

PACIFIC GAS AND ELECTRIC COMPANY
DIABLO CANYON PROJECT
SEMI-MONTHLY REPORT
DIABLO CANYON SEISMIC REVIEW PROGRAM
FEBRUARY 26, 1982

Summary

This report summarizes the progress of our seismic review program from February 11, 1982 through the close of business on Wednesday, February 24, 1982.

Piping and support redesign for the annulus area spectra revisions is complete except for two supports.

Ninety-seven Errors and Open Items (EOIs) have been identified to date in the R. L. Cloud Associates, Inc. (RLCA) program.

The status of findings generated by PGandE review is now included in our computer tracking system. These are items identified by internal PGandE efforts and being addressed as part of the overall verification program. The twelve issues previously reported are included. Two new issues are being reported.

PGandE has introduced a term in this report to more clearly identify how issues are being handled internally. This term is "PGandE Technical Program" ("Program"). It should be recognized that this Program is not new. Only its identification has been formalized. The function of this existing Program has been two-fold: (1) to address all technical issues raised as a result of the original annulus problem, the Phase I Reverification Program and any other concerns identified while addressing these issues, and (2) to review all safety related design to prepare for that portion of the Phase II independent verification program dealing with PGandE's internal design process. This preparatory work is being done to facilitate the independent verification effort.

Status of Progress

I. Annulus Review Status

Civil Engineering

Structures

Verified seismic loads for approximately 93% of the pipe supports reviewed for the revised spectra have been received. Confirmatory analysis of the annulus structural members is 50% complete.

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Conduit Supports

The requalification of conduit supports for revised spectra and raceway weights is 99% complete. It is scheduled to be complete by March 15, 1982.

Mechanical Engineering

Mechanical Equipment

All work, including modifications, is complete.

Instrumentation

All work, including modifications, is complete.

Piping

Review and redesign of piping and pipe supports for the revised reoriented annulus spectra is complete with the exception of two supports. The redesign of these two supports is delayed pending review of an associated thermal analysis. The analysis will be issued soon and support redesign is scheduled to be complete by March 3, 1982.

This piping review status and schedule does not include design and design review activities caused by "Other Findings", EOIs and problems encountered in construction of new designs.

II. RLCA Error and Open Item Status (EOIs)

A total of ninety-seven EOIs have been identified to date by RLCA and are listed in Attachment I. Six are designated as errors and the remainder are open items which require further review. Eighty-three of these open items have been assigned to the responsible groups to determine resolution. The remaining 8 EOIs are quality assurance related and do not appear to require resolution by PGandE; however, they are being reviewed to determine if any corrective action should be initiated by PGandE.

III. Other Findings

As noted above, the PGandE Technical Program has evolved during the verification program. Our tracking system now includes not only RLCA EOIs, but also PGandE findings to assure overall control of these "Open Items." Attachment II is a computer printout listing the status of twelve findings identified in our previous reports.



Two new open items have been identified and are described below.
(Open Items 13 and 14)

New Items

Piping Isometric Accuracy (Open Item 13)

A number of discrepancies identified by RLCA and documented as EOIs involve differences between as-built piping configurations and piping isometric drawings.

PGandE has determined that many of these differences are associated with errors made in the transfer of data from field walkdown drawings to the final isometric drawings. The drawings in question were erroneously classified as "For Information Only" and, therefore, appropriate document control measures were not applied. A further review of these drawings is in progress.

The remainder of these discrepancies resulted from inaccuracies in the field walkdown process.

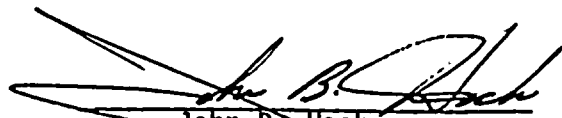
Since the field walkdown drawings were used in the NRC Bulletin 79-14 piping review, the results of errors made in the transfer of data do not affect the Bulletin 79-14 review.

A further review to determine the accuracy of field walkdown data is in progress. The effect of walkdown errors on the NRC Bulletin 79-14 review is being assessed.

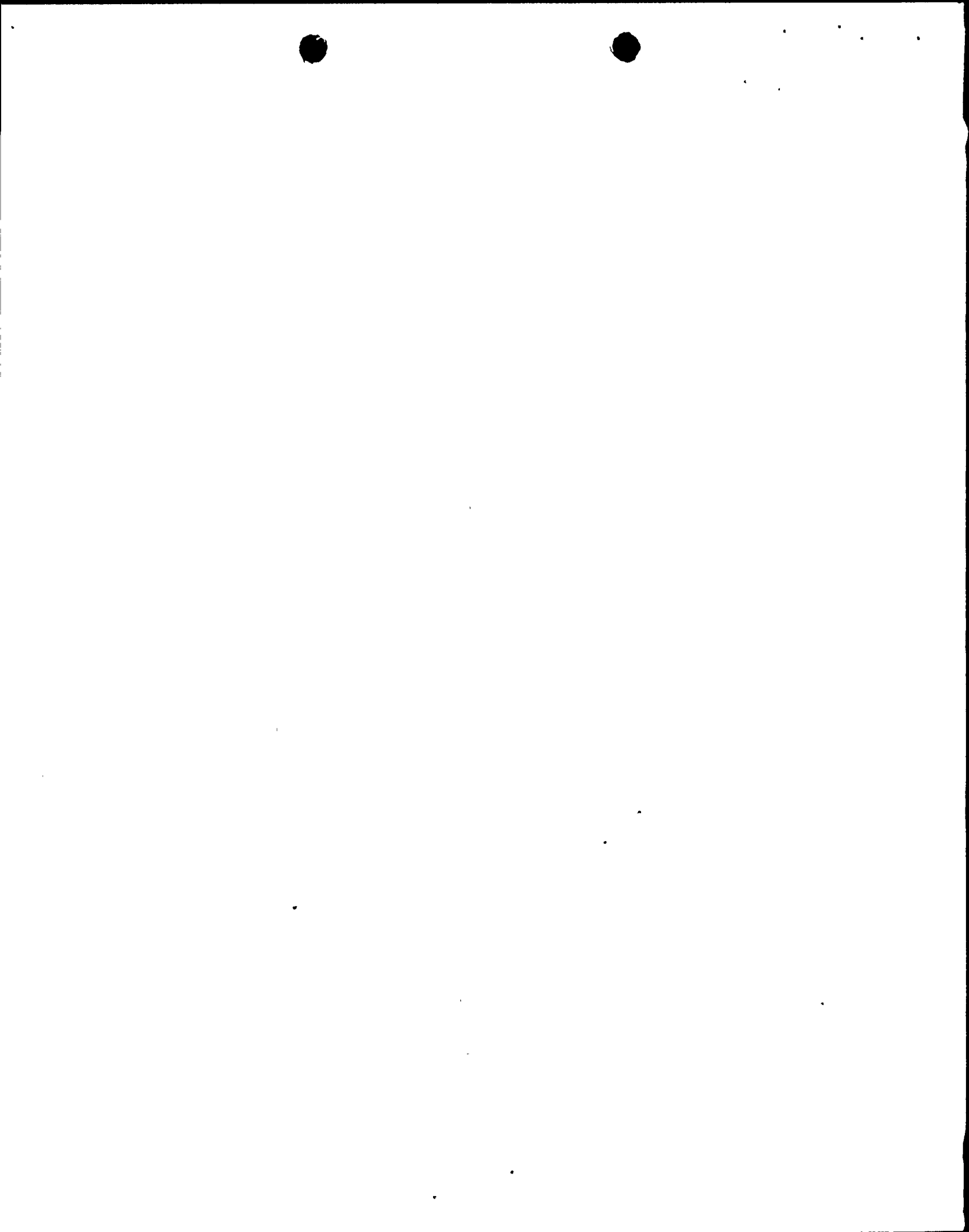
Small Bore Seismic Anchors (Open Item 14)

An instruction in criteria used for small bore piping design was found to be in error. The instruction dealt with representing lengths used in piping analyses. It is anticipated that only a small portion of the small bore piping will be affected. The instruction will be revised and all affected small bore piping will be reviewed and qualified.

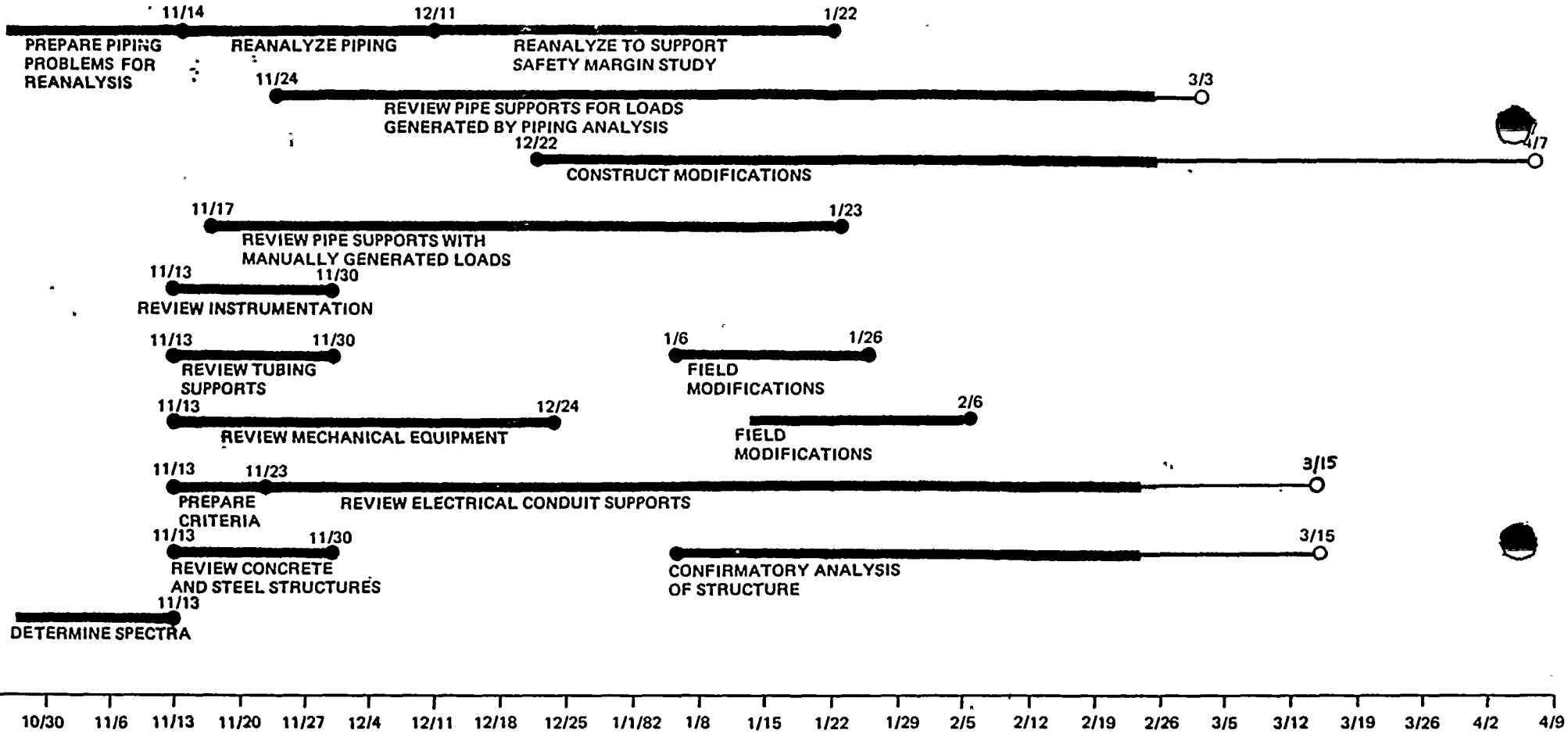
This issue was identified during the reanalysis of piping required to accommodate the revised annulus area spectra. Specifically, the instruction dealt with the projection of skewed line lengths into their orthogonal components.



