

March 29, 2010

PG&E Letter HBL-10-009

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

Docket No. 50-133, OP-DPR-7 Humboldt Bay Power Plant Unit 3 Decommissioning Funding Report for Humboldt Bay Power Plant Unit 3

Dear Commissioners and Staff:

PG&E is submitting the decommissioning funding report for Humboldt Bay Power Plant (HBPP) Unit 3, pursuant to the requirements of 10 CFR 50.75(f). The decommissioning funding assurance for the Independent Spent Fuel Storage Installation (ISFSI) is addressed in this report in accordance with 10 CFR 72.30(c)(5).

#### **Humboldt Bay Unit 3**

At the end of calendar year 2009, the market value of the HBPP Unit 3 (220 MWt) decommissioning trust funds was \$327.0 million. PG&E estimates an additional \$30.132 million (future nominal dollars) will need to be collected over three years beginning in 2010 based on a site-specific decommissioning cost estimate prepared by TLG Services, Inc. and submitted in the Nuclear Decommissioning Cost Triennial Proceeding (NDCTP) Application 09-04-007 to the California Public Utilities Commission (CPUC). The CPUC Application is based on an ISFSI that would be in operation until 2020 when all fuel would be removed from HBPP by the Department of Energy (DOE). A Decision from the CPUC is imminent.

The market value of the HBPP trust is lower than the minimum NRC decommissioning estimate of \$596.6 million (2010 dollars) that was calculated pursuant to the requirements specified in 10 CFR 50.75(c), which is based on a minimum 1200 MWt plant.

PG&E is confident the HBPP trust, with the noted additional contributions, will be sufficient to ensure successful decommissioning and maintaining the spent fuel in an ISFSI at HBPP until 2020, based on a site-specific decommissioning cost estimate prepared by TLG Services, Inc. and the CPUC Application 09-04-007.

#### Supporting Cost Estimates

Based on a site-specific cost estimate prepared by TLG Services, Inc. PG&E has estimated that the decommissioning costs are approximately \$428.7 million (including \$69.7 million disbursed from the Trust(s) through December 2009 and \$359.0 million

NM 5501

future radiological removal costs) for HBPP Unit 3 in 2010 dollars. These costs do not include site restoration of the facilities (\$2.0 million), nor spent fuel management until 2020 (\$106.4 million).

To assure that sufficient funds will be available for decommissioning, PG&E has established external sinking trust fund accounts for HBPP Unit 3.

#### Supporting Enclosures

Enclosure 1 provides decommissioning funding status information in a format suggested by Nuclear Energy Institute (NEI) and the NRC.

Enclosure 2 provides information on the escalation of the required decommissioning funding amounts from 1986 dollars to 2010 dollars. As required by 10 CFR 50.75(c)(2), and using NUREG-1577, "Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance," Revision 1, and NUREG-1307, "Report on Waste Burial Charges," Revision 13, the information includes escalation factors for energy, labor, and waste burial costs.

Enclosure 3 is Appendix D from the TLG Services, Inc. decommissioning cost estimate report prepared in March 2009 for PG&E for HBPP Unit 3 escalated to 2010 dollars. The report provides cost estimates for decommissioning of both the nuclear and non-nuclear facilities, including the ISFSI.

Enclosure 4 is a cash flow of the total decommissioning of HBPP that identifies the monies for NRC scope (removal of radiological contamination), site restoration (including the non-radiological work) and the spent fuel management.

Enclosure 5 contains the TLG Services, Inc. decommissioning cost estimate report prepared in March 2009 for PG&E for the HBPP Unit 3. The report provides cost estimates for the decommissioning of the nuclear, non-nuclear facilities, and spent fuel management, including operation of the ISFSI in 2008 dollars.

There are no new regulatory commitments in this letter.

If you have questions regarding this submittal, please contact Bob Kapus at 707-444-0810.

\$incerely

James R. Becker

Site Vice President

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### **Enclosures**

cc/enc:

Elmo E. Collins, Jr. John B. Hickman

**INPO** 

PG Fossil Gen HBPP Humboldt Distribution

NRC Decommissioning Funding Status Report
Humboldt Bay Power Plant – Unit 3 (220 MWt)
(2 Pages)

#### NRC Decommissioning Funding Status Report Humboldt Bay Power Plant - Unit 3 (220 MWt)

As provided in 10 CFR 50.75(f)(1), each power reactor licensee is required to report to the NRC on a calendar year basis, beginning March 31, 1999, and annually thereafter, on the status of its decommissioning funding for each reactor that it owns and has already closed.

