



June 13, 1984  
WOW: 84-22

Mr. Phillip J. Morrill, Project Manager  
U. S. Nuclear Regulatory Agency, Region V  
1450 Maria Lane, Suite 210  
Walnut Creek, California 94596

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REGION V 1155

PROGRESS REPORT, MAY 1984  
TECHNICAL ASSISTANCE FOR INSPECTION OF DIABLO CANYON DESIGN VERIFICATION PROGRAM, FIN B8552 (UNIT 1) AND FIN A0753 (UNIT 2).

1. Project Description

As a consequence of an Independent Design Verification Program, many modifications and additions to the piping and electrical raceway support systems and building structural steel are being implemented at the Diablo Canyon Nuclear Power Plant. The LLNL is assisting the NRC Region V office in assessing the adequacy of this work.

2. Progress - May 1984

Inspections continued in Unit 2 at a reduced level of effort covering 57 Class I piping supports and 22 electrical raceway supports. (Details are provided in Attachment 1.) Minor variations were found on 16 items that will require follow-up.

The items selected for inspection during this report period are within guidelines provided by the staff in a letter from P. Morrill to W. Wade dated 5/11/84. The letter also states that the Unit 1 inspection work under this program is considered complete and that all remaining resources, including the funds in FIN B8552, are to be applied to the inspection of Unit 2. A summary of the number of all items inspected as of May 14, 1984 is shown on Attachment 4.

3. Funding

The detailed report of expenditures for this period is provided in Attachments 2 & 3.

4. Personnel, Subcontracts, and Consultants

Mark Eli provided temporary assistance to a similar Region V inspection program at San Onofre Nuclear Generating Station during the weeks of 4/30 - 5/4 and 5/21 - 5/25 and firm commitments to other work by backup personnel reduced the level-of-effort during the report period.

8410020026 840910  
PDR ADOCK 05000275  
G PDR

5. Meetings/Travel

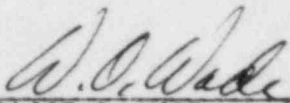
None

6. Concerns

None

7. Plans

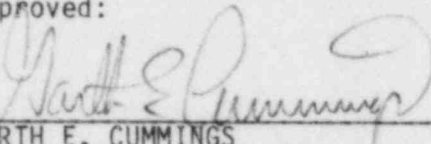
Inspections are to continue in Unit 2.



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WALLACE O. WADE  
PROJECT MANAGER  
EG&G MECHANICAL ENGINEERING DEPARTMENT

Approved:



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GARTH E. CUMMINGS  
DEPUTY PROGRAM LEADER  
NUCLEAR SYSTEM SAFETY PROGRAM

WOW:cog

Attachment

Distribution:

LLNL

G. Cummings, L-91  
J. Johnson, L-91 *mi/mk*  
R. Langland, L-90  
M. Eli, L-390  
C. Meier, L-90 *OK*  
J. Selan, L-777  
R. White, L-777

