



**Pacific Gas and
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PG&E Letter DCL-16-086

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

10 CFR 50.4

Docket No. 50-323, OL-DPR-82
Diablo Canyon Unit 2
Owner's Activity Report for Unit 2 Nineteenth Refueling Outage

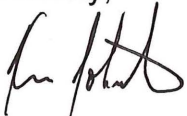
In accordance with American Society of Mechanical Engineers (ASME) Code Case N-532-5, enclosed is the Owner's Activity Report for inservice inspection (ISI) activities performed at Diablo Canyon Power Plant through the completion of the Unit 2 Nineteenth Refueling Outage.

This code case is used as an alternative to the requirements of ASME Section XI, Article IWA-6000 as listed in Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1," Revision 17, and approved in accordance with 10 CFR 50.55a(b)(5).

There are no new or revised regulatory commitments (as defined by NEI 99-04) in this submittal.

If you have any questions regarding the information enclosed, or other ISI program activities, please contact Mr. Ken Bych, Manager, Technical Support Engineering, at (805) 545-4241.

Sincerely,

 FOR

Paula Gerfen

jmsp/4927/64113881-0100

Enclosure

cc/enc: Kriss M. Kennedy, NRC Region IV Administrator
Balwant K. Singal, NRR Project Manager
Christopher W. Newport, NRC Senior Resident Inspector
State of California, Pressure Vessel Unit

Pacific Gas and Electric Company

Diablo Canyon Power Plant

Owner's Activity Report for Unit 2 Nineteenth Refueling Outage

DIABLO CANYON POWER PLANT

UNIT 2

REFUELING OUTAGE: 2R19

Operating License No. DPR-82

USNRC Docket No. 50-323

OWNER'S ACTIVITY REPORT

Rev. 0

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Table 2: Abstract of Repair/Replacement Activities Required for Continued Service.

NIS-2A: Repair/Replacement Certification Record
Attachment: List of Repair/Replacement Plans

Prepared By: _____


Thomas L. Alcott, ISI Specialist

Date

8/16/16

Reviewed By: _____


James E. Hill, ISI Specialist

Date

8/16/2016

Approved By: _____


Ken Bych, Manager Technical Support Engineering

Date

8-17-16

Document Date: 7/30/16

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INTRODUCTION

Inservice inspection (ISI) of scheduled ASME Section XI components and their supports at Pacific Gas and Electric Company's Diablo Canyon Power Plant (DCPP) Unit 2 was completed during the nineteenth refueling outage (2R19) from 05/2016 through 06/2016. 2R19 was the second outage in the third period within the third 10-year ISI interval.

This Owner's Activity Report, OAR-1, complies with the provisions of Code Case N-532-5 as approved by Regulatory Guide 1.147, Revision 17.

The OAR-1 Report covers applicable 2R19 work completed prior to and including June 30, 2016 and any mid cycle and 2R18 work completed after December 5, 2014.

FORM OAR-1 OWNERS ACTIVITY REPORT -- DCP-2R19

Report Number DCPP-2R19

Plant Diablo Canyon Nuclear Power Plant, P.O. Box 56, Avila Beach, California 93424

Unit No. 2 Commercial service date March 13, 1986 Refueling outage no. 2R19

Current inspection interval IWB / IWC / IWD / IWF - 3rd IWE / IWL - 2nd
(1st, 2nd, 3rd, 4th, other)

Current inspection period IWB / IWC / IWD / IWF - 3rd IWE / IWL - 2nd
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans 2001 Edition thru 2003 Addenda

Date and revision of inspection plans IWB / IWC / IWD / IWF -- 12/28/11 Rev. 1 IWE / IWL -- 11/4/10 Rev. 0

Edition and addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans

2007 Edition through 2008 Addenda

Code Cases used: N-532-5, N-685, N-722-1, N-770-1, N-798, N-460, N-566-2
(if applicable)

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of 2R19 (refueling outage no) conform to the requirements of Section XI.

Signed [Signature] / Manager, Technical Support Engineering Date 8-17-16
Owner or Owner's designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the items described in this Owner's Activity Report, and state that, to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commission NB-15083, ANI CA 2184
Inspector's Signature National Board, State, Province, and Endorsements

Date 8/17/16

TABLE 1
ITEMS WITH FLAWS OR REVELANT CONDITIONS THAT REQUIRED
EVALUATION FOR CONTINUED SERVICE

Examination Category and Item Number	Item Description	Evaluation Description
CAT R-A ITEM R1.11	Line-2-109-14SPL Weld, WIB-245. Rejectable UT indication. SAPN 50852155	Accepted for continued use with: 1) Expanded scope exams of (8) additional welds in 2R19. 2) Weld overlay repair during next refueling outage (2R20). (50852155 Task-28).