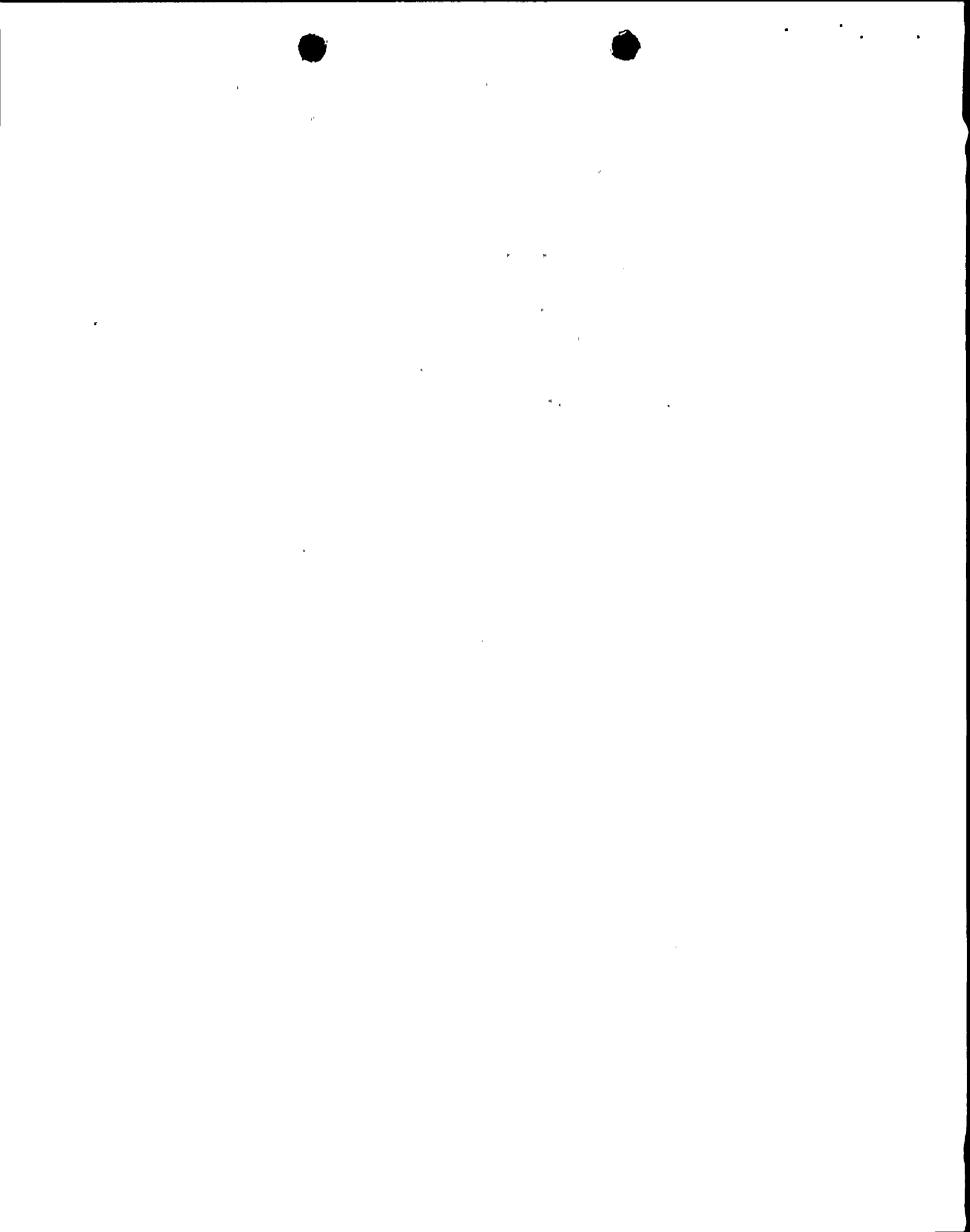
John B. Hoch
Diablo Canyon Project Manager



PROGRESS CHART-ANNULUS AREA SEISMIC REVIEW PROGRAM—STATUS AS OF 2-24-82



○ MILESTONES
 — PROJECTED SCHEDULE
 ● COMPLETED MILESTONES
 ■ COMPLETED WORK

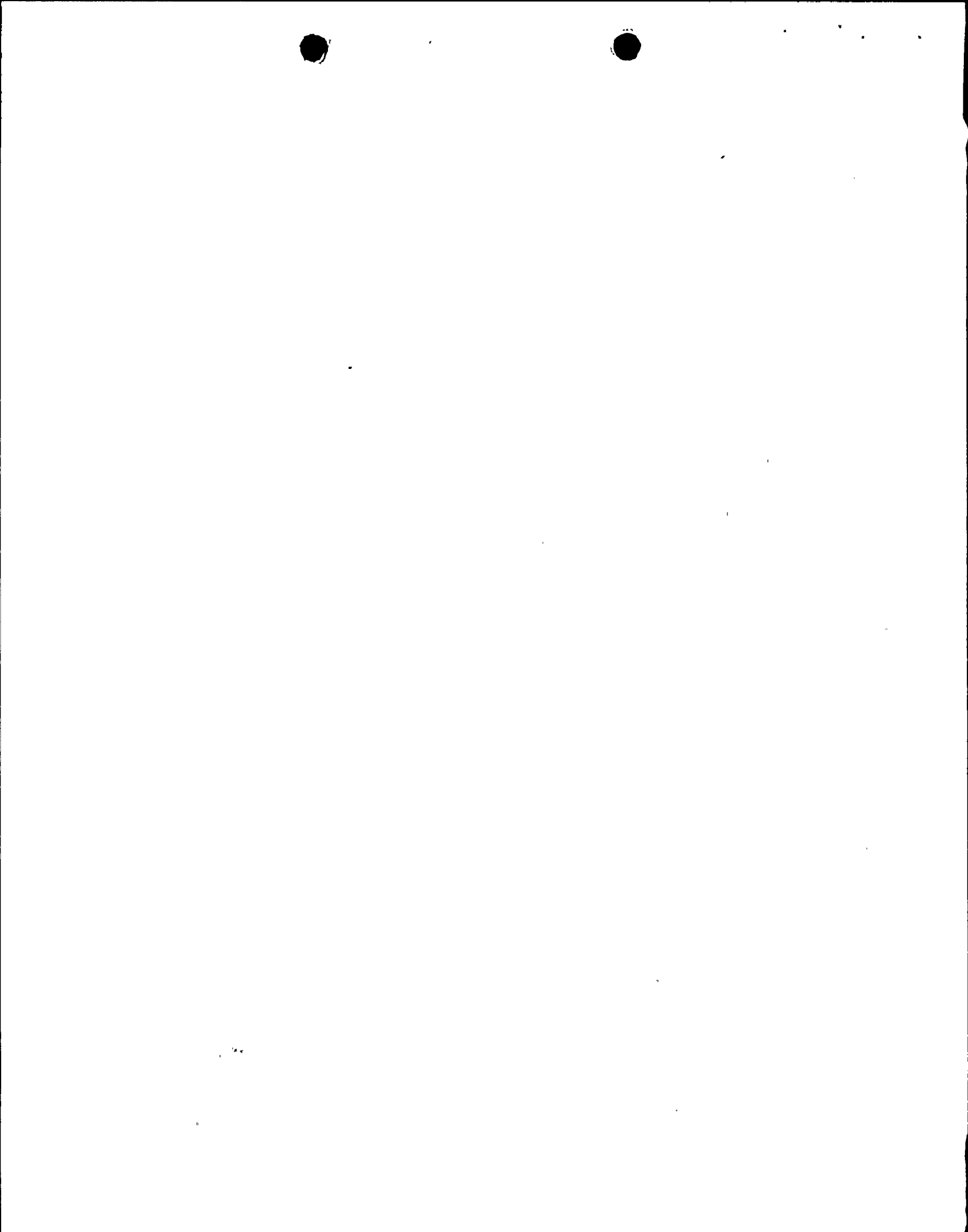


ATTACHMENT I

Error and Open Item Tracking System Computer Printout

LEGEND

1. TASK# - The number assigned by PGandE for tracking.
2. INITIATING DOCUMENT - The EOI number.
3. IDENT DT - Date problem was identified: year-month-date.
The computer defaults to 000000.
4. ECD - Estimated Completion Date. The computer will enter
999999 until a date is entered.
5. DESCRIPTION - Self explanatory.
6. STATUS - Will be used to describe status of resolution.
7. A%C - Actual Percent Complete.
8. CLS DT - Closed Date.