NRC

R. Gilbert  
D. Kirsch  
H. Canter  
T. Bishop  
E. Frigillana

EG&G/SRO

A. Debeling  
R. Pong  
C. Morton

## ATTACHMENT 1

LOG NUM	LOC	U N I T	ITEM	PART NUMBER	START DATE	COMPLETE DATE	CRIT	CONTACTS	AFF	STATUS	STATUS DATE	MAN INSP HRS
E1087	TURBINE BLDG	2	RACEWAY SUPPORT	S-60B-A-104-2-14	5/21/84	5/24/84	QCP E9	MORRISON	BE	ACC-W/O-QA	5/23/84	JCS CHM 4.0
E1088	AUX BLDG	2	RACEWAY SUPPORT	S-88-11-GA-85-1-317	5/21/84	5/24/84	QCP E9	MORRISON	BE	ACC-W/O-QA	5/24/84	CHM 2.0
E1089	PENETRAT BLDG	2	RACEWAY SUPPORT	S-239-F2-85-1-300	5/21/84		QCP E9	MORRISON	BE	M/R E-2843	5/24/84	CHM 3.0
E1090	TURBINE BLDG	2	RACEWAY SUPPORT	S-235-18-A-85-15-128	5/21/84	5/24/84	QCP E9	MORRISON	BE	ACC-W/O-QA	5/24/84	CHM 2.0
E1091	AUX BLDG	2	RACEWAY SUPPORT	S-244-41G-100-2-283	5/21/84	5/24/84	QCP E9	MORRISON	BE	ACC-W/O-QA	5/24/84	CHM 2.0
E1092	AUX BLDG	2	RACEWAY SUPPORT	S-244-36GE-100-2-313	5/21/84	5/24/84	QCP E9	MORRISON	BE	ACC-W/O-QA	5/24/84	CHM 2.0
E1093	CONTAINMENT	2	RACEWAY SUPPORT	S-18-1-F-117-2-83	5/29/84	5/30/84	QCP E9	MORRISON	BE	ACC-W/O-QA	5/30/84	CHM 2.0
E1094	AUX BLDG	2	RACEWAY SUPPORT	S-401B-GA-115-3-122	5/21/84		QCP E9	MORRISON	BE	NCR 8802-1277	5/31/84	CHM 5.0
E1095	TURBINE BLDG	2	RACEWAY SUPPORT	S-1022-C-119-1-2	5/21/84		QCP E9	MORRISON	BE	IR 88-2-2312	5/21/84	CHM 5.0
E1096	AUX BLDG	2	RACEWAY SUPPORT	S-48-L-GA-100-3-113	5/21/84		QCP E9	MORRISON	BE	M/R E-2842	5/23/84	JCS CHM 4.0
E1097	AUX BLDG	2	RACEWAY SUPPORT	S-83-2-GE-100-1-69	5/21/84	5/23/84	QCP E9	MORRISON	BE	ACC-W/O-QA	5/23/84	JCS CHM 4.0
E1098	AUX BLDG	2	RACEWAY SUPPORT	S-87-27-H-100-4-91	5/21/84	5/24/84	QCP E9	MORRISON	BE	ACC-W/O-QA	5/24/84	CHM 2.0
