



EXHIBIT A

2012 Nuclear Decommissioning Cost Triennial Proceeding

Common Summary Format for Decommissioning Cost Estimates
Pacific Gas and Electric Company
Diablo Canyon Units 1 and 2
Southern California Edison Company
San Onofre Nuclear Generating Station Units 2 and 3

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2012 NUCLEAR DECOMMISSIONING COST TRIENNIAL PROCEEDING
COMMON SUMMARY FORMAT FOR DECOMMISSIONING COST ESTIMATES
PACIFIC GAS AND ELECTRIC COMPANY DIABLO CANYON UNITS 1 AND 2
SOUTHERN CALIFORNIA EDISON COMPANY SAN ONOFRE NUCLEAR
GENERATING STATION UNITS 2 AND 3

In accordance with Ordering Paragraph 2 of Decision 11-07-003, Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company provide in common format the information required by Attachment A to Decision 11-07-003:

- Section 1 Assumptions and Results for Diablo Canyon Units 1 and 2 and Southern California Edison Company San Onofre Nuclear Generating Station Units 2 and 3
- Section 2 Requested Revenue Requirements and Trust Fund Assumptions for Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company

SECTION 1
Assumptions and Results

	DCPP Units 1 and 2	SONGS Units 2&3
Assumptions		
DOE performance (common)	The 2011 study assumes that DOE will start accepting spent fuel in 2024 (4 years later than the 2008 study) and at a rate such that the last fuel is accepted in 2055 (30 years after shutdown of the last unit). The study further assumes that sealed canisters will be accepted without repackaging.	The 2011 study assumes that DOE will start accepting spent fuel in 2024 (4 years later than the 2008 study) and at a rate such that the last fuel is accepted in 2053 (31 years after shutdown of the last unit). The study further assumes that sealed canisters will be accepted without repackaging.
State severance requirements (common)	<p>The estimate includes staff termination costs for displaced PG&E personnel after permanent cessation of operations, and after termination of decommissioning projects as required by PUC § 8330.</p> <p>The per-person estimated cost is \$82,400, and is based on average base salary, and years of service. The total severance amount is based on terminating 1,487 persons, and is incurred during each period as staffing is reduced.</p>	<p>The estimate includes staff termination costs for displaced SCE personnel after permanent cessation of operations, and after termination of decommissioning projects as required by PUC § 8330.</p> <p>The per-person estimated cost is \$98,000, and is based on average base salary, and years of service. The total severance amount is based on terminating 1,675 persons, and is incurred during each period as staffing is reduced.</p>
State site restoration requirements (common)	<p>The 2011 study assumes that all site improvements located at an elevation higher than 3 feet below grade (both radioactive and non-radioactive) will be removed. The break water will be removed. All material that is expected to contain residual radioactivity (i.e., has activity above federal release limits) will be disposed of at a licensed LLRW facility.</p> <p>The switchyard is excluded from the scope of decommissioning.</p>	<p>The 2011 study assumes that all site improvements (both radioactive and non-radioactive) will be removed, including all below-grade foundations, and intake and outfall conduits. All material that is radioactive (i.e., has detectable activity above background) will be disposed of at a licensed LLRW facility.</p> <p>The switchyard is excluded from the scope of decommissioning.</p>

SECTION 1
Assumptions and Results

<p>Alternatives and pricing for LLRW burial (common)</p>	<p>Rates for disposal are as follows (exclusive of taxes, unless otherwise noted):</p> <ul style="list-style-type: none">Class A Bulk LLRW - \$72 per cubic footClass A General LLRW - \$274 per cubic footClasses B and C LLRW - \$7,000 per cubic footGTCC Waste - \$6,119 per cubic foot (packaged volume - nominal 300 cubic foot per package). Cost was determined on a per pound basis, equivalent to the average estimated cost (per pound) for the disposal of spent fuel.Mixed waste – Not directly used in the estimate (closure costs provided)	<p>Rates for disposal are as follows:</p> <ul style="list-style-type: none">Class A Bulk LLRW - \$70 per cubic footClass A General LLRW - \$270 per cubic footClasses B and C LLRW - \$7,000 per cubic footGTCC Waste - \$8,500 per cubic foot (packaged volume)Mixed waste - \$592 per cubic foot
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SECTION 1 Assumptions and Results

