire Department	Backup fire fighting support.	715 Harbor Morro Bay	

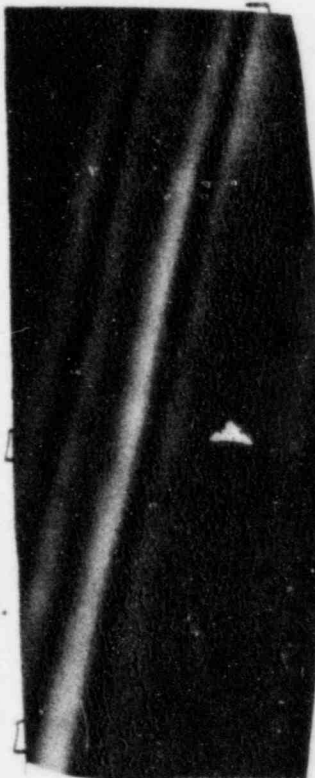
TITLE: OFFSITE EMERGENCY SUPPORT ORGANIZATION PHONE LIST - EP OR-1 (continued)

<u>Organization</u>	<u>Function(s)</u>	<u>Location(s)</u>	<u>Phone Number(s)</u>
<u>IV. Health Physics/Assessment Support</u>			
<u>Onsite</u>			
Nuclear Regulatory Commission Region V	1) Onsite assessment 2) Coordinate federal technical response 3) Develop protective action recommendations. 4) Radiological monitoring	1450 Maria Lane Suite 260 Walnut Creek, CA Incident Response Center	
Sacramento Municipal Utility District	Chemical-Radiation assistants and equipment.	Rancho Seco Heald, CA Control Room	
Southern California Edison	Health Physics technicians and equipment.	San Onofre San Clemente, CA	
Portland General Electric	Chemistry and/or Radiation Protection Technicians and Equipment.	Portland, Oregon V.P. Nuclear Gen. Mgr., Tech. Funct.	
		Trojan Plant General Manager	
Washington Public Power Supply System	Health Physicist and Health Physics/Chemistry Technicians and equipment	WNP-2, Hanford, Wash. Emerg. Coordinator or Security Control	
Arizona Public Service	Radiological Engineer or Supervising Radiation Physicist, Chemist or Supervising Chemist, Radiation Protection Tech, Chemistry Techs.	Shift Supv. or Rad. Prot. Office	

TITLE: OFFSITE EMERGENCY SUPPORT ORGANIZATION PHONE LIST - EP OR-1 (continued)

<u>Organization</u>	<u>Function(s)</u>	<u>Location(s)</u>	<u>Phone Number(s)</u>
Department of Energy	1) Federal offsite monitoring and assessment coordination. 2) Coordination of Federal response (IREP Coordination).	San Francisco Operations Office-Region 7 7333 Broadway Oakland, CA Nevada Operations Office Las Vegas, Nevada	
Environmental Protection Agency	Complete radiological monitoring and assessment assistance.	Dave Duncan, Regional Radiation Representative, Region IX, San Francisco Wayne Bliss, Director of Office of Radiation Programs, Las Vegas Facility	
Department of Defense (Army)	Assist in monitoring and medical assistance if requested by the IRAP coordinator or local authorities (Nuclear Accident Incident Control Teams).	HQ-6th Army Presidio of San Francisco	
Department of Defense (Navy)	Assist in monitoring and medical assistance if requested by the IRAP Coordinator (Nuclear Accident Teams).	Commander - Naval Base San Diego, CA	
National Weather Service (NOAA)	Weather reports, forecasts and special advice from Weather Service Forecasting Offices (WSFO)-normally coordinated through Meteorology personnel in CIRC.	WSFO-Redwood City WSFO-Los Angeles	

TITLE: OFFSITE EMERGENCY SUPPORT ORGANIZATION PHONE LIST - EP OR-1 (continued)

<u>Organization</u>	<u>Function(s)</u>	<u>Location(s)</u>	<u>Phone Number(s)</u>
State Office of Emergency Services	Assessment support to local agencies.	Emergency Response Center Sacramento, CA	
State Department of Public Health-Radiological Health Bureau	Ingestion pathway monitoring coordination and food stuff interdiction as required.	744 "P" Street Sacramento, CA	
San Luis Obispo County of Emergency Services	Coordinate county emergency response activities and emergency planning.	County Gov't. Center San Luis Obispo	
San Luis Obispo County Environmental Health	Direct offsite monitoring and assessment activities of San Luis Obispo County.	2191 Johnson Ave. San Luis Obispo	
		5574 Capistrano Ave. Atascadero	