E1099	AUX BLDG	2	RACEWAY SUPPORT	S-202-32-GE-100-1-19	5/29/84		QCP E9 QCP 5	MORRISON HANN WILSON	BE FO FO	RECORDS	5/31/84	CHM 3.0
E1100	AUX BLDG	2	RACEWAY SUPPORT	S-87-12-CS-117-4-404	5/29/84	5/31/84	QCP E9	MORRISON HANN WILSON	BE FO FO	ACC-W/O-QA	5/31/84	CHM 2.0
E1101	AUX BLDG	2	RACEWAY SUPPORT	S-244-13-GA-100-3-88	5/30/84	5/31/84	QCP E9	MORRISON HANN WILSON	BE FO FO	ACC-W/O-QA	5/21/84	CHM 2.0
E1102	CONTAINMENT	2	RACEWAY SUPPORT	S-197C-G-91-8-25	5/30/84	5/31/84	QCP E9	MORRISON HANN WILSON	BE FO FO	ACC-W/O-QA	5/31/84	CHM 2.0
E1103	CONTAINMENT	2	RACEWAY SUPPORT	S-21C-G-140-4-22	5/30/84	5/31/84	QCP E9	MORRISON HANN WILSON	BE FO FO	ACC-W/O-QA	5/31/84	CHM 2.0
E1104	TURBINE BLDG	2	RACEWAY SUPPORT	S-176A-A-104-5-15	5/30/84		QCP E9	MORRISON HANN WILSON	BE FO FO	M/R E-2846	5/31/84	CHM 4.0
E1105	CONTAINMENT	2	RACEWAY SUPPORT	S-217-3-G-91-1-15	5/30/84		QCP E9	MORRISON HANN WILSON	BE FO FO	M/R E-3847	5/31/84	CHM 4.0
E1106	AUX BLDG	2	RACEWAY SUPPORT	S-19A-GA-100-5-57	5/30/84	5/31/84	QCP E9	MORRISON HANN WILSON	BE FO FO	ACC-W/O-QA	5/31/84	CHM 2.0
E1107	TURBINE BLDG	2	RACEWAY SUPPORT	S-20-A-85-15-140	5/30/84	5/31/84	QCP E9	MORRISON HANN WILSON	BE FO FO	ACC-W/O-QA	5/31/84	CHM 2.0
E1108	CONTAINMENT	2	RACEWAY SUPPORT	S-221-F-9-3-14	5/30/84		QCP E9	MORRISON HANN WILSON	BE FO FO	M/R 2848	5/31/84	CHM 3.0
E1109	AUX BLDG	2	RACEWAY SUPPORT	S-202-18-K-100-6-104	5/30/84		QCP E9 QCP 5	MORRISON HANN WILSON	BE FO FO	RECORDS	5/31/84	CHM 2.0
M1062	CONTAINMENT	2	PIPE HANGER	S-5#	5/10/84	5/31/84	ESD 223	KULIKOWSKI	BE	WELD	4/12/84	JCS 1.5