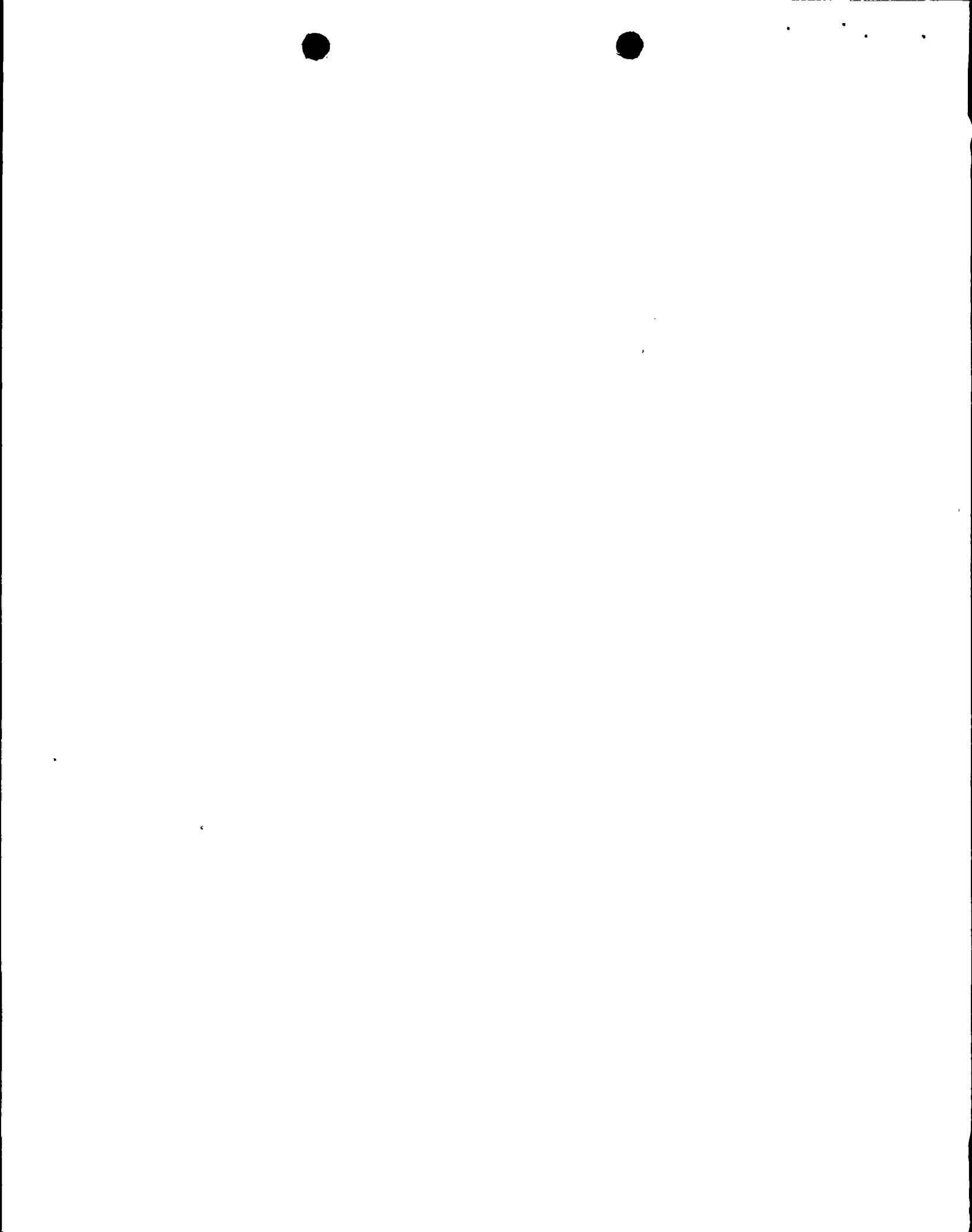
TASK#	INITIATING DOCUMENT IDENT	DT ECD...	DESCRIPTION.....	STATUS.....	AXC	CLS	DT
70000	EOI#0910	811231	999999	THREE OF 20 ELEC RACEWAY SUPPORTS WERE FOUND AT VARIANCE WITH THE PG&E INSTALLATION CRITERIA.			0
70001	EOI#0920	811200	999999	AUXILIARY BUILDING FLOOR RESPONSE SPECTRA IN THE NS DIRECTION CONTAINED IN THE HOSGRI REPORT DIFFER FROM THOSE IN THE OCTOBER 1979 BLUME REPORT.			0
70002	EOI#0930	820104	999999	THE RICA PRELIM. REVIEW OF THE PG&E RACEWAY CRITERIA INDICATES THE POSSIBILITY OF UNCONSERVATIVE SEISMIC LOADS.			0
70003	EOI#0931	820104	999999	VALVE 9001A IS SHOWN AS BEING INSTALLED IN THE HORIZONTAL POSITION. FIELD INFORMATION SHOWS THE VALVE IN A VERTICAL POSITION.			0
70004	EOI#0932	820104	999999	SUPPORT 58S-23R IS SHOWN AS A RIGID VERTICAL SUPPORT FIELD INFORMATION INDICATES A DEAD LOAD SUPPORT ONLY.			0
70005	EOI#0933	820120	999999	AS-BUILT LENGTH OF LINE 110 IS SHOWN ON ISOMETRIC AS 9.75 INCHES. FIELD INSPECTION SHOWS THIS DIMENSION AS 12 FEET.			0
70006	EOI#0934	820120	999999	DIRECTION OF RESTRAINT FOR SUPPORT 72/11R IS NOT GIVEN.			0
70007	EOI#0935	820120	999999	ISOMETRIC SHOWS A 3 INCH LINE NO. 931, ATTACHED TO LINE 1971 FIELD INSPECTION SHOWED NO 3 INCH LINE.			0
70008	EOI#0936	820120	999999	THE LENGTH OF THE VERTICAL RUN OF LINE 1971 IS SHOWN ON ISOMETRIC AS 2 FEET 0 INCHES. FIELD INSPECTION SHOWED THIS DIMENSION TO BE 2 FEET 10 INCHES.			0
70009	EOI#0937	820120	999999	ISOMETRIC DOES NOT SHOW THE SECOND FLANGE ON THE VERTICAL RUN OF LINE 44 FIELD INSPECTION SHOWED THE LOCATION OF THIS SECOND			0



TASK# INITIATING DOCUMENT IDENT DT ECD... DESCRIPTION... STATUS... A%Z CLS DT

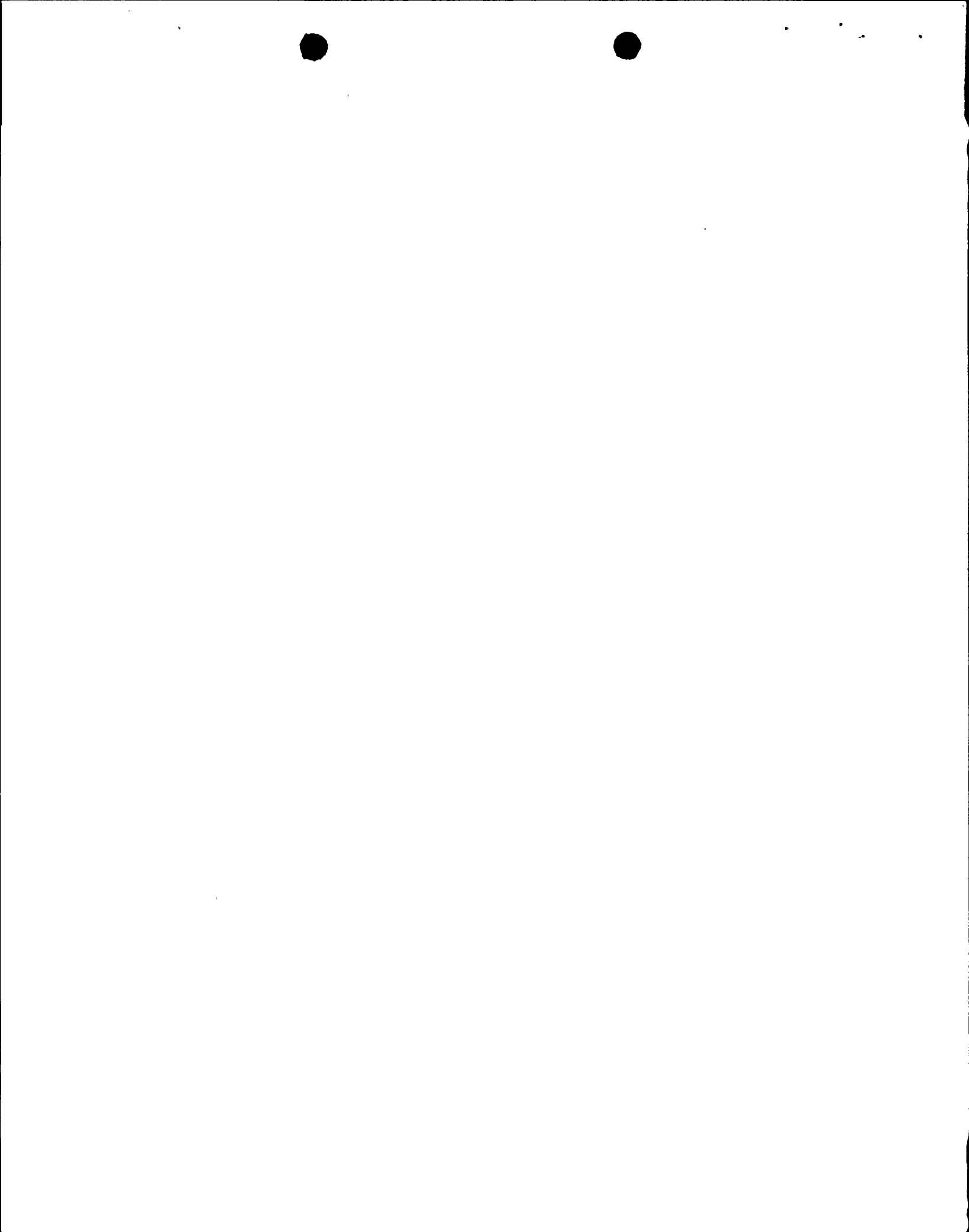
FLANGE 13 INCHES ABOVE THE
 FIRST FLANGE.

70010	EOI*0938	820120	999999	VALVE 8805B IS SHOWN ON ISOMETRIC IN A VERTICAL POSITION. FIELD INSPECTION SHOWED THAT THE VALVE IS IN A HORIZONTAL POSITION.	0
70011	EOI*0939	820120	999999	SUPPORT 73/72R ON ISOMETRIC IS SHOWN TO BE ACTIVE IN THE NS DIRECTION ONLY. FIELD INSPECTION SHOWED THE SUPPORT ACTIVE IN BOTH NS AND EW DIRECTIONS.	0
70012	EOI*0940	820120	999999	THE "AS-BUILT" LENGTH OF LINE 103 SOUTH OF SUPPORTS 18/2R AND 18/12SL IS SHOWN ON ISOMETRIC AS 15 FEET 6 INCHES. FIELD INSPECTION SHOWED THIS DIMENSION AS 6 FEET.	0
70013	EOI*0941	820120	999999	DIRECTION OF RESTRAINT FOR SUPPORT 18/4R ON ISOMETRIC IS NOT GIVEN.	0
70014	EOI*0942	820120	999999	SUPPORT 18/7R IS NOT SHOWN ON ISOMETRIC.	0
70015	EOI*0943	820120	999999	SUPPORT 5006/V IS NOT SHOWN ON ISOMETRIC.	0
70016	EOI*0944	820120	999999	SUPPORT 5003/V ON ISOMETRIC IS NOT ADEQUATELY LOCATED.	0
70017	EOI*0945	820120	999999	ISOMETRIC SHOWS LINE 104 SUPPORTED AT THE J COLUMN LINE THE SUPPORT IDENTIFICATION NUMBER AND THE DIRECTIONS OF RESTRAINT ARE NOT SPECIFIED	0
70018	EOI*0946	820120	999999	DIMENSION OF THE VERTICAL RUN OF LINE 1980 BETWEEN VALVES 8922A AND 8921A ON ISOMETRIC IS NOT SPECIFIED.	0
70019	EOI*0947	820120	999999	VALVE 8821A IS SHOWN ON ISOMETRIC AS BEING INSTALLED IN THE HORIZONTAL POSITION FIELD INSPECTION SHOWED THAT THE VALVE IS IN A VERTICAL POSITION.	0



TASK# INITIATING DOCUMENT IDENT DT ECD... DESCRIPTION..... STATUS..... AXC CLS DT

70020	EOI*0948	820120	999999	DIRECTION OF RESTRAINT FOR SUPPORT 13/23SL ON ISOMETRIC IS NOT GIVEN.	0
70021	EOI*0949	820120	999999	MAIN ANNUNCIATOR CABINET: (1) ORIGINAL ANALYSIS CONSIDERED CABINET RIGID IN LONGITUDINAL DIRECTION. (2) ACTUAL FIRST MODE FREQUENCY IS 14 HZ OR LESS BY INDEPENDENT CALCULATION.	0
70022	EOI*0950	820129	999999	PLATES ON FCV-95 SUPPORT SHOWN ON DRAWING AS 1/2 INCH THICK FIELD INSPECTION SHOWED THE THICKNESS TO BE 3/8 INCHES.	0
70023	EOI*0951	820129	999999	SUPPORT 1/27R IS SHOWN ON ISOMETRIC TO BE LOCATED 9 INCHES FROM THE ELBOW FIELD INSPECTION SHOWED THIS SUPPORT TO BE LOCATED 35 INCHES FROM THE ELBOW.	0
70024	EOI*0952	820129	999999	DIMENSION BETWEEN VALVE FCV 37 AND SUPPORT 3/27V IS SHOWN ON ISOMETRIC TO BE 4 INCHES FIELD INSPECTION SHOWED THIS DIMENSION TO BE 12 INCHES	0
70025	EOI*0953	820129	999999	SUPPORT 58S/69R IS SHOWN ON ISOMETRIC TO BE ACTIVE IN THE Z AND Y DIRECTIONS FIELD INSPECTION SHOWED THIS SUPPORT TO BE ACTIVE IN THE X, Y AND Z DIRECTIONS	0
70026	EOI*0954	820129	999999	SUPPORT 58S/56R IS SHOWN ON ISOMETRIC TO BE LOCATED 5 FEET, 2 INCHES FROM THE ELBOW FIELD INSPECTION SHOWED THIS SUPPORT TO BE LOCATED 7 FEET, 8 INCHES FROM THE ELBOW	0
70027	EOI*0955	820129	999999	TWO SUPPORTS, BOTH LABELED 58S/57R, ARE SHOWN ON ISOMETRIC.	0
70028	EOI*0956	820129	999999	SUPPORT 58S/69R IS SHOWN ON ISOMETRIC TO BE LOCATED 3 FEET FROM THE ELBOW FIELD INSPECTION SHOWED THIS	0