TABLE 2
ABSTRACT OF REPAIR/REPLACEMENT ACTIVITIES REQUIRED FOR CONTINUED SERVICE

Code Class	Item Description	Description of Work	Date Completed	Repair/Replacement Plan Number
2 (Non code exam)	Accumulator 2-2 LT-952 lower nozzle, C-1A	Replace Accumulator 2-2 nozzle C-1A and associated piping. Rejectable UT indication SAPN 50849012	5/15/16	60089765-10 60089765-80
2	Accumulator 2-2 LT-952 lower nozzle, C-1A	Accumulator 2-2 base metal repair at nozzle C-1A	5/15/16	60089765-250

FORM NIS-2A REPAIR/REPLACEMENT CERTIFICATION RECORD

OWNER'S CERTIFICATE OF CONFORMANCE

I certify that the Post 2R18 thru 2R19
(12/06/14 thru 6/30/16) activities represented by Repair/Replacement Plan number (see attachment)
conform to the requirements of Section XI necessary to place the item in service.

Edition and Addenda of Section XI used: 2007 Edition through 2008 Addenda

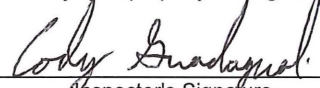
Code Cases used for repair/replacement activities: N-532-5 and as listed on attachment
(If applicable, including cases modified by Case N-532 and later revisions)

Signed  Date 8-17-16
Owner or Owner's designee

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and
employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the items described
in Repair/Replacement Plan number (see attachment), and state that, to the best of my knowledge and belief, the Owner has performed
all activities described in the Repair/Replacement Plan in accordance with the requirements of Section XI necessary to place the item in
service.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the activities
described in the Repair/Replacement Plan. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any
personal injury or property damage or loss of any kind arising from or connected with this inspection.

 Commissions NB-15083, ANI CA 2184
Inspector's Signature National Board, State, Province, and Endorsements