							THOMAS	BE		CHM	1.5
							BENTACUR	BE	DR 4730	5/31/84	
									ACCEPTED	5/31/84	
M1095 AUX BLDG	2 PIPE HANGER	2042-3V	5/01/84	5/01/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/01/84	JCS 2.0
M1096 AUX BLDG	2 PIPE HANGER	2042-4V	5/01/84	5/01/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/01/84	JCS 2.0
M1097 CONTAINMENT	2 PIPE HANGER	414-340R	5/01/84	5/01/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/01/84	JCS 2.0
M1098 CONTAINMENT	2 PIPE HANGER	8-51R	5/01/84	5/01/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/01/84	JCS 2.0
M1099 CONTAINMENT	2 PIPE HANGER	413-169SL	5/01/84	5/01/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/01/84	JCS 1.0
M1100 CONTAINMENT	2 PIPE HANGER	71-43SL	5/02/84	5/02/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/02/84	JCS 1.0
M1101 CONTAINMENT	2 PIPE HANGER	6-120R	5/02/84	5/02/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/02/84	JCS 2.0
M1102 CONTAINMENT	2 PIPE HANGER	3-246SL	5/02/84	5/02/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/02/84	JCS 1.0
M1103 CONTAINMENT	2 PIPE HANGER	78-245SL	5/02/84		ESD 223	WERTS	BERNASCONI	BE	MVR 4712	5/02/84	JCS 3.0
M1104 CONTAINMENT	2 PIPE HANGER	90-47R	5/02/84	5/02/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/02/84	JCS 2.0
M1105 CONTAINMENT	2 PIPE HANGER	414-56R	5/02/84	5/02/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/02/84	JCS 2.0
M1106 CONTAINMENT	2 PIPE HANGER	7-2v	5/02/84	5/02/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/02/84	JCS 3.0
M1107 CONTAINMENT	2 PIPE HANGER	8-46R	5/03/84		ESD 223	WERTS	BERNASCONI	BE	MVR 4711	5/03/84	JCS 3.0
M1108 CONTAINMENT	2 PIPE HANGER	412-85V	5/03/84	5/03/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/03/84	JCS 1.0
M1109 CONTAINMENT	2 PIPE HANGER	412-25SL	5/03/84	5/03/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/03/84	JCS 1.0
M1110 CONTAINMENT	2 PIPE HANGER	412-66R	5/03/84	5/03/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/03/84	JCS 2.0
M1111 CONTAINMENT	2 PIPE HANGER	412-78R	5/03/84	5/03/84	ESD 223	WERTS	BERNASCONI	BE	ACCEPTED	5/03/84	JCS 2.0
M1119 AUX BLDG	2 PIPE HANGER	949-212R	5/15/84	5/15/84	ESD 223	BERNASCONI	BERNASCONI	BE	ACCEPTED	5/15/84	RLW 3.0
M1120 CONTAINMENT	2 PIPE HANGER	413-529R	5/15/84	5/15/84	ESD 223	BERNASCONI	BERNASCONI	BE	ACCEPTED	5/15/84	RLW .5
M1121 CONTAINMENT	2 PIPE HANGER	413-530R	5/15/84	5/15/84	ESD 223	BERNASCONI	BERNASCONI	BE	ACCEPTED	5/15/84	RLW .5
M1122 CONTAINMENT	2 PIPE HANGER	5-2R	5/15/84		ESD 223	BERNASCONI	BERNASCONI	BE	MVR	5/15/84	RLW 2.0
M1123 CONTAINMENT	2 PIPE HANGER	8-12V	5/15/84	5/15/84	ESD 223	BERNASCONI	BERNASCONI	BE	ACCEPTED	5/15/84	RLW .5
M1124 CONTAINMENT	2 PIPE HANGER	9-36	5/15/84	5/15/84	ESD 223	BERNASCONI	BERNASCONI	BE	ACCEPTED	5/15/84	RLW 2.5
M1125 CONTAINMENT	2 PIPE HANGER	414-237SL	5/16/84	5/16/84	ESD 223	BERNASCONI	BERNASCONI	BE	ACCEPTED	5/16/84	RLW 1.5
M1126 AUX BLDG	2 PIPE HANGER	46-14R	5/16/84	5/16/84	ESD 223	BERNASCONI	BERNASCONI	BE	ACCEPTED	5/16/84	RLW 2.5
M1127 AUX BLDG	2 PIPE HANGER	47-97R	5/16/84		ESD 223	BERNASCONI	BERNASCONI	BE	MVR	5/16/84	RLW 3.0
M1128 AUX BLDG	2 PIPE HANGER	47-48R	5/17/84	5/17/84	ESD 223	BERNASCONI	BERNASCONI	BE	ACCEPTED	5/17/84	RLW 1.0
M1129 AUX BLDG	2 PIPE HANGER	413-511R	5/17/84	5/17/84	ESD 223	BERNASCONI	BERNASCONI	BE	ACCEPTED	5/17/84	RLW 1.0
M1130 AUX BLDG	2 PIPE HANGER	46-20R	5/17/84		ESD 223	BERNASCONI	BERNASCONI	BE	MVR	5/17/84	RLW 2.0
M1131 CONTAINMENT	2 PIPE HANGER	73-14SL	5/21/84	5/21/84	ESD 223	KULIKOWSKI	BERNASCONI	BE	ACCEPTED	5/21/84	JCS 2.0
M1132 CONTAINMENT	2 PIPE HANGER	72-40SL	5/22/84	5/22/84	ESD 223	KULIKOWSKI	BERNASCONI	BE	ACCEPTED	5/22/84	JCS 1.0
M1133 CONTAINMENT	2 PIPE HANGER	7-97V	5/22/84		ESD 223	KULIKOWSKI	BERNASCONI	BE	MVR	5/24/84	JCS 2.0
M1134 AUX BLDG	2 PIPE HANGER	47-137R	5/22/84	5/22/84	ESD 223	KULIKOWSKI	BERNASCONI	BE	4724	5/24/84	JCS 1.0
						BERNASCONI	BERNASCONI	BE	ACCEPTED	5/22/84	JCS 1.0