VERIFICATION LOG - ALL EOI'S

TASK# INITIATING DOCUMENT IDENT DT ECD... DESCRIPTION... STATUS... A% CLS DT

SUPPORT TO BE LOCATED 2 FEET, 1 INCH FROM THE ELBOW

70029 EOI#0957 820129 999999 LINES 577 AND 78 ARE SHOWN ON ISOMETRIC TO BE INSULATED FIELD INSPECTION SHOWED THESE LINES UNINSULATED 0

70030 EOI#0958 820129 999999 SUPPORT 58S/55V IS SHOWN ON ISOMETRIC TO BE LOCATED ABOVE THE TEE FIELD INSPECTION SHOWED THIS SUPPORT TO BE LOCATED 8 INCHES BELOW THE TEE 0

70031 EOI#0959 820129 999999 SUPPORT 11/49SL IS SHOWN ON ISOMETRIC ADJACENT TO THE REDUCER AT ELEVATION 163 FEET ON LINE 20 FIELD INSPECTION SHOWED THE SUPPORT TO BE LOCATED ADJACENT TO THE BEND AT ELEVATION 155 FEET 0

70032 EOI#0960 820129 999999 "AS-BUILT" ELEVATION OF THE FIRST 45-DEGREE ELBOW ABOVE THE HEADER ON LINE 19 IS SHOWN ON ISOMETRIC AS 166FT-21 INCHES FIELD INSPECTION SHOWED THE ELEVATION TO BE 155FT-1 INCH 0

70033 EOI#0961 820129 999999 SUPPORT 11/59SL IS SHOWN TO BE ACTIVE IN THE VERTICAL DIRECTION ON ISOMETRIC FIELD INSPECTION SHOWED TWO SKEWED SNUBBERS 20 AND 25 DEGREES RESPECTIVELY FROM VERTICAL 0

70034 EOI#0962 820129 999999 SUPPORT 48/44R IS SHOWN ON ISOMETRIC TO BE ACTIVE IN THE EW DIRECTION FIELD INSPECTION SHOWED THIS SUPPORT TO BE ACTIVE IN BOTH THE EW AND NS DIRECTIONS 0

70035 EOI#0963 820129 999999 SUPPORT 58/32R IS SHOWN ON ISOMETRIC TO BE ACTIVE IN BOTH DIRECTIONS OF RESTRAINT 0

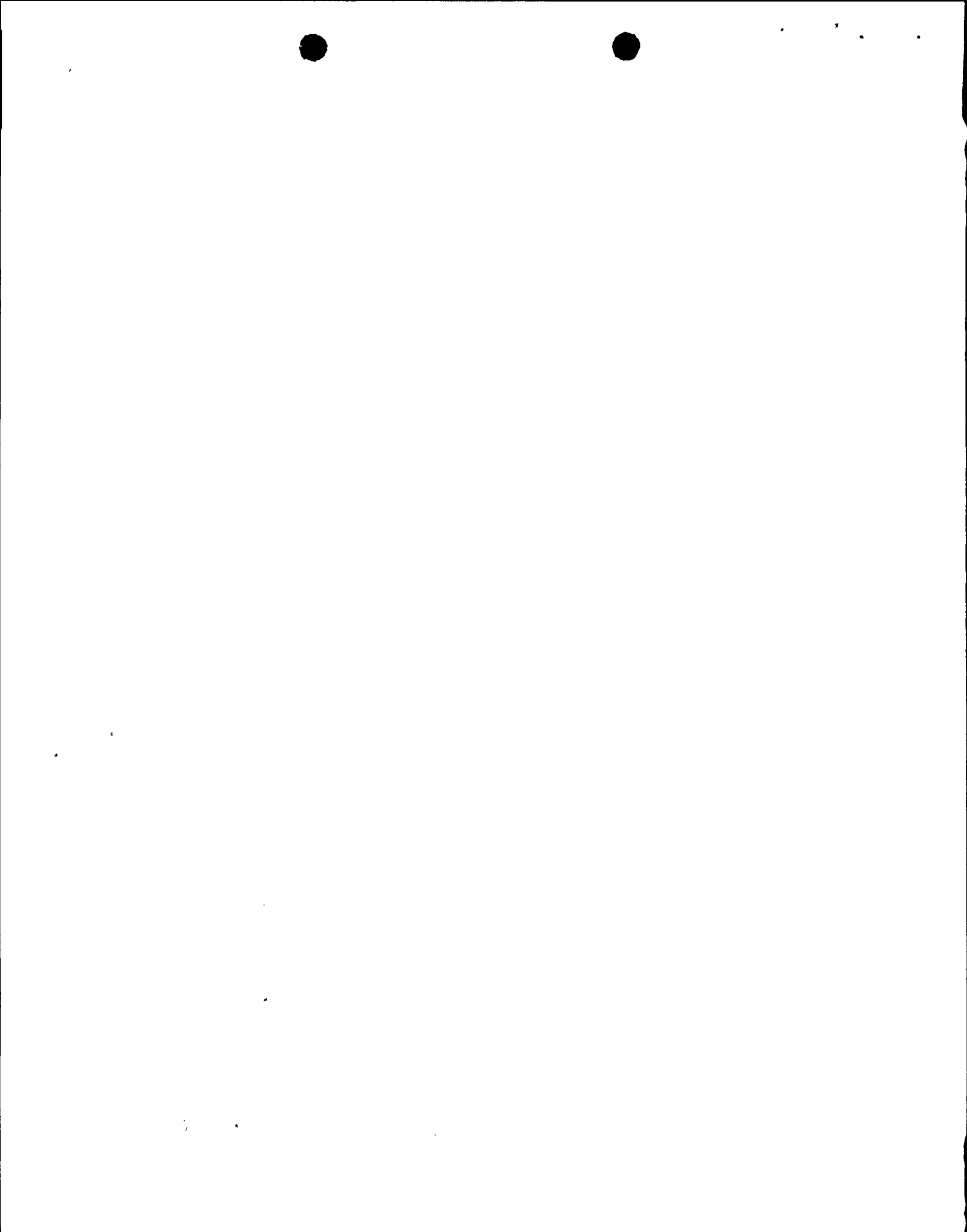
70036 EOI#0964 820129 999999 FIELD INSPECTION SHOWED A NS RIGID SUPPORT ON LINE 2519 ISOMETRIC DOES NOT SHOW THIS 0