\$ in Millions

1. The minimum decommissioning fund estimate, pursuant to 10 CFR 50.75 (b) and (c).1

January 2010 dollars

\$ 596.6

(HBPP is a shutdown unit with a Site Specific Cost Study; therefore, the minimum decommissioning fund estimate is based on the Site Specific Cost Study shown in item 8 of this enclosure.)

2. The amount accumulated at the end of the calendar year preceding the date of the report for items included in 10 CFR 50.75 (b) and (c). (Alternatively, the total amount accumulated at the end of the calendar year preceding the date of the report can be reported here if the cover letter transmitting the report provides the total estimate and indicates what portion of that estimate is for items not included in 10 CFR 50.75 (b) and (c)).

Market Value (December 2009 dollars)

\$ 327.0

3. A schedule of the annual amounts remaining to be collected; for items in 10 CFR 50.75 (b) and (c). (Alternatively, the annual amounts remaining to be collected can include items beyond those required in 10 CFR 50.75 (b) and (c) if the cover letter transmitting the report provides a total cost estimate and indicates what portion of that estimate is for items that are not included in 10 CFR 50.75 (b) and (c). All values below are from 2009 NDCTP filing, Final Decision has not been received from the CPUC. (See item 6 of this enclosure describing the collection of additional funds.)

Amount remaining \$30.132

Number of years to collect beginning in 2010 3 years

Annual amount to be collected \$10.044

<sup>&</sup>lt;sup>1 •</sup> The NRC formulas in section 10CFR50.75(c) include only those decommissioning costs incurred by licensees to remove a facility or site safely from service and reduce residual radioactivity to levels that permit: (1) release of the property for unrestricted use and termination of the license; or (2) release of the property under restricted conditions and termination of the license. The cost of dismantling or demolishing non-radiological systems and structures is not included in the NRC decommissioning cost estimates. The costs of managing and storing spent fuel on site until transfers to DOE are not included in the cost formulas.

4. The assumptions used regarding escalation in decommissioning cost, rates of earnings on decommissioning funds (assumes trust will be gradually converted to a more conservative, all fixed income portfolio after 2010), and rates of other factors used in funding projections (all values below are from 2009 NDCTP filing, Final Decision has not been received from the CPUC):

62 perco 76 perco 34 perco	
34 perce	△nt
34 perce	CIIL
95 perce	
95 perc	
95 perc	
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one	
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one	
537.1 2.0 106.4 69.7	
•	o one 537.1 2.0

Calculation of Energy Escalation Factor
Reference NUREG-1307, Revision 13, Section 3.2
(16 Pages)

Nuclear Regulatory Commission Estimate of Decommission Costs for BWR In 2009

HBPP

BWR

(millions)

Jan 1986 Estimate

114.8

,	
Escalated to 1999	(Table 2.1 in NUREG 1307 Rev 12 128.9 has no value for 1999 Burial)
Escalated to 2000	400.2 (\$360.9 in 2000 Submittal)
Escalated to 2001	412.4 (\$425.3 in 2001 Submittal)
Escalated to 2002	418.1 (\$445.6 in 2002 Submittal)
Escalated to 2003	437.3 (\$430.1 in 2003 Submittal)
Escalated to 2004	454.5 (\$439.6 in 2004 Submittal)
Escalated to 2005	485.7 (\$453.2 in 2005 Submittal)
Escalated to 2006	519.2 (\$494.3 in 2006 Submittal)
Escalated to 2007	549.8 (\$548.6 in 2007 Submittal)
Escalated to 2008	565.6 (\$590.9 in 2008 Submittal)
Escalated to 2009	574.4 (\$573.8 in 2009 Submittal)
Escalated to 2010	596.6

<u>Jan 1986</u> based on 10 CFR 50.75 (c) Table of minimum amounts
BWR based on minimum 1200 MWt = (\$104 + (.009xMWt)) million per unit
where BWR less than 1200 MWt use P=1200 MWt, HBPP 220 MWt

#### Calculating Overall Escalation Rate

BWR	Jan-86	Jan-99	Jan-00	Jan-01	Jan-02	Jan-03	Jan-04	Jan-05	Jan-06	Jan-07	Jan-08	Jan-09	Jan-10 W	eight (1)
L (Labor)	1.0000	1.5624	1.6370	1.7183	1.7862	1.8630	1.9521	2.0200	2.0724	2.1465	2.2207	2.2639	2.2948	0.65
E (Energy)	1.0000	0.8257	1.0220	1.1841	0.9715	1.2003	1.2131	1.4810	1.8656	1.8226	2.3961	1.7963	2.1241	0.13
B (Burial)	1.0000	0.0000	10.4061	10.5540	10.7015	11.0993	11.5119	12.3889	13.3331	14.3491	14.4164	14.9931	15.5874	0.22

<sup>(1)</sup> from NUREG 1307 Revision 13, Report on Waste Burial Charges, Section 2 Summary, Page 3 ... where A, B, and C are the fractions of the total 1986 dollar costs that are attributable to labor (0.65), energy (0.13), and burial (0.22), respectively, and sum to 1.0.