M1135 AUX BLDG	2 PIPE HANGER	42-3R	5/22/84	5/22/84	ESD 223	KULIKOWSKI BE BERNASCONI BE	ACCEPTED	5/22/84	JCS	2.0
M1136 AUX BLDG	2 PIPE HANGER	414-207R	5/23/84		ESD 223	KULIKOWSKI BE BERNASCONI BE	MVR 4725	5/24/84 5/24/84	JCS	3.0
M1137 AUX BLDG	2 PIPE HANGER	413-576A	5/23/84	5/23/84	ESD 223	KULIKOWSKI BE BERNASCONI BE	ACCEPTED	5/23/84	JCS	1.0
M1138 AUX BLDG	2 PIPE HANGER	413-307R	5/23/84	5/23/84	ESD 223	KULIKOWSKI BE BERNASCONI BE	ACCEPTED	5/23/84	JCS	2.0
M1139 CONTAINMENT	2 PIPE HANGER	989-26V	5/23/84	5/23/84	ESD 223	KULIKOWSKI BE BERNASCONI BE	ACCEPTED	5/23/84	JCS	1.0
M1140 CONTAINMENT	2 PIPE HANGER	72-10SL	5/23/84	5/23/84	ESD 223	KULIKOWSKI BE BERNASCONI BE	ACCEPTED	5/23/84	JCS	2.0
M1141 CONTAINMENT	2 PIPE HANGER	70-28SL	5/23/84		ESD 223	KULIKOWSKI BE BERNASCONI BE	MVR 4724	5/24/84 5/24/84	JCS	2.0
M1142 AUX BLDG	2 PIPE HANGER	48-58R	5/24/84	5/24/84	ESD 223	KULIKOWSKI BE BERNASCONI BE	ACCEPTED	5/24/84	JCS	2.0
M1143 AUX BLDG	2 PIPE HANGER	47-126A	5/24/84	5/24/84	ESD 223	KULIKOWSKI BE BERNASCONI BE	ACCEPTED	5/24/84	JCS	1.0
M1144 AUX BLDG	2 PIPE HANGER	948-36S	5/24/84		ESD 223	KULIKOWSKI BE BERNASCONI BE	MVR 4724	5/24/84 5/24/84	JCS	3.0
M1145 AUX BLDG	2 PIPE HANGER	414-231A	5/24/84		ESD 223	KULIKOWSKI BE BERNASCONI BE	RECORDS	5/24/84	JCS	2.0
M1146 AUX BLDG	2 PIPE HANGER	47-148R	5/30/84	5/30/84	ESD 223	THOMAS BE BERNASCONI BE	ACCEPTED	5/30/84	AGD	3.0
M1147 ANNULUS	2 PIPE HANGER	70-12SL	5/30/84	5/30/84	ESD 223	THOMAS BE BERNASCONI BE	ACC-W/O-QA	5/30/84	AGD	3.0
M1148 ANNULUS	2 PIPE HANGER	71-10SL	5/30/84	5/30/84	ESD 223	THOMAS BE BERNASCONI BE	ACCEPTED	5/30/84	AGD	3.0
M1149 ANNULUS	2 PIPE HANGER	70-22SL	5/30/84	5/30/84	ESD 223	THOMAS BE BERNASCONI BE	ACCEPTED	5/30/84	AGD	3.0
M1150 ANNULUS	2 PIPE HANGER	6-24R	5/30/84	5/30/84	ESD 223	THOMAS BE BERNASCONI BE	ACCEPTED	5/30/84	AGD	3.0
M1151 ANNULUS	2 PIPE HANGER	2-41R	5/30/84	5/30/84	ESD 223	THOMAS BE BERNASCONI BE	ACCEPTED	5/30/84	AGD	3.0
M1152 AUX BLDG	2 PIPE HANGER	949-194A	5/31/84	5/31/84	ESD 223	THOMAS BE BERNASCONI BE	ACC-W/O-QA	5/31/84	AGD	4.0