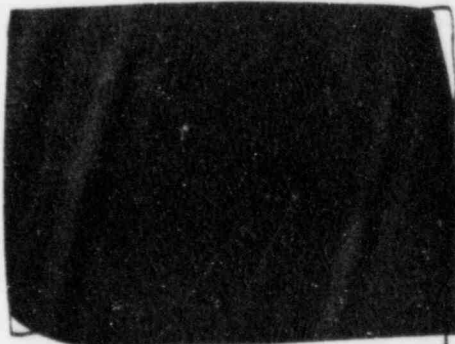
V. Plant Operation/Repair Support

Westinghouse Electric Company	Technical, onsite or materials assistance or reactor systems or components.	Monroeville Nuclear Center	(Notify as Indicated Below)
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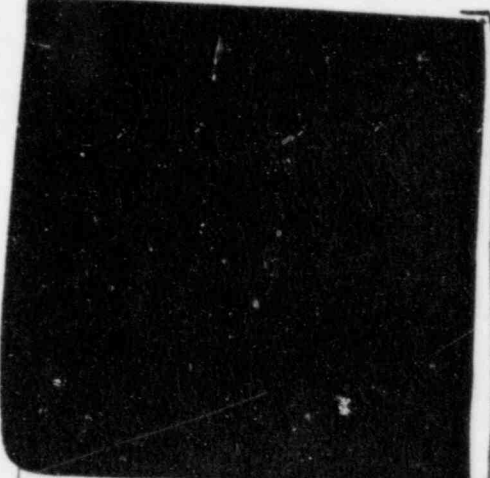
NOTIFY ONLY IF TECHNICAL, ONSITE OR MATERIALS ASSISTANCE ON REACTOR SYSTEMS IS NEEDED PROVIDE PLANT EMERGENCY NUMBER [805-595-7335] FOR REPLY. NOTIFY ONE WESTINGHOUSE CONTACT ONLY USING THE BELOW LIST IN THE ORDER SHOWN.

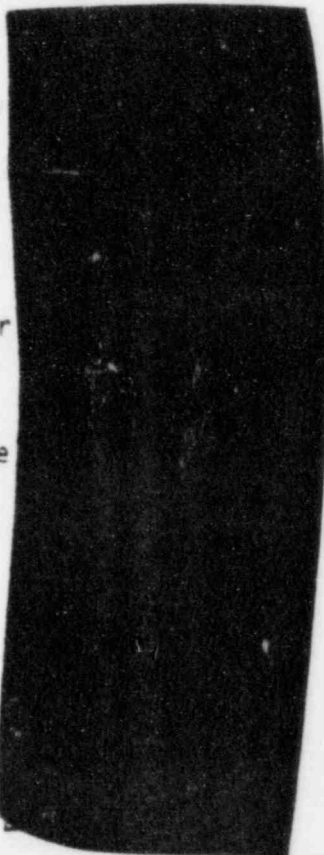
<u>TITLE</u>	<u>NAME</u>	<u>OFFICE/HOME/HOME HOT LINE</u>
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NOTE: Unless indicated otherwise, all phone numbers are area code [412]. Where an area code other than [412] is shown, it applies to the office, home, and HHL numbers.

1. SITE SERVICES MANAGER	RON BUCHHOLZ	
2. OPERATING PLANT RESIDUAL MANAGER	GIL KUBANSEK	
1ST ALTERNATE	JOHN GALLIK	
2ND ALTERNATE	JOHN MISKO	

TITLE: OFFSITE EMERGENCY SUPPORT ORGANIZATION PHONE LIST - EP OR-1 (continued)

<u>TITLE</u>	<u>NAME</u>	<u>OFFICE/HOME/HOME HOT LINE</u>
3. SERVICE RESPONSE MANAGER	TOM MITLO	
1ST ALTERNATE	BOB STOKES	
2ND ALTERNATE	JOE LEBLENG	
4. EMERGENCY RESPONSE DIRECTOR	TOM ANDERSON	
5. EMERGENCY RESPONSE DEPUTY DIRECTOR	RON LEHR	
6. EMERGENCY NEWS COMMUNICATIONS	MIKE MANGAN	