Date 8/17/16

Sys	Class	Order	Op	Item Description	Description of Work	Code Case	Comments	Revision	Actual finish (date)
3	3	60071787	10	DC-2-03-P-V-FW-2-121	FW-2-121: Replc AFWP2-1 CST Suction VLV			2R19	5/19/2016
3	3	60073994	10	DC-2-03-P-P-LINE-574	404-43R: Replace shim plates by welding			D1EO	2/10/2015
3	3	60076901	20	DC-2-03-P-P-LINE-574	Ln-574: Weld Repair Thinned Pipe Wall			D1EO	11/24/2015
3	3	60076901	30	DC-2-03-P-P-LINE-574	404-43R: Install Sppt After Pipe Repairs		welding	D1EO	11/24/2015
3	2	60077234	15	DC-2-03-P-V-FW-2-377	FW-2-377: Repair Hinge Pin Cover Leak		replace cover studs and nuts	2R19	5/19/2016
3	2	60077234	50	DC-2-03-P-V-FW-2-377	FW-377 Machine Hinge Pin Cover			2R19	5/19/2016
3	3	60082569	100	DC-2-03-P-PSL-414-343SL	414-343SL, Drop & Swap like for like AD-71	N-71-15, N-249-11	replace snubber	2R19	5/7/2016
3	3	68025021	10	DC-2-03-P-V-FW-2-124	FW-2-124 Replace Valve		replace valve (new s/n 20531560)	2R19	5/19/2016
3	3	68039801	200	DC-2-03-P-V-FW-2-680	Install AFW Crosstie Connection		new FLEX vlv and piping (vlv s/n BQ966)	2R19	6/8/2016
3	3	68039860	200	DC-2-03-P-PSL-414-545R	414-545R Modify Support		modify support (welding)	2R19	6/14/2016
4	2	60076542	300	DC-2-04-P-VR-MS-2-RV-9	MS-2-RV-9: Offsite Rebuild/Test/RTS		Replaced disc (s/n AGG11)	2P19	9/23/2015
4	2	60082536	100	DC-2-04-P-PSL-78-574SL	#78-574SL: Drop/Swap/Test - New	N-71-15, N-249-11		2R19	5/6/2016
4	2	60082541	100	DC-2-04-P-PSL-412-68SL	#412-68SL: Drop/Swap/Test - New	N-71-15, N-249-11		2R19	5/9/2016
4	2	60082542	100	DC-2-04-P-PSL-412-71SL	#412-71SL: Drop/Swap/Test - New	N-71-15, N-249-11		2R19	5/7/2016
4	2	60082576	215	DC-2-04-P-PSL-2033-25SL	#2033-25SL: Repair Deformed Load Pin	N-71-15, N-249-11	repaired load pin	2R19	5/20/2016
4	2	60085800	400	DC-2-04-P-VR-MS-2-RV-14	MS-2-RV-14: Offsite Rebuild/Test/RTS		replaced disc (s/n AGG12)	2P19	5/6/2016
4	2	60085800	500	DC-2-04-P-VR-MS-2-RV-224	MS-2-RV-224: Offsite Rebuild/Test/RTS		replaced 3 B/B studs/nuts	2P19	5/6/2016
4	2	60090609	200	DC-2-04-P-PSL-2033-25SL	#2033-25SL: Modify Pipe Support		mod rear bracket attmnt by welding	2R19	5/26/2016
4	2	64014893	100	DC-2-04-P-VR-MS-2-RV-11	MS-2-RV-11: Replace RV & Inlet Flng Bol		replace inlet flg bolting and spacer	2R19	5/17/2016
4	2	64014894	100	DC-2-04-P-VR-MS-2-RV-12	MS-2-RV-12: Replace RV & Inlet Flng Bol		replace inlet flg bolting	2R19	5/17/2016
4	2	64014895	100	DC-2-04-P-VR-MS-2-RV-13	MS-2-RV-13: Replace RV & Inlet Flng Bol		replace inlet flg bolting	2R19	5/17/2016
4	2	64014896	100	DC-2-04-P-VR-MS-2-RV-14	MS-2-RV-14: Replace RV & Inlet Flng Bol		replace inlet flg bolting	2R19	5/17/2016
4	2	64014897	100	DC-2-04-P-VR-MS-2-RV-224	MS-2-RV-224: Replace RV & Inlet Flng Bol		replace inlet flg bolting	2R19	5/17/2016
4	2	64048974	100	DC-2-04-P-V-MS-2-FCV-43	MS-2-FCV-43: Perform Inspection & Repair		replaced disc	2R19	5/27/2016
4	2	64048974	150	DC-2-04-P-V-MS-2-FCV-43	MS-2-FCV-43: Weld Disc Retaining Nut		pressure boundary attmnt (weld)	2R19	5/25/2016
4	2	64150657	700	DC-2-04-M-HX-SG4	SG 2-4: Replace Cracked Washers/Sect XI		replace washer sets	2R19	5/18/2016
7	1	60009354	5010	DC-2-07-P-V-RCS-2-8050	RCS-2-8050 - Q Pipe Base Metal Damage		Line-1169-3/4" BMR (missed 2R18 cut-off)	2R18	10/19/2014