TASK# INITIATING DOCUMENT IDENT DT ECD... DESCRIPTION..... STATUS..... AXZ CLS DT

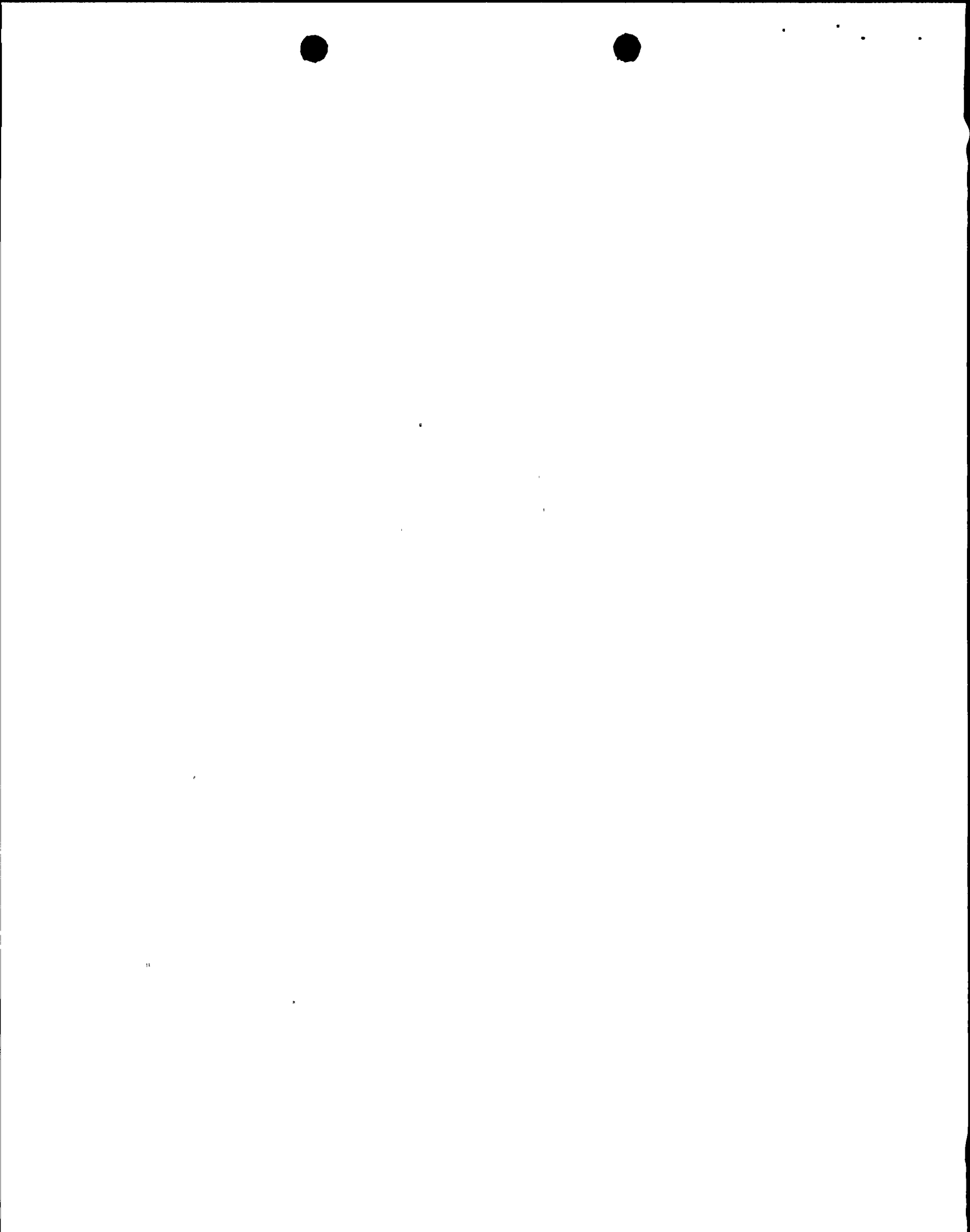
SUPPORT

70037	EOI#0965	820129	999999	THE VERTICAL SPRING HANGER 55S/(UNREADABLE) IS SHOWN ON ISOMETRIC TO BE LOCATED 7 FEET, 10-3/4 INCHES FROM THE ELBOW BELOW ELEVATION 100 FEET FIELD INSPECTION SHOWED THIS SUPPORT TO BE LOCATED 8 FEET, 10 INCHES FROM THE ELBOW	0
70038	EOI#0966	820129	999999	SUPPORT 14/33SL IS SHOWN ON ISOMETRIC TO BE LOCATED 7 FEET, 10-3/4 INCHES FROM THE ELBOW FIELD INSPECTION SHOWED THIS SUPPORT TO BE LOCATED 4 FEET, 5 INCHES FROM THE ELBOW	0
70039	EOI#0967	811201	999999	SOME OF THE INTAKE STRUCTURE MAXIMUM ABSOLUTE ACCELERATIONS CONTAINED IN TABLE 1-53 OF THE HOSGRI REPORT DIFFER FROM THOSE IN THE MAY 1979 BLUME REPORT	0
70040	EOI#0968	820130	999999	HARDING LAWSON ASSOCIATES WAS NOT REQUIRED BY PG&E TO IMPLEMENT A FORMAL QA PROGRAM FOR THEIR ACTIVITIES PRIOR TO APRIL 10, 1978.	0
70041	EOI#0969	820130	999999	HARDING LAWSON ASSOCIATES QA PROGRAM AND OPERATING PROCEDURES FOR ACTIVITIES PERFORMED PRIOR TO JUNE 1978 DID NOT COMPLY WITH THE APPLICABLE CRITERIA REQUIREMENTS OF 10CFR50, APPENDIX B	0
70042	EOI#0970	820130	999999	INSUFFICIENT OBJECTIVE EVIDENCE AVAILABLE AT HARDING LAWSON ASSOCIATES TO ESTABLISH THAT A CONTROLLED SYSTEM WAS IN EFFECT WHICH COULD BE ACCEPTED AS EQUIVALENT TO 10CFR50, APPENDIX B	0
70043	EOI#0971	820130	999999	FOR EDS, THE EXISTENCE OF THE "DESIGN REVIEW CRITERIA" USED IN ACCORDANCE WITH GAP 3.7, PAR 3.1 COULD NOT BE VERIFIED	0



TASK# INITIATING DOCUMENT IDENT DT ECD... DESCRIPTION..... STATUS..... AXC CLS DT

70044	EOI*0972	820130	999999	FOR EDS, IN MANY CASES, "POINT OF USE" REFERENCES WERE NOT MADE FOR EQUATIONS IN THE CALCULATION FILES		0
70045	EOI*0973	820130	999999	FOR EDS, IT COULD NOT BE VERIFIED THAT THE QUALITY ASSURANCE MANAGER CONCURRED WITH THE RESOLUTION OF DISCREPANCIES		0
70046	EOI*0974	820130	999999	FOR EDS, IT COULD NOT BE VERIFIED THAT PROJECT PERSONNEL HAD READ THE PROJECT INTERFACE INSTRUCTIONS		0
70047	EOI*0975	820130	999999	FOR EDS, MEMORANDA WERE USED IN LIEU OF TECHNICAL INSTRUCTIONS.		0
70048	EOI*0976	820208	999999	THE EXTERIOR CONTAINMENT SPECTRA WERE SUPERSEDED BY THE URS/DLUME REPORT ISSUED ON 770605. HOWEVER, NO TRANSMITTAL TO WESTINGHOUSE OF THIS SPECTRA WOULD BE LOCATED IN THE PG&E FILES.		0
70049	EOI*0977	820208	999999	PG&E IS PRESENTLY RE-EVALUATING THE STRUCTURAL ADEQUACY OF THE ANNULUS.		0
70050	EOI*0978	820208	999999	FOR REGENERATING HEAT EXCHANGERS THE VERTICAL SPECTRA INPUT USED BY WESTINGHOUSE WAS TWO-THIRDS OF THE FILTERED RATHER THAN UNFILTERED HORIZONTAL RESPONSE SPECTRA.	THIS EQUIPMENT HAS BEEN REQUALIFIED TO THE UNFILTERED SPECTRA. PGANDE IS WAITING FOR DOCUMENTATION TO THIS EFFECT FROM WESTINGHOUSE.	0
70051	EOI*0979	820208	999999	OTHER EQUIPMENT IN THE CONTAINMENT STRUCTURE HAS NOT BEEN REVIEWED YET.		0
70052	EOI*0980	820208	999999	NO FORMAL DOCUMENTATION HAS BEEN FOUND TO DATE FOR QUALIFICATION OF AUXILIARY SALTWATER PUMP COMPARTMENTS.		0
70053	EOI*0981	820208	999999	INPUT USED IN THE BURIED PIPELINE QUALIFICATIONS WILL BE VERIFIED.		0



VERIFICATION LOG - ALL EOI'S

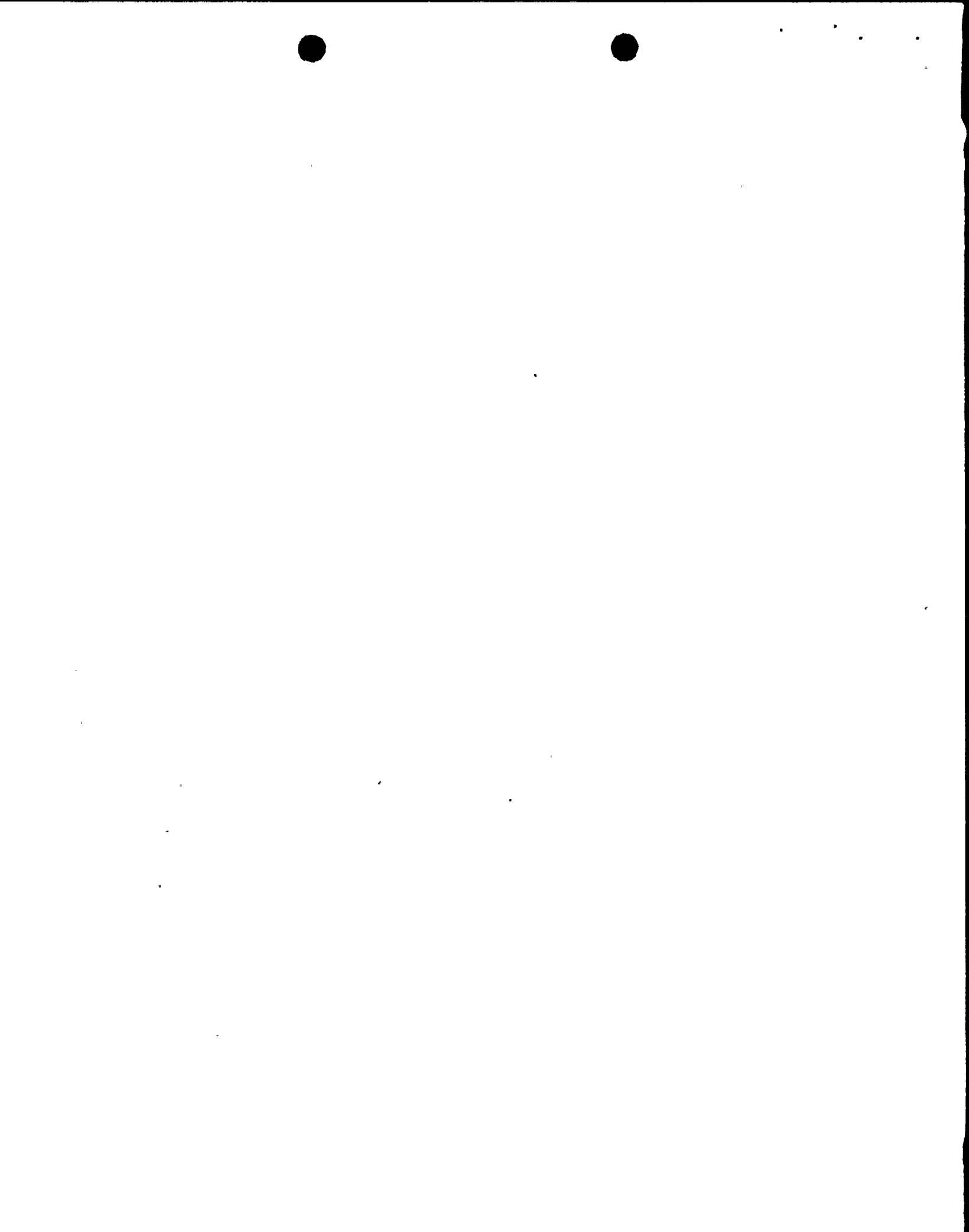
TASK# INITIATING DOCUMENT IDENT DT ECD... DESCRIPTION... STATUS... AZC CLS DT

TASK#	INITIATING DOCUMENT IDENT	DT	ECD	DESCRIPTION	STATUS	AZC	CLS	DT
70054	EOI*0982	820208	999999	THE DETAIL TRANSMITTALS FOR THE TURBINE BUILDING HAVE NOT BEEN REVIEWED YET.		0		
70055	EOI*0983	820208	999999	NINE OF THE TWENTY ELECTRICAL RACEWAY SUPPORT SEISMIC CALCULATIONS WERE FOUND TO HAVE BEEN DONE WITH INAPPLICABLE SPECTRA.		0		
70056	EOI*0984	820208	999999	INTERFACE PROCEDURES BETWEEN URS/BLUME, PG&E AND THE FIELD WILL BE INVESTIGATED.		0		
70057	EOI*0985	820208	999999	NO DOCUMENTATION OF RESOLUTION OF AUXILIARY BLDG WEIGHTS CONTROVERSY WITH BLUME HAD BEEN FOUND TO DATE.		0		
70058	EOI*0986	820208	999999	THE FINAL VERTICAL CONTROL ROOM SPECTRA ARE HIGHER THAN THE PRELIMINARY SPECTRA. A DETAILED REVIEW OF EQUIPMENT QUALIFICATION WILL BE NECESSARY.		0		
70059	EOI*0987	820208	999999	A DETAILED REVIEW OF THE SEISMIC ANALYSIS OF THE AUXILIARY BUILDING AND ITS QUALIFICATION SHOULD BE PERFORMED.		0		
70060	EOI*0988	820208	999999	CHECKS ARE REQUIRED TO COMPARE THE AS-BUILT DRAWINGS TO THE DRAWINGS USED IN THE QUALIFICATION OF INTAKE STRUCTURE CRANE.		0		
70061	EOI*0989	820208	999999	CHECKS ARE REQUIRED TO COMPARE THE AS BUILT DWGS TO THOSE USED IN THE QUALIFICATION OF TURBINE BUILDING CRANE.		0		
70062	EOI*0990	820208	999999	CHECKS NEED TO BE MADE OF THE APPLICABILITY OF DESIGN INFORMATION TRANSMITTED FOR THE FUEL HANDLING BUILDING CRANE.		0		
70063	EOI*0991	820208	999999	CHECKS WILL BE MADE TO INSURE THAT MODIFICATIONS TO THE FUEL HANDLING BUILDING CRANE WERE DONE.		0		