ATTACHMENT 2

UNIT #1 PROJECT FINANCIAL STATUS (THROUGH 31 MAY 1984)\*

A. STATUS (Dollars in thousands)

<u>Total Projected Project Cost</u>	<u>Funds Obligated To Date</u>	<u>Balance of Funds Due FY 1983</u>
<u>\$345.0K</u>	<u>\$345.0K</u>	<u>-0-</u>

B. ANALYSIS

	<u>Period</u>	<u>Cumulative</u>
Direct Laboratory Staff Effort (FTE)	<u>0</u>	<u>1.2</u>
Direct Salaries	<u>\$ 0</u>	<u>\$ 36.0</u>
Material and Services (Excluding ADP)	<u>\$ 0</u>	<u>\$ 0</u>
ADP Support	<u>\$ 0</u>	<u>\$ 0</u>
Subcontracts (EG&G, Inc.)	<u>\$ 0.4</u>	<u>\$ 95.0</u>
Travel Expenses	<u>\$ 0</u>	<u>\$ 17.5</u>
Indirect Labor Costs	<u>\$ 0</u>	<u>\$ 34.8</u>
Other (TID)	<u>\$ 0</u>	<u>\$ 0.2</u>
General and Administrative	<u>\$ 1.1</u>	<u>\$ 28.6</u>
 TOTAL	 <u>\$ 1.5</u>	 <u>\$212.1</u>
 Liens		 <u>\$ 0</u>
 Total Including Liens		 <u>\$212.1</u>
 (Percent of Available Funding)		 <u>61%</u>

\*NOTE: Figures may differ slightly from final billing.

ATTACHMENT 3

UNIT #2 PROJECT FINANCIAL STATUS (THROUGH 31 MAY 1984)\*

A. STATUS (Dollars in thousands)

<u>Total Projected Project Cost</u>	<u>Funds Obligated To Date</u>	<u>Balance of Funds Due FY 1983</u>
<u>\$125.0K</u>	<u>\$125.0K</u>	<u>-0-</u>

B. ANALYSIS

	<u>Period</u>	<u>Cumulative</u>
Direct Laboratory Staff Effort (FTE)	<u>1.0</u>	<u>5.9</u>
Direct Salaries	<u>\$ 4.4</u>	<u>\$ 24.7</u>
Material and Services (Excluding ADP)	<u>\$ 0</u>	<u>\$ 0</u>
ADP Support	<u>\$ 0</u>	<u>\$ 0</u>
Subcontracts (EG&G, Inc.)	<u>\$ 10.4</u>	<u>\$ 31.8</u>
Travel Expenses	<u>\$ 2.9</u>	<u>\$ 8.9</u>
Indirect Labor Costs	<u>\$ 6.2</u>	<u>\$ 27.9</u>
Other (TID)	<u>\$ 0</u>	<u>\$ 0</u>
General and Administrative	<u>\$ 4.3</u>	<u>\$ 8.2</u>
 TOTAL	 <u>\$ 28.2</u>	 <u>\$ 101.5</u>
 Liens		 <u>\$ 0</u>
 Total Including Liens		 <u>\$ 101.5</u>
 (Percent of Available Funding)		 <u>81%</u>

\*NOTE: Figures may differ slightly from final billing.

ATTACHMENT 4

DIABLO CANYON INSPECTION SUMMARY  
(Data through May 14, 1984)

ITEM	LOCATION	NUMBER	UNIT 1	UNIT 2
			SUB-TOTAL	SUB-TOTAL
<u>MECHANICAL</u>				
HVAC Supports	(Not Recorder)	7		1
	Auxiliary Bldg.	4		1
	Turbine Bldg.	4		-
			<u>15</u>	<u>2</u>
Pipe Hangers	(Not Recorded)	209		-
	Auxiliary Bldg.	58		19
	Containment Bldg.	13		42
	Fuel Handling Bldg.	3		-
	Penetration Bldg.	2		2
	Turbine Bldg.	11		-
	Ventilation Bldg.	-		1
			<u>296</u>	<u>64</u>
Spray Hangers	Containment Bldg.	-		56
			<u>0</u>	<u>56</u>
Rupture Restraints	(Not Recorded)	6		-
	Containment Bldg.	8		-
	Penetration Bldg.	3		-
	Turbine Bldg.	1		-
			<u>18</u>	<u>0</u>
<u>ELECTRICAL</u>				
Raceway Supports	Auxiliary Bldg.	108		-
	Containment Bldg.	25		-
	Intake Bldg.	1		-
	Penetration Bldg.	3		-
	Turbine Bldg.	27		-
	Ventilation Bldg.	2		-
			<u>166</u>	<u>0</u>
<u>STRUCTURAL</u>				
Containment Annulus		14		69
Containment Platforms		9		5
Containment Polar Crane		1		1
Fuel Handling Bldg.		24		-
Turbine Bldg. - Switch Gear		12		-
Turbine Bldg.		3		3
			<u>63</u>	<u>78</u>