7	1	60054523	60	DC-2-07-P-V-RCS-2-8078C	Section XI Parts Tracking Op (SOV-4) (spare)		replace Main/Pilot disc set (missed 2R18 cut-off)	D1	2/4/2014
7	1	60054523	70	DC-2-07-P-V-RCS-2-8078C	Section XI Parts Tracking Op (SOV-4) (spare)		replaced Bonnet (missed 2R18 cut-off)	D1	2/4/2014
7	1	60075208	10	DC-2-07-P-V-RCS-2-PCV-474	RCS-2-PCV-474 Inspect & Rebuild Valve		replaced Plug	2R19	6/7/2016
7	1	60079102	10	DC-2-07-P-V-RCS-2-8000A	RCS-2-8000A Inspect and Rebuild Valve		replaced wedge	2R19	5/23/2016
7	1	60082547	100	DC-2-07-P-PSL-412-113SL	#412-113SL: Replace Snubber w/ Anvil MMD		replaced snubber & load pin	2R19	5/16/2016
7	1	60082549	100	DC-2-07-P-PSL-412-154SL	#412-154SL: Replace Snubber w/ Anvil MMD		replaced snubber	2R19	5/6/2016
7	1	60090155	10	DC-2-07-P-V-RCS-2-8078C	RCS-2-8078C/D: Replace Valve Spool		replace existing spool w/ SOV-5	2R19	5/19/2016
7	1	60090187	10	DC-2-07-P-V-RCS-2-8078A	RCS-2-8078A/B: Replace Valve Spool		replace existing spool w/ SOV-7	2R19	6/13/2016
7	1	60090551	10	DC-2-07-P-P-LINE-109	TMOD LINE 109: Install Thermoco/Loggers		Install Thermoco/Loggers (welding)	2R19	5/27/2016
7	3	64047582	140	DC-2-07-E-MTR-RCP3	RCP 2-3: UBOC Disassembly-Reassembly		replace channel head bolting	2R19	5/10/2016
7	3	68040482	150	DC-2-07-E-MTR-RCP1	RCP 2-1: UBOC Disassembly-Reassembly		replace channel head bolting	2R19	5/19/2016
7	3	68040484	10	DC-2-07-E-MTR-RCP1	RCP2-1 Install UBOC Support to Stator		replace spt plate to stator (welding)	2R19	6/13/2016
8	2	60054256	10	DC-2-08-P-V-CVCS-2-8149A	CVCS-2-8149A Replace Bonnet & Gasket		replace bonnet & plug/stem assembly	2R19	5/21/2016
8	2	60077299	10	DC-2-08-P-V-CVCS-2-8458B	CVCS-2-8458B: Rebuild Diaphragm Valve		replace Body/Bonnet bolting	2R19	5/18/2016
8	2	60077299	50	DC-2-08-P-V-CVCS-2-8458B	CVCS-2-8458B Weld Repair sealing surface		Base metal repair of sealing surface	2R19	6/13/2016
8	2	60082528	100	DC-2-08-P-PSL-78-139SL	#78-139SL: Replace Snubber w/ Anvil MMD		replaced snubber	2R19	5/10/2016
8	2	68039803	20	DC-2-08-P-V-CVCS-2-950	Install BAT Pump Suction Crosstie Connec		install FLEX conn (s/n 906090-001-002)	2R19	6/8/2016
9	2	60082514	100	DC-2-09-P-PSL-77-10SL	#77-10SL: Replace Snubber w/ PSA NF MMD	N-71-15, N-249-11	replace snubber	2R19	5/7/2016
9	2	60082551	100	DC-2-09-P-PSL-413-11SL	#413-11SL: Replace Snubber w/ PSA NF MMD	N-71-15, N-249-11	replace snubber	2R19	5/12/2016
9	2	60089765	10	DC-2-09-M-TK-AT2	ACCUM 2-2 C1-A NOZZLE Rmv/Rplc Piping		replace piping	2R19	6/9/2016
9	2	60089765	80	DC-2-09-M-TK-AT2	Replace Nozzle C1-A Accum 2-2		replace nozzle	2R19	5/15/2016
10	2	60082504	100	DC-2-10-P-PSL-72-75SL	#72-75SL: Replace Snubber w/ PSA NF MMD	N-71-15, N-249-11	replace snubber	2R19	5/12/2016
10	2	60082515	200	DC-2-10-P-PSL-77-18SL	#77-18SL: Replace Snubber w/ PSA NF MMD	N-71-15, N-249-11	replace snubber	2R19	5/10/2016
10	2	60082534	100	DC-2-10-P-PSL-78-568SL	#78-568SL: Drop/Swap w/New Snubber(A/D)	N-71-15, N-249-11	replace snubber	2R19	5/12/2016
10	2	68039802	200	DC-2-10-P-V-RHR-2-1028	Install RHR Cross Tie Piping/valve		install FLEX connection (s/n 891218-5)	2R19	6/8/2016
13	3	60078233	20	DC-2-13-M-PP-SFPP2	SFPP 2-2: Levelizer/Minim Support Instll		Pump Base attachment weld	D1EO	4/12/2016