TASK# INITIATING DOCUMENT IDENT DT ECD... DESCRIPTION..... STATUS..... AXC CLS DT

70064	EOI#0992	820208	999999	THE DESIGN INFORMATION FOR THE OUTDOOR WATER STORAGE TANKS WAS FOUND TO BE TRANSMITTED INFORMALLY. CHECKS ARE REQUIRED TO INSURE ITS ACCURACY.	0
70065	EOI#0993	820208	999999	CHECKS NEED TO BE MADE TO DETERMINE THE ACCURACY OF DESIGN INFORMATION TRANSFERRED FOR THE OUTDOOR WATER STORAGE TANKS.	0
70066	EOI#0994	820208	999999	EXAMINE THE FORMAL DESIGN GUIDE FOR THE SEISMIC FACTORS USED IN PIPING SYSTEMS WHICH PG&E TRANSMITTED TO THE CONSULTANTS.	0
70067	EOI#0995	820208	999999	THE TRANSMITTALS FOR PIPING ANALYSIS APPEAR TO BE IN COMPLETE FORM FOR DOCUMENTS SENT TO EES. THE ONLY PROBLEM IS THAT THE TRANSMITTAL COVER SHEET DOES NOT LIST THE CONTENTS OF THE ENTIRE ATTACHMENT. TO TRACE THE FLOW OF INFORMATION IT WILL BE NECESSARY TO FIND THE CONTENTS OF THE TRANSMITTALS.	0
70068	EOI#0996	820208	999999	FOR THE PIPING ASSIGNED TO BIUME, VERY LITTLE CORRESPONDENCE HAS BEEN LOCATED TO DATE.	0
70069	EOI#0997	820208	999999	TO DATE NO DOCUMENTATION HAS BEEN FOUND CONCERNING TRANSMITTALS OF VALVE INFORMATION FROM PG&E TO EES.	0
70070	EOI#0998	820208	999999	COMPLETE DOCUMENTATION OF EDS REQUALIFICATION INFORMATION FOR THE VALVES BEING REVIEWED HAS NOT BEEN COMPLIED AT THIS POINT IN TIME.	0
70071	EOI#0999	820208	999999	A COMPLETE SET OF EDS TRANSMITTALS TO P&E FOR THE VALVES BEING REVIEWED HAS NOT BEEN COMPLIED AS OF THIS	0

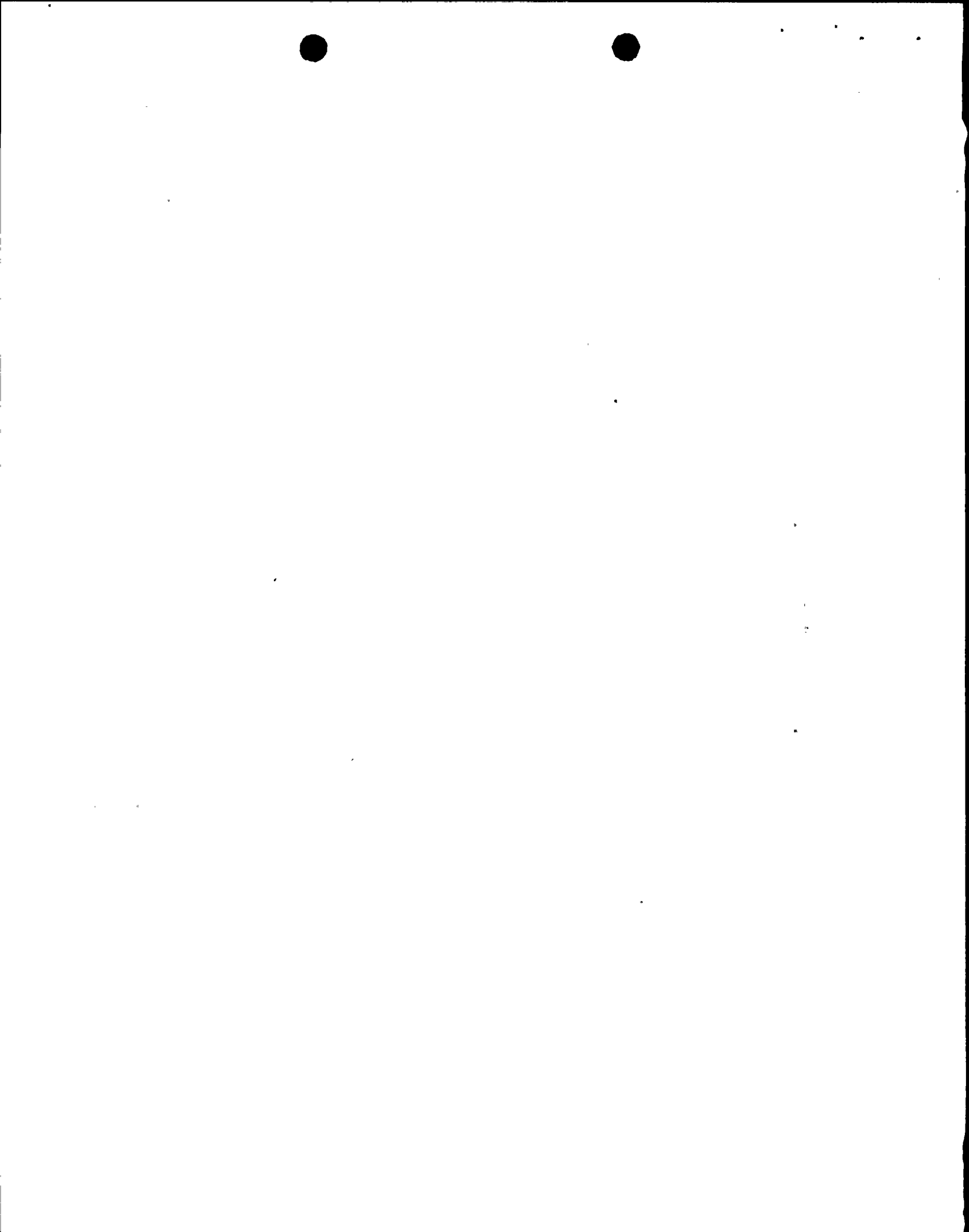


VERIFICATION LOG - ALL EOI'S

TASK# INITIATING DOCUMENT IDENT DT ECD... DESCRIPTION..... STATUS..... A% CLS DT

DATE.

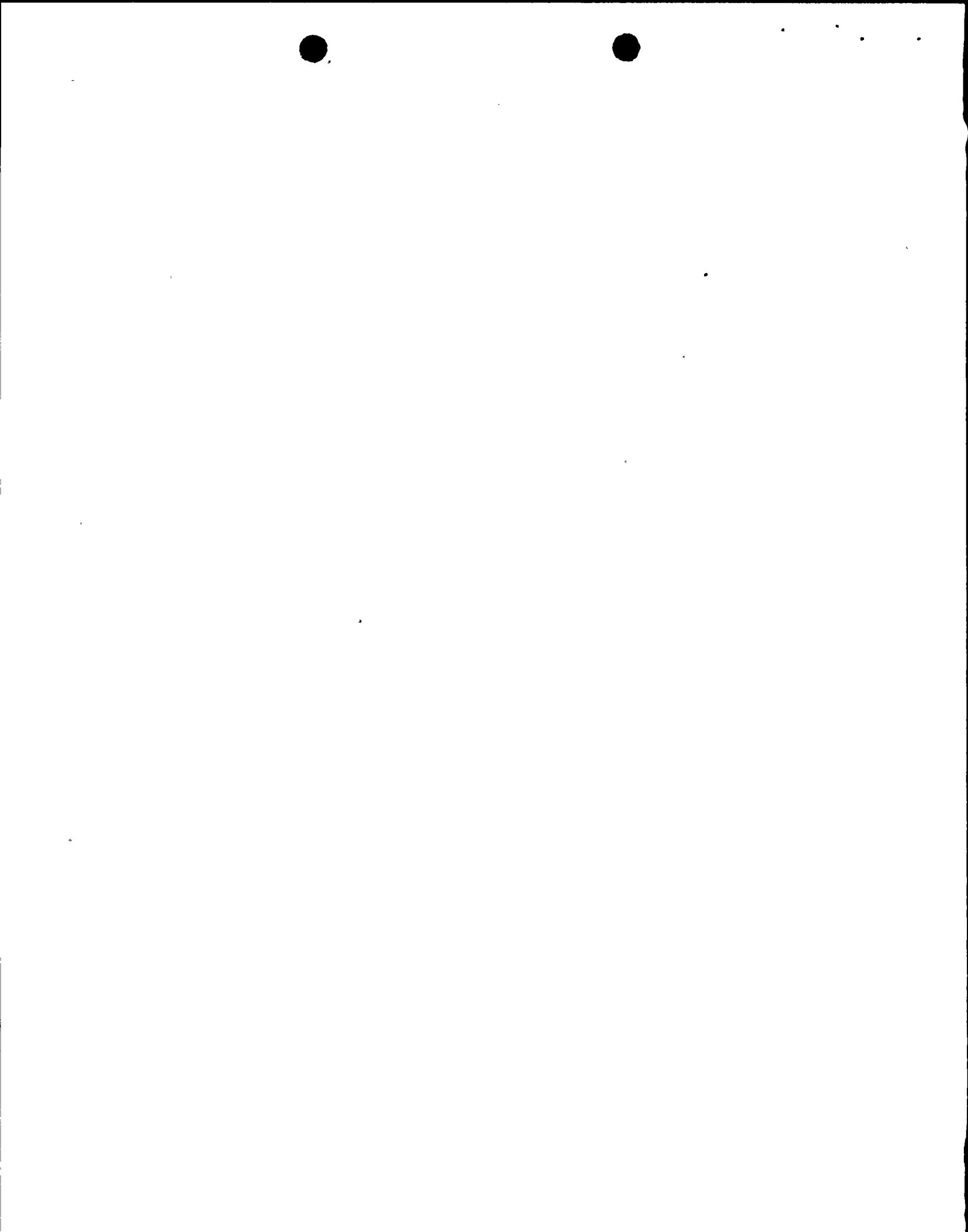
TASK#	IDENT	DT	ECD	DESCRIPTION	STATUS	A%	CLS	DT
70072	EOI*1000	820208	999999	INSUFFICIENT RECORDS HAVE YET BEEN FOUND TO FOLLY DOCUMENT INFORMATION FLOW FROM PG&E TO WESTINGHOUSE.		0		
70073	EOI*1001	820208	999999	WITH THE DOCUMENTATION AVAILABLE TO DATE, NO EVIDENCE WAS FOUND TO INDICATE WHETHER THE VALVE ACCELERATIONS HAVE EVER BEEN VERIFIED AS BEING CORRECT BEFORE BEING TRANMITTED TO THE VALVE QUALIFIERS.		0		
70074	EOI*1002	820208	999999	CALCULATIONS FOR SUPPLY FANS S67, 68 AND 69 WERE FOUND TO HAVE USED INCORRECT AND UNCONSERVATIVE SEISMIC INPUTS. IN ADDITION, THE FORCED DRAFT SHUTTER DAMPER QUALIFICATION SHOWED INCORRECT SEISMIC DEFINITION BECAUSE GRAVITY HAD NOT BEEN ADDED TO VERTICAL ACCELERATION.		0		
70075	EOI*1003	820208	999999	DUCT SUPPORT QUALIFICATIONS FOR THE 4 KV SWITCHGEAR ROOM HV SYSTEM HAVE NOT BEEN LOCATED AS OF OCTOBER 28, 1981		0		
70076	EOI*1004	820208	999999	FOR ELECTRICAL EGPT AND INSTRUMENTATION, DOCUMENTATION OF ONE TRANSMITTAL OF SEISMIC INFORMATION FROM PG&E TO WESTINGHOUSE HAS BEEN FOUND TO DATE. THIS TRANSMITTAL IS ONLY FOR CERTAIN ACCELERATIONS FOR THE CONTAINMENT INTERIOR AT CERTAIN ELEVATIONS.		0		
70077	EOI*1005	820208	999999	NO DOCUMENTATION FOR ELECTRICAL EGPT AND INSTR. HAS BEEN FOUND TO DATE REGARDING FORMAL TRANSMITTALS OF SPECTRA FROM PG&E TO WYLE LABS.		0		
70078	EOI*1006	820208	999999	FOR ELECTRICAL AND INSTRUMENTATION EGPT REQUALIFIED BY ANALYSIS. NO		0		



TASK# INITIATING DOCUMENT IDENT DT ECD... DESCRIPTION... STATUS... AZC CLS DT

INFORMATION HAS BEEN FOUND
 TO DATE AS TO WHO HAD
 PERFORMED THESE ANALYSES.