<p>Extent of site and building contamination</p>	<p>In the reactor building the fuel canal liner and all of the concrete located inside the containment liner was assumed to be removed and disposed of as LLRW. This precluded the scabbling (or drill and spall) of concrete surfaces in this building.</p> <p>A fraction of the floor and wall concrete surfaces in radiologically contaminated buildings (penetration, fuel, auxiliary, radwaste storage) are assumed to be scabbled to an average depth of 0.5 inches. The fraction of floor area impacted was estimated to be approximately 20-25% of the concrete floor surface. The fraction of wall areas requiring scabbling were estimated as a fraction of the of the floor area impacted.</p> <p>A fraction of concrete in radiologically contaminated buildings (penetration, fuel, auxiliary) are assumed to be more aggressively decontaminated to an average depth of 2 inches. The fraction of floor area requiring more aggressive decontamination was estimated to be approximately 40% of the floor area being scabbled.</p> <p>No system or structure identified as contaminated upon final shutdown is assumed to become releasable due to decay during decommissioning.</p>	<p>All concrete surfaces in radiologically contaminated buildings (containment, penetration, fuel SEB, and radwaste) are assumed to be scabbled to an average depth of 0.5 inches.</p> <p>In addition, historical unit operation data was used to identify areas that had been exposed to wet or dry contamination. This data was used to estimate the amount of concrete in contaminated buildings that will be assumed to be “volumetrically” contaminated with tritium, and thus dispositioned as LLRW.</p> <p>No system or structure identified as contaminated upon final shutdown is assumed to become releasable due to decay during decommissioning.</p>
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SECTION 1 Assumptions and Results

<p>LLRW and hazardous waste on site at beginning of decommissioning including large components</p>	<p>The 2011 study includes the disposition of radioactive material used to operate the DCP site (such as refueling tools).</p> <p>The study does include a cost allowance for closure of hazardous-only and mixed waste management units . Specific quantities of materials were not provided.</p> <p>The 2011 study includes the cost for removal of large components from previous operation that have been stored on site and must be dispositioned as part of decommissioning. These include eight retired steam generators, and 2 retired reactor vessel closure heads.</p>	<p>The 2011 study includes the disposition of radioactive material used to operate the SONGS site (such as refueling tools). This material is managed in SONGS' REMP system.</p> <p>The study includes costs for removal of hazardous waste on site at shutdown, including asbestos, lead, oil, diesel fuel, mercury, PCBs, acid solutions, caustic solutions, hydrazine, and others.</p> <p>The 2011 study does not assume that any large components from previous operation have been stored on site and must be dispositioned as part of decommissioning.</p>
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SECTION 1 Assumptions and Results

Results								
Duration by Period or WBS element	Duration (Years)	Unit 1	Unit 2	Average	Duration (Years)	Unit 2	Unit 3	Average
	P1a,b	1.5	1.5	1.5	WBS 0	2.0	2.0	2.0
	P2a,b	4.0	4.0	4.0	WBS 1	2.0	2.0	2.0
	P2c	7.3	6.5	6.9	WBS 2	10.0	10.0	10.0
	P2d,e	1.2	1.2	1.2	WBS 3	2.0	2.0	2.0
	P3b	2.5	2.5	2.5	WBS 4	18.0	17.2	17.6
	P3c,d	14.7	14.7	14.7	WBS 5	1.25	1.25	1.25
	P3e,f	0.5	0.5	0.5	TOTAL	35.25	34.5	34.88
	TOTAL	31.7	30.8	31.3				
		P1a,b (Wet Storage / Preps) P2a,b (Wet Storage/ Rad D&D) P2c (Wet Storage only) P2d,e (Dry Storage / Rad D&D) P3b (Site Restoration) P3c,d (Dry Storage Only) P3e,f (ISFSI Rad D&D and Site Restore)			WBS 0 Prior to Shutdown WBS 1 Wet Storage/Preps WBS 2 Wet Storage/Rad D&D WBS 3 Dry Storage/Rad D&D WBS 4 Dry Storage/Fuel Transfer WBS 5 Site Restoration			

SECTION 1
Assumptions and Results

Craft and non-craft labor hours, total, and by period

Craft	Unit 1	Unit 2	Total
P1a,b	94,359	80,047	174,406
P2a,b	563,748	617,200	1,180,949
P2c	89	88	177
P2d,e	183,989	254,651	438,640
P3b	165,784	779,348	945,133
P3c,d	-	-	-
P3e,f	22,489	22,489	44,978
TOTAL	1,030,460	1,753,823	2,784,282

Non-Craft	Unit 1	Unit 2	Total
P1a,b	813,893	614,282	1,428,175
P2a,b	1,502,368	1,780,717	3,283,085
P2c	114,472	535,845	650,317
P2d,e	209,337	255,897	465,234
P3b	225,649	271,405	497,054
P3c,d	103,100	103,100	206,199
P3e,f	3,454	3,454	6,908
TOTAL	2,972,273	3,564,700	6,536,972