		Repair/Replacement Plan No.							
Sys	Class	Order	Op	Item Description	Description of Work	Code Case	Comments	Revision	Actual finish (date)
13	3	60078233	70	DC-2-13-M-PP-SFPP2	Sect XI Replacements: Gland Plate/Bolts		replace gland plate and bolting	D1EO	4/12/2016
14	3	60075717	10	DC-2-14-P-V-CCW-2-601	CCW-2-601 Replace Check Valve		replace valve (new s/n 57591)	2R19	5/21/2016
14	3	60082497	200	DC-2-14-P-PSL-72-39SL	#72-39SL: Replace Snubber Rear Bracket		replace rear bracket by welding	2R19	5/18/2016
14	3	60082497	300	DC-2-14-P-PSL-72-39SL	#72-39SL: Replace Snubber w/ Anvil MMD		replace snubber	2R19	5/20/2016
14	3	60082498	100	DC-2-14-P-PSL-72-41SL	#72-41SL: Replace Snubber w/ PSA NF MMD	N-71-15, N-249-11	replace snubber	2R19	5/17/2016
14	3	60082539	100	DC-2-14-P-PSL-412-19SL	D930927: Replace internals (verge) on AD-41	N-1644-8	replaced internals (verge) on replacemnt snubber	2R19	5/14/2016
14	2	64071753	200	DC-2-14-P-VR-CCW-2-RV-52	M77 CCW-2-RV-52: Replace inlet bolting		replace inlet flg bolting	2R19	5/15/2016
16	3	60070942	20	DC-0-16-P-V-MU-0-976	MU-0-976: Replace Check Valve		replaced valve (new s/n D9700)	D1EO	3/16/2016
17	3	60073532	15	DC-2-17-P-PSL-28-70R	28-70R - Mod ASW2-2 Motor Support		modify support by welding	2R19	6/13/2016
17	3	60089664	100	DC-2-17-P-V-SW-2-185	Replace Valve SW-2-185		replace valve (new s/n E3149-1-4)	2R19	5/17/2016
17	3	60089732	10	DC-2-17-P-V-SW-2-186	Replace Valve SW-2-186		replace valve (new s/n E3149-1-1)	2R19	5/11/2016
17	3	64076822	50	DC-2-17-M-PP-ASP2	ASP2-2 Replace / Align / Couple		replace pump (new s/n 290602)	2R19	5/13/2016
21	3	60070644	20	DC-2-21-M-HX-JWR1B	DG21: Replace North Radiator Cores		replace radiator cores and bolting	D1EO	3/31/2016
21	3	60071190	20	DC-2-21-M-HX-JWR2B	DG22: Install North Radiator Cores		replace radiator cores and bolting	D1EO	3/24/2016
21	3	60087800	20	DC-2-21-M-EN-DEG2	414-636R: Replace U-bolt DG22		replaced U-bolt for 414-636R	D1EO	3/24/2016
21	3	60087843	20	DC-2-21-M-HX-JWR2B	Weld Repair DEG 2-2 Radiator Tank Flange		BMR by welding	D1EO	3/16/2016
21	3	60088210	20	DC-2-21-M-PP-JWP3	JWP3: Replace Pump DG23		replace pump (s/n 122990791JM)	D1EO	4/5/2016
21	3	64038680	100	DC-2-21-M-EN-DEG3	DG23: Perform STP M-21-ENG.2		replace Expansion Tank Cap (RV-75)	D1EO	3/14/2016
21	3	64039489	100	DC-2-21-M-EN-DEG1	DG21: Perform STP M-21-ENG.2		replace Expansion Tank Cap (RV-72)	D1EO	3/31/2016
21	3	64042239	100	DC-2-21-M-EN-DEG2	DG22: Perform STP M-21-ENG.2		replace Expansion Tank Cap (RV-71)	D1EO	3/24/2016
21	3	64046937	100	DC-2-21-M-EN-DEG2	DG22: STP M21-ENG.4 Inspection & Maint		replaced Jacket Water couplings	D1EO	3/1/2016
21	3	64048412	100	DC-2-21-M-EN-DEG1	DG21: STP M21-ENG.4 Inspection & Maint		replaced Jacket Water couplings	D1EO	4/1/2016
21	3	64077107	100	DC-2-21-M-EN-DEG1	TCV-4: Replace Valve M-21-TCV.3 DG21		replace valve (new s/n A961X)	D1EO	4/5/2016
21	3	64077813	100	DC-2-21-P-V-DEG-2-TCV-5	TCV-5: Replace Valve M-21-TCV.3 DG23		replace valve (new s/n B9111)	D1EO	3/24/2016
21	3	64079958	100	DC-2-21-P-V-DEG-2-TCV-3	TCV-3: Replace Valve M-21-TCV.3 DG22		replace valve (new s/n D951)	D1EO	3/24/2016
25	2	60036936	10	DC-2-25-P-VOA-AIR-I-2-FCV-584	FCV-584 Rebuild Valve & Replace Actuator		replaced internals (ball)	2R19	5/12/2016