70079	EOI*1007	820208	999999	SHOULD FURTHER INVESTIGATION OF ELFC. EQPT AND INSTR. FAIL TO UNCOVER RECORDS THAT SATISFACTORILY DOCUMENT THE TRANSFER OF SEISMIC REQUALIFICATION INFORMATION BETWEEN PG&E AND THEIR CONSULTANTS A MORE DETAILED INVESTIGATION WILL BE UNDERTAKEN.	0	
70080	EOI*1008	820208	999999	THE SPECTRA FOR THE MAIN ANNUNCIATOR CABINET ARE PRELIMINARY.	0	
70081	EOI*1009	820209	999999	SPECTRA HAVE NOT BEEN PROVIDED OR SCALING CRITERIA DEFINED FOR SUPPORT LOCATIONS ABOVE ELEVATION 140 FEET FOR THE CONTAINMENT INTERIOR.	0	
70082	EOI*1010	820209	999999	SPECTRA HAVE NOT BEEN PROVIDED OR SCALING CRITERIA DEFINED FOR SUPPORT LOCATIONS ABOVE ELEVATION 140 FEET FOR THE TURBINE BUILDING.	0	
70083	EOI*1011	820209	999999	THE HOSGRI SPECTRA FOR THE DIESEL GENERATOR OIL PRIMING TANK ARE PRELIMINARY.	0	
70084	EOI*1012	820209	820225	THE RLCA CALCULATED RESULTS FOR THE DIESEL GENERATOR OIL PRIMING TANK DIFFER FROM THE PG&E CALCULATED RESULTS BY MORE THAN 15%.	PG&E CONCURS WITH RLCA FINAL RESOLUTION: 15% CRITERIA IS NOT MEANINGFUL BECAUSE DIFFERENT ANALYSIS TECHNIQUES WERE USED AND RESULTS WERE LESS THAN HALF OF ALLOWABLE.	100 820225
70085	EOI*1013	820209	999999	THE TEST RESPONSE SPECTRA USED TO QUALIFY THE GROUP VI FLUCTRICAL EQUIPMENT DID NOT INCLUDE THE REQUIRED HOSGRI RESPONSE SPECTRA.	0	
70086	EOI*1014	820209	999999	SPECTRA HAVE NOT BEEN PROVIDED OF SCALING CRITERIA DEFINED FOR THE PIPE RACK ATTACHED TO THE CONTAINMENT EXTERIOR	0	



70087	EOI*1015	820211	820225	THE PG&E QUALIFICATION ANALYSIS FOR THE DIESEL GENERATOR OIL PRIMING TANK SPECIFIED 4% DAMPING. REGULATORY GUIDE 1.61 SPECIFIES 3% DAMPING FOR EQUIPMENT.	PG&E CONCURS WITH RLCA FINAL RESOLUTION: SECTION 5.2.1 OF THE HOSGRI REPORT PERMITS 4% DAMPING FOR COMPONENTS OTHER THAN REACTOR VESSEL INTERNALS.	100	820225
70088	EOI*1016	820211	999999	THE ANCHOR ALLOWABLES ON PG&E DRAWING DO NOT AGREE WITH THOSE ON DCM.		0	
70089	EOI*1017	820211	999999	THE WEIGHT OF THE SIGHT GLASS LEVEL INDICATOR ON THE DIESEL GENERATOR PRIMING TASK IS INCORRECT.		0	
70110	EOI*1018	820218	999999	THE 2-1/2 INCH CHANNEL FOR SUPPLY FAN 5-31 IS SHOWN AS A 4 INCH CHANNEL IN BOTH THE BUFFALO FORGE AND EDS NUCLEAR CALCULATIONS.		0	
70090	EOI*1019	820218	999999	RLCA HAS BEEN UNABLE TO OBTAIN DOCUMENTATION FOR THE CVCS SEPARATOR/STABILIZER SHELL AND SKIRT THICKNESS, NOZZLE DIAMETER AND THICKNESS, AND SUPPORT CONFIGURATION.		0	
70091	EOI*1020	820218	999999	THE HOSGRI SPECTRA ATTACHED TO THE PG&E ANALYSIS FOR THE AUXILIARY SALTWATER PUMP ARE PRELIMINARY SPECTRA.		0	
70092	EOI*1021	820218	999999	PG&E PIPING ANALYSIS NO 4-3 REPRESENTS THE COMPONENT COOLING WATER HEAT EXCHANGER AS A RIGID ANCHOR. THE HOSGRI REPORT LISTS NATURAL FREQUENCIES OF 9 HERTZ (HORIZONTAL AND VERTICAL) FOR THIS HEAT EXCHANGER.		0	
70093	EOI*1022	820218	999999	THE UPPER AUXILIARY SALT WATER PUMP SUPPORT IS LOCATED 10 FEET ABOVE ELEV. -2.1 FEET. SPECTRA APPLICABLE AT -2.1 FEET WERE USED AS INPUT FOR THE UPPER PUMP SUPPORT.		0	
70094	EOI*1023	820219	999999	INFORMATION CONCERNING A 3 INCH VELAN VALVE IN THE RLCA PIPING ANALYSIS IS NOT		0	



TASK# INITIATING DOCUMENT IDENT DT ECD... DESCRIPTION..... STATUS..... A%Z CLS DT

AVAILABLE.

70095	EOI*1024	820220	999999	PG&E ISOMETRIC SHOWS LINE 1917-4 INCH RIGIDLY RESTRAINED BY A SUPPORT LABELED 85S-40R. THE QUALIFICATION ANALYSIS SHOWS THIS RESTRAINT TO BE LABELED 85S-40V.	0
70096	EOI*1025	820220	999999	THE HOSGRI REPORT DOES NOT INCLUDE VERTICAL SPECTRA FOR THE TURBINE BUILDING ELEVATION 104 FEET BENTS 16-20. SPECTRA FOR THE CARDOX TANK SUPPORT MAY NOT BE APPLICABLE FOR THE ENTIRE REGION BENTS 16-20.	0
70097	EOI*1026	820220	999999	THE HOSGRI REPORT DOES NOT INCLUDE SPECTRA FOR SEVERAL AREAS OF THE TURBINE BUILDING THAT SUPPORT CLASS I ELECTRICAL CONDUIT. THE MARCH 1980 BLUME TURBINE BUILDING REPORT CONTAINS SPECTRA FOR THESE AREAS.	0
70111	EOI*1027	820225	820225	FIGURE 4-166 IN THE HOSGRI REPORT SHOWS THAT THE FUEL HANDLING CRANE SUPPORT STRUCTURE TO HAVE SLOTTED BOLT HOLES. PG&E DRAWING DOES NOT SHOW THE SLOTTED BOLT HOLES.	0
70112	EOI*1028	820225	820225	THE BLUME AUX. BLDG REPORT SPECIFY A METHODOLOGY FOR CALCULATING AH DIFFERS FROM THE HOSGRI REPORT	0
70113	EOI*1029	820225	820225	THE RLCA CALCULATED RESULTS FOR THE DYNAMIC MODEL PROPERTIES DIFFER FROM THE BLUME CALCULATED RESULTS BY MORE THAN 15 PERCENT.	0

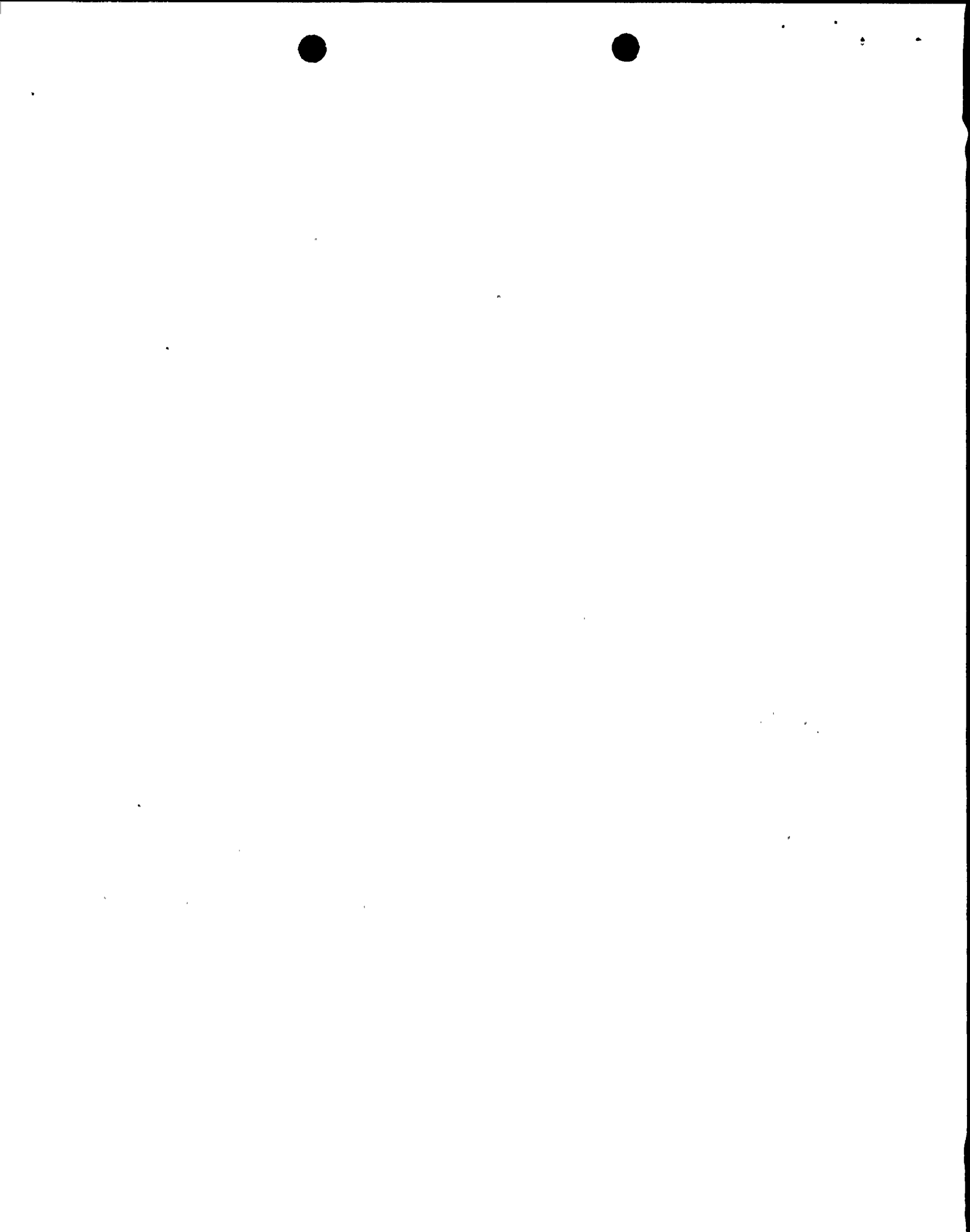


ATTACHMENT II

Other Findings (Open Items) Tracking System Computer Printout

LEGEND

1. TASK# - The number assigned by PGandE for tracking.
2. INITIATING DOCUMENT - The status report item number.
3. IDENT DT - Date problem was identified: year-month-date.
The computer defaults to 000000.
4. ECD - Estimated Completion Date. The computer will enter
999999 until a date is entered.
5. DESCRIPTION - Self explanatory.
6. STATUS - Will be used to describe status of resolution.
7. A%C - Actual Percent Complete.
8. CLS DT - Closed Date.