BW	R
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Combined	Escalation	Rate	for:

ined Escal	ation Rate i	or:											
	Jan-86	Jan-99	Jan-00	Jan-01	Jan-02	Jan-03	Jan-04	Jan-05	Jan-06	Jan-07	Jan-08	Jan-09	Jan-10
	1.0000	1.1229	3.4862	3.5927	3.6417	3.8088	3.9592	4.2311	4.5229	4.7890	4.9265	5.0035	5.1970

<sup>(2)</sup> Jan-01, Jan-03, Jan-05, Jan-07, Jan-08, Jan-09, and Jan-10 B (Burial) value in this table see calculation notes in Development of B Component spreadsheet

	PPI for Fuels &	PPI for Light	PPI for Fuels &	PPI for Light	Energy Escalation
	Related Products	Fuel Oils	Related Products	Fuel Oils	Factor (E)
		(1982=100)	(1986 = 100)	(1986=100)	for BWR
	(1982 = 100)				
	(P) =Industrial Energy Power	(F) = Light Fuel Oils	(P) =Industrial Energy Power	(F) = Light Fuel Oils	(Humboldt)
	·		BWR wt = 0.54	BWR wt = 0.46	
Jan-86	114.2	82.0	1.0000	. 1.0000	1.0000
Feb-86	115.0	62.4	1.0070	0.7610	·0.8938 ·
Mar-86	114.4	51.3	1.0018	0.6256	0.8287
Apr-86	113.7	49.8	0.9956	0.6073	0.8170
May-86	114.1	47.0	0.9991	0.5732	0.8032
Jun-86	115.3	44.7	1.0096	0.5451	0.7960
Jul-86	116.2	36.4	1.0175	0.4439	0.7537
Aug-86	116.3	40.1	1.0184	0.4890	0.7749
		46.3	1.0184	0.5646	0.8097
Sep-86	116.3		0.9895	0.5256	0.7761
Oct-86	113.0	43.1	0.9869		0.7769
Nov-86	112.7	43.5		0.5305	
Dec-86	112.3	45.6	0.9834	0.5561	0.7868
Jan-87	110.3	51.4	0.9658	0.6268	0.8099
Feb-87	109.8	53.1	0.9615	0.6476	0.8171
Mar-87	110.2	49.7	0.9650	0.6061	0.7999
Apr-87	109.9	52.0	0.9623	0.6341	0.8114
May-87	111.8	53.3	0.9790	0.6500	0.8277
Jun-87	113.9	55.1	0.9974	0.6720	0.8477
Jul-87	116.2	56.3	1.0175	0.6866	0.8653
Aug-87	115.7	59.4	1.0131	0.7244	0.8803
Sep-87	. 115.5	56.8	1.0114	0.6927	0.8648
Oct-87	111.0	59.3	0.9720	0.7232	0.8575
Nov-87	109.2	61.2	0.9562	0.7463	0.8597
Dec-87	109.6	58.1	0.9597	0.7085	0.8442
Jan-88	108.8	54.8	0.9527	0.6683	0.8219
Feb-88	109.0	51.5	0.9545	0.6280	0.8043
Mar-88	109.0	49.7	0.9545	0.6061	0.7942
Apr-88	109.1	53.3	0.9553	0.6500	0.8149
May-88	108.9	54.3	0.9536	0.6622	0.8195
Jun-88	117.2	50.6	1.0263	0.6171	0.8380
Jul-88	118.2	46.9	1.0350	0.5720	0.8220
Aug-88	118.3	46.8	1.0359	0.5707	0.8219
Sep-88	118.5	45.9	1.0377	0.5598	0.8178
Oct-88	114.2	42.3	1.0000	0.5159	0.7773
Nov-88	109.2	47.2	0.9562	0.5756	0.7811
Dec-88	110.5	50.6	0.9676	0.6171	0.8064
Jan-89	112.0	54.9	0.9807	0.6695	0.8376
Feb-89	112.0	54.0	0.9807	0.6585	0.8325
Mar-89	112.3	57.3	0.9834	0.6988	0.8525
Apr-89	112.4	61.5	0.9842	0.7500	0.8765
May-89	. 113.6	57.5	. 0.9947	0.7012	0.8597
Jun-89	119.8	53.3	1.0490	0.6500	0.8655
		52.7	1.0701	0.6427	0.8735
Jul-89	122.2	53.5	1.0701	0.6524	0.8789
Aug-89	122.4	53.5 59.3			0.8789
Sep-89	122.5		1.0727	0.7232	
Oct-89	117.2	64.0	1.0263	0.7805	0.9132
Nov-89	113.5	64.4	0.9939	0.7854	0.8980
Dec-89	114.2	68.1	1.0000	0.8305	0.9220
Jan-90	114.9	85.3	1.0061	1.0402	1.0218