Craft	Unit 2	Unit 3	Total
WBS 1	102,160	102,640	204,800
WBS 2	2,095,560	2,172,120	4,267,680
WBS 3	213,840	352,760	566,600
WBS 4	16,200	16,000	32,200
WBS 5	75,800	340,040	415,840
TOTAL	2,503,560	2,983,560	5,487,120

Non-Craft	Unit 2	Unit 3	Total
WBS 0	49,920	16,640	66,560
WBS 1	1,218,506	1,073,738	2,292,243
WBS 2	4,896,360	4,896,360	9,792,720
WBS 3	384,842	384,842	769,683
WBS 4	643,397	616,502	1,259,899
WBS 5	40,053	60,853	100,906
TOTAL	7,233,077	7,048,935	14,282,012

**SECTION 1
Assumptions and Results**

Security labor hours, total and by period (non-safeguards information)	Security	Unit 1	Unit 2	Total		Security	Unit 2	Unit 3	Total	
	P1a, b	343,200	343,200	686,400		WBS 1	282,880	282,880	565,760	
	P2a, b	919,600	919,600	1,839,200		WBS 2	1,419,840	1,419,840	2,839,680	
	P2c	1,678,914	1,492,229	3,171,143		WBS 3	74,880	74,880	149,760	
	P2d, e	49,996	49,996	99,991		WBS 4	671,760	643,680	1,315,440	
	P3b	102,023	102,023	204,046		WBS 5	40,560	40,560	81,120	
	P3c, d	411,789	411,789	823,577		TOTAL	2,489,920	2,461,840	4,951,760	
	P3e, f	3,561	3,561	7,123						
TOTAL	3,509,083	3,322,398	6,831,480							
Average craft, non-craft and security labor rates	Labor Category	\$/hr			Labor Category	\$/hr				
	Craft	\$66.45			Craft	\$60.11				
	Non-craft	\$85.35			Non-craft	\$86.19				
	Security	\$64.34			Security	\$41.82				
LLRW handled, and removed from site *Includes packaging materials in reported values		Volume (cu ft)	Weight (lbs)			Volume (cu ft)	Weight (lbs)			
	Class A General*	475,302	34,304,356		Class A General	651,827	45,710,508			
	Class A Bulk	698,388	67,463,329		Class A Bulk	2,956,796	197,119,762			
	Class B*	3,465	395,002		Class B	7,736	918,048			
	Class C*	1,148	139,300		Class C	2,380	161,394			
	GTCC	3,000	171,020		GTCC	3,000	203,438			
All LLRW is assumed to be removed from the site.					All LLRW is assumed to be removed from the site.					

SECTION 2
Revenue Requirements and Trust Fund Assumptions

REVENUE REQUIREMENT AND FUNDING CONTRIBUTIONS
(MILLIONS \$)

	Funding Requirements	Revenue Requirements
PG&E Diablo Canyon Units 1 and 2	\$81.276	\$82.517
PG&E Humboldt Unit 3	\$118.573	\$120.383
PG&E Humboldt Unit 3 SAFSTOR	NA	\$9.997
SCE SONGS Unit 2	\$21,974	\$22,221
SCE SONGS Unit 3	\$19,008	\$19,221
SDG&E SONGS Units 2 & 3	\$16.239	\$17.390

TRUST FUND ASSUMPTIONS
BALANCES IN TRUST FUND AS OF SEPTEMBER 30, 2012
(MILLIONS \$)

PG&E	Qualified Diablo Canyon	\$2,108.6
	Non-Qualified Diablo Canyon	\$0.0
	Qualified Humboldt	\$280.0
	Non Qualified Humboldt	\$7.0
SCE	Qualified SONGS	\$2,790.9
	Non-Qualified SONGS	\$42.46
	Qualified Palo Verde	\$868.7
	Non-Qualified Palo Verde	\$67.4
SDG&E	Qualified SDG&E SONGS	\$892.0

<u>Asset Returns Pre and Post Tax</u>	<u>Equity Return (%)</u>		<u>Fixed Income Return (%)</u>	
	<u>Pre Tax</u>	<u>After Tax</u>	<u>Pre Tax</u>	<u>After Tax</u>
SCE	7.79	6.36	4.27	3.42
SDG&E	7.25	5.84	4.25	3.16
PG&E	7.50	6.60	2.90	2.20

Asset Returns After Tax - Pre and Post Retirement	Qualified Trust		Non-Qualified Trust	
	Pre - Retirement Rate %	Post Retirement Rate %	Pre - Retirement Rate %	Post Retirement Rate %
SCE	4.96	3.34	4.48	2.71
SDG&E	4.65	3.16	N/A	N/A
PG&E	4.80	3.16	N/A	N/A