TASK# INITIATING DOCUMENT..... IDENT DT ECD... DESCRIPTION..... STATUS..... AXC CLS DT

70098 SEMI-MONTHLY STATUS 000000 820424 VALVE MODELING IN PIPING ANALYSES: MODELING OF ALL ANNULUS AREA VALVES 0

REVIEWED SIX WERE FOUND TO BE MODELED INCORRECTLY. THE VALVE MODELING IN ALL UNIT 1 PIPING ANALYSES WILL BE REVIEWED. IF MODELING ERRORS ARE FOUND, AFFECTED PIPING ANALYSES WILL BE RERUN AND PIPE SUPPORTS WILL BE REQUALIFIED.

REPORT NO. 7
 OTHER FINDINGS ITEM 1

70099 SEMI-MONTHLY STATUS 000000 820403 HOSGRI SPECTRA DIGITIZATION: 0

THE DIGITIZATION OF THE EAST-WEST TRANSLATIONAL HOSGRI SPECTRA FOR THE 140 ELEVATION IN THE AUXILIARY BUILDING HAS BEEN FOUND TO CONTAIN AN ERROR. ALL AFFECTED PIPING ANALYSES WILL BE RERUN AND PIPE SUPPORTS REQUALIFIED.

REPORT NO. 7
 OTHER FINDINGS ITEM 2

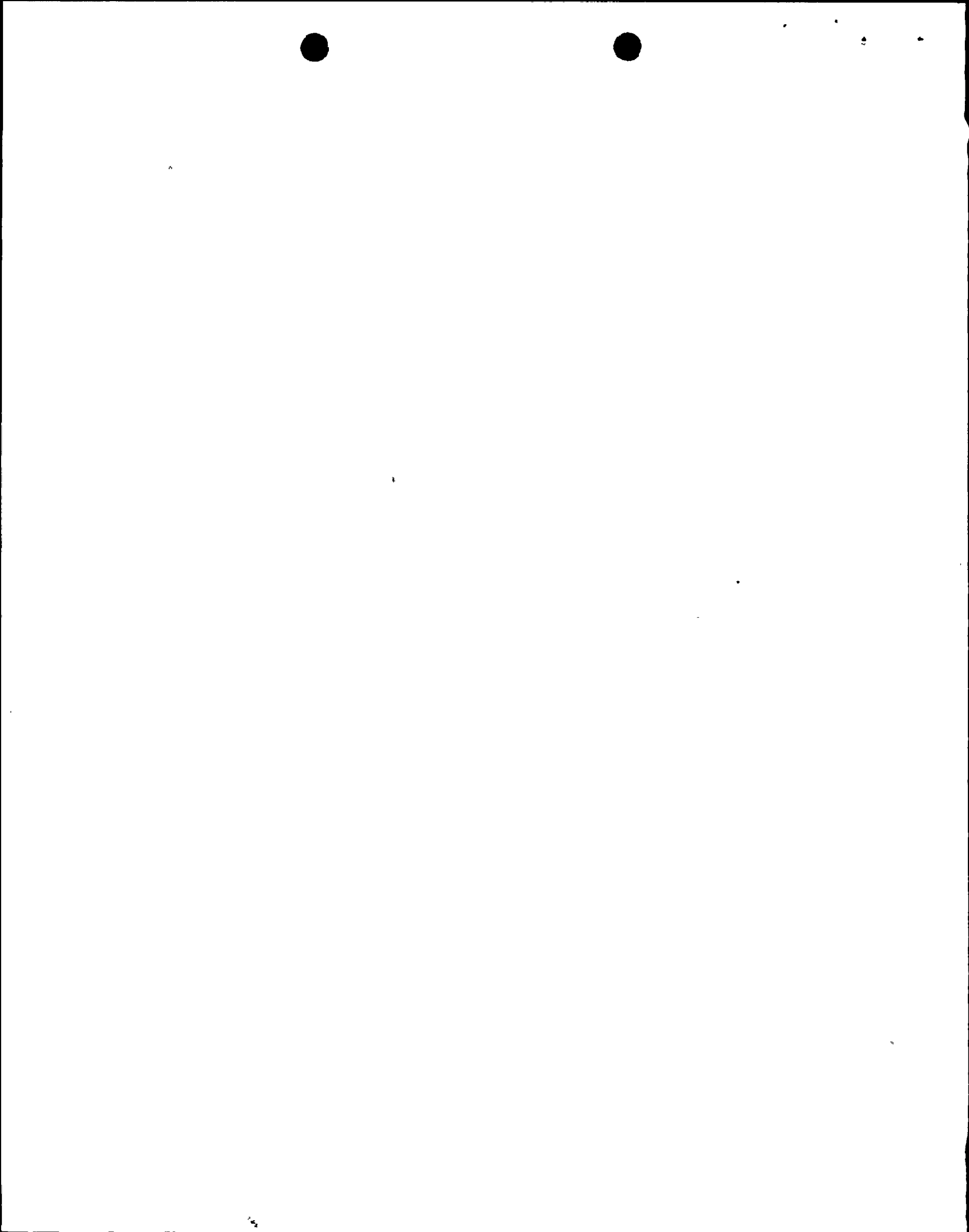
70100 SEMI-MONTHLY STATUS 000000 820401 RACEWAY SUPPORTS: THE METHOD USED TO CALCULATE RACEWAY WEIGHTS MAY HAVE RESULTED IN AN UNDERESTIMATION OF THE WEIGHTS OF SOME CONDUITS. A THOROUGH REVERIFICATION PROGRAM FOR ALL RACEWAY SUPPORTS WILL BE CONDUCTED. 0

REPORT NO. 7
 OTHER FINDINGS ITEM 3

70101 SEMI-MONTHLY STATUS 000000 820315 SMALL BORE SEISMIC RESTRAINTS: REVIEW OF ALL UNIT 1 SMALL BORE PIPING HAS IDENTIFIED FORTY SUPPORTS REQUIRING VERTICAL RESTRAINT WHERE ONLY A SINGLE ROD WAS UTILIZED. MODIFICATION OF THESE SUPPORTS WILL BE MADE. 0

REPORT NO. 7
 OTHER FINDINGS ITEM 4

70102 SEMI-MONTHLY STATUS 000000 999999 ACTIVE VALVE HOSGRI QUALIFICATION. ONE VALVE LIST IN THE HOSGRI REPORT WAS NOT UPDATED AS REQUIRED 0



TASK# INITIATING DOCUMENT..... IDENT DT ECD... DESCRIPTION..... STATUS..... AZC CLS DT

BY THE SECOND PHASE. ALL
 DESIGN CLASS 1 ACTIVE VALVES
 WILL BE REVIEWED TO MAKE
 SURE THEY WERE QUALIFIED.

REPORT NO. 7
 OTHER FINDINGS ITEM 5

70103	SEMI-MONTHLY STATUS	000000	820305	SMALL BORE PIPING OVERSPANS: CERTAIN SMALL BORE PIPING SPANS HAVE BEEN IDENTIFIED AS DEVIATING FROM SEISMIC CRITERIA. REVIEW AND ANALYSIS WILL BE PERFORMED TO DETERMINED EXTENT AND SIGNIFICANCE.	0
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REPORT NO. 7
 OTHER FINDINGS ITEM 6

70104	SEMI-MONTHLY STATUS	000000	820316	PIPING THERMAL ANALYSES: PIPING REVIEW OF ANNULUS REVEALED TWO THERMAL ANALYSES WHICH USED INCORRECT MODELING OF SUPPORTS. A SAMPLE OF OTHER THERMAL ANALYSES WILL BE REVIEWED.	0
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REPORT NO. 7
 OTHER FINDINGS ITEM 7

70105	SEMI-MONTHLY STATUS	000000	999999	SEISMIC REPNSE SPECTRA APPLICATION: PIPING WITH SUPPORTS ATTACHED TO CONTAINMENT INTERNAL STRUCTURE ABOVE 140 ELEVATION WERE DYNAMICALLY ANALYZED USING 140 ELEVATION SPECTRA. PIPING, ELECTRICAL RACEWAYS AND SUPPORTS ATTACHED TO CONTAINMENT EXTERIOR PIPEWAY WERE ANALYZED USING CONTAINMENT EXTERIOR SPECTRA. FURTHER ANALYSIS WILL BE PERFORMED TO VERIFY APPROPRIATENESS OF THESE ASSUMPTIONS.	0
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REPORT NO. 7
 OTHER FINDINGS ITEM 8

70106	SEMI-MONTHLY STATUS	000000	820409	DEVIATIONS FROM PIPE LUG CRITERIA: ONE CASE OF A PIPE SUPPORT DESIGN WITH FEWER PIPE LUGS THAN REQUIRED BY DESIGN CRITERIA, RESULTING IN LOCAL PIPE OVERSTRESS, HAS BEEN IDENTIFIED. ALL PIPE	0
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11
12
13

TASK# INITIATING DOCUMENT..... IDENT DT ECD... DESCRIPTION..... STATUS..... AXC CLS DT

SUPPORT DESIGNS WILL BE
 REVIEWED TO IDENTIFY ANY
 DEVIATIONS FROM MINIMUM PIPE
 LOG CRITERIA.

REPORT NO. 7
 OTHER FINDINGS ITEM 9

70107 SEMI-MONTHLY STATUS 000000 820305

SEISMIC SPECTRA SELECTION:
 SEVEN PIPING ANALYSES WERE
 IDENTIFIED FOR WHICH THE
 SPECTRA SETS USED WERE NOT
 ENVELOPED BY THE APPROPRIATE
 REVISED REORIENTED ANNULUS
 SPECTRA. THE ANALYSES WILL
 BE RERUN WITH APPROPRIATE
 SPECTRA.

0

REPORT NO. 7
 OTHER FINDINGS ITEM 10

70108 SEMI-MONTHLY STATUS 000000 999999

PLANT EXHAUST VENT: DYNAMIC
 PROPERTIES USED IN THE
 SEISMIC QUALIFICATION OF THE
 PLANT EXHAUST VENT WILL BE
 REVIEWED.

0

REPORT NO. 7
 OTHER FINDINGS ITEM 11

70109 SEMI-MONTHLY STATUS 000000 999999

CONTAINMENT INTERIOR
 STRUCTURE VERTICAL DYNAMIC
 MODEL: SOME MASSES WERE
 REPRESENTED INCORRECTLY IN
 THE VERTICAL DYNAMIC MODEL
 OF THE CONTAINMENT INTERIOR
 STRUCTURE. AN INVESTIGATION
 WILL BE MADE TO DETERMINE
 THE SIGNIFICANCE

0

REPORT NO. 7
 OTHER FINDINGS ITEM 12