<u>Organization</u>	<u>Function(s)</u>	<u>Location(s)</u>	<u>Phone Number(s)</u>
Institute of Nuclear Power Operations	1) Locating emergency manpower and equipment 2) Operational analysis 3) Information dissemination 4) Organization of experts for advice	Emergency Response Center Atlanta, Georgia	
Rogers Helicopter	Helicopter on standby under PGandE contract sound system and lighting.	Rogers Helicopter Clovis, CA Rory Rogers (home - or - Robin Rogers	
Rotor-Aids, Inc.	Helicopter(s), as available, under PGandE contract.	Rotor-Aids, Inc. Oxnard, CA	
Aris Helicopter	Helicopter(s), as available under PGandE contract. Medivac capability.	San Jose	

TITLE: OFFSITE EMERGENCY SUPPORT ORGANIZATION PHONE LIST - EP OR-1 (continued)


<u>Organization</u>	<u>Function(s)</u>	<u>Location(s)</u>	<u>Phone Number(s)</u>
Condor Helicopters	Helicopter(s), as available, under PGandE contract. At least 1 light duty helicopter available at all times.	Condor Helicopters and Aviation Inc. Oxnard Airport Ventura, CA or Mr. Gary O'Conner Chief Pilot	
Air Ambulance, International	Fixed wing or helicopter air ambulance service under PGandE contract.	Mr. Steve Smith 795 Skyway San Carlos, CA	
California Department of Forestry	Fixed wing and helicopter for county/state support, as available.	Air Attack Base Paso Robles Airport	

VI. Offsite Emergency Response Support

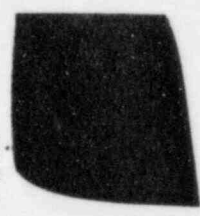
Transportation

California Highway Patrol	1) Fixed wing or helicopter for transportation of essential personnel. 2) Escort of priority vehicles.	San Francisco Area 455 8th Street San Francisco
State Parks and Recreation Department	San Luis Obispo Area	S.L.O. H.Q. Hearst Castle
Ken Huddleson Emergency Coordinator		
24 Hour Dispatcher Pismo Beach (Ranger Station)		

TITLE: OFFSITE EMERGENCY SUPPORT ORGANIZATION PHONE LIST - EP OR-1 (continued)

<u>Organization</u>	<u>Function(s)</u>	<u>Location(s)</u>	<u>Phone Number(s)</u>
<u>Law Enforcement</u>			
San Luis Obispo County Sheriff	1) Law enforcement in county areas not under city PD's. 2) Primary response agency under SLO County emergency plan.	Dispatch office County Operational Facility Highway 1 San Luis Obispo	
Arroyo Grande Police Department	Law enforcement in Arroyo Grande.	200 N. Halcyon Rd. Arroyo Grande	
Atascadero Police Department	Law enforcement in Atascadero.	Administration Building Lewis Ave. Atascadero	
Morro Bay Police Department	Law enforcement in Morro Bay.	850 Morro Bay Boulevard Morro Bay	
Pismo Beach Police Department	Law enforcement in Pismo Beach.	1000 Bello Ave. Pismo Beach	
San Luis Obispo Police Department	Law enforcement in San Luis Obispo.	575 Santa Rosa San Luis Obispo	
Monterey County Sheriff	Law enforcement in Monterey County.	Salinas	
Santa Barbara County Sheriff	Law enforcement in Santa Barbara County.	Santa Barbara	

Traffic Control (City police, fire and public work also support)

California Highway Patrol	1) Primary traffic control support to SLO County. 2) Fixed wing or helicopter traffic surveillance.	675 Calif. Blvd. San Luis Obispo Coastal Div. H.Q. 1122 Laurel Lane San Luis Obispo	
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TITLE: OFFSITE EMERGENCY SUPPORT ORGANIZATION PHONE LIST - EP OR-1 (continued)

<u>Organization</u>	<u>Function(s)</u>	<u>Location(s)</u>	<u>Phone Number(s)</u>
		<u>Public Alerting and Car</u>	
American Nuclear Insurers (ANI)	Emergency assistance funding of the public for emergency response expenses from an extraordinary nuclear occurrence. Assistance is coordinated through CIRC, Corporate Liaison Coordinator.	270 Farmington Ave. Farmington, Conn.	
American Red Cross	Primary operator of care and feeding facilities in support of SLO County.	1216 Morro San Luis Obispo	
Emergency Broadcast Stations	Primary stations for providing emergency public information in support of SLO County.	KVEC 820 Walnut San Luis Obispo	
		KSLY 2895 S. Higuera San Luis Obispo	
		KATY 1146 Monterey San Luis Obispo	