	DDI for Eurolo 9	DDI for Light	REBASED TO 1986 =		F	
	PPI for Fuels &	PPI for Light	PPI for Fuels &	PPI for Light	Energy Escalation	
	Related Products	Fuel Oils	Related Products	Fuel Oils	Factor (E)	
	(1982 = 100)	(1982=100)	(1986 = 100)	(1986=100)	for BWR	
	(P) =Industrial Energy Power	(F) = Light Fuel Oils	<ul><li>(P) =Industrial Energy Power</li></ul>	(F) = Light Fuel Oils	(Humboldt)	
	•		BWR wt = 0.54	BWR wt = 0.46	, ,	
			•			
Feb-90	115.0	59.4	1.0070	0.7244	0.8770	
Mar-90	115.4	60.4	1.0105	0.7366	0.8845	
Apr-90	115.1	61.0	1.0079	0.7439	0.8865	
May-90	117.0	58.4	1.0245	0.7122	0.8808	
Jun-90	123.9	53.0	1.0849	0.6463	0.8832	
Jul-90	124.4	51.6	1.0893	0.6293	0.8777	
Aug-90	124.6	72.3	1.0911	0.8817	0.9948	
Sep-90	125.0	87.3	1.0946	1.0646	1.0808	
Oct-90	121.2	104.8	1.0613	1.2780	1.1610	
Nov-90	120.2	98.9	1.0525	1.2061	1.1232	
Dec-90	118.9	89.3	1.0412	1.0890	1.0632	
Jan-91	124.2	82.9	1.0876	1.0110	1.0523	
Feb-91	124.3	74.3	1,0884	, 0.9061	1.0046	
Mar-91	124.3	61.6	1.0884	0.7512	0.9333	
Apr-91	124.7	60.0	1,0919	0.7312		
May-91	128.2	59.6			0.9262	
Jun-91	132.6		1.1226	0.7268	0.9405	
		57.6	1.1611	0.7024	0.9501	
Jul-91	134.5	58.1	1.1778	0.7085	0.9619	
Aug-91	133.8	62.1	1.1716	0.7573	0.9810	
Sep-91	133.8	65.4	1.1716	0.7976	0.9996	
Oct-91	128.3	67.6	1.1235	0.8244	0.9859	
Nov-91	123.1	71.0	1.0779	0.8659	0.9804	
Dec-91	125.1	62.2	1.0954	0.7585	0.9405	
Jan-92	125.9	54.4	1.1025	0.6634	0.9005	
Feb-92	125.3	57.3	1.0972	0.6988	0.9139	
Mar-92	125.8	56.0	1.1016	0.6829	0.9090	
Apr-92	124.8	59.0	1.0928	0.7195	· 0.9211	
May-92	128.5	62.1	1.1252	0.7573	0.9560	
Jun-92	134.8	65.4	1.1804	0.7976	1.0043	
Jul-92	135.6	64.6	1.1874	0.7878	1.0036	
Aug-92	135.1	63.3	1.1830	0.7720	0.9939	
Sep-92	135.9	65.6	1.1900	0.8000	1.0106	
Oct-92	131.2	68.2	1.1489	0.8317	1.0030	
Nov-92	125.5	64.2	1.0989	0.7829	0.9536	
Dec-92	126.7	59.4	1.1095	0.7244	0.9323	
Jan-93	127.1	59.0	1.1130	0.7195	0.9320	
Feb-93	126.4	60.4	1.1068	0.7366	0.9365	
Mar-93	126.7	63.2	1.1095	0.7707	0.9536	
Apr-93	126.8	62.4	1.1103	0.7610		
May-93	127.5	62.6	1.1165		0.9496	
Jun-93	136.9	60.8		0.7634	0.9541	
Jul-93			1.1988	0.7415	0.9884	
	137.1	`57.0	1.2005	0.6951	0.9680	
Aug-93	137.2	54.4	1.2014	0.6634	0.9539	
Sep-93	137.6	59.3	1.2049	0.7232	0.9833	
Oct-93	131.9	65.4	1.1550	0.7976	0.9906	
Nov-93	126.3	61.6	1.1060	0.7512	0.9428	
Dec-93	126.0	51.4	1.1033	0.6268	0.8841	
Jan-94	126.2	51.5	1.1051	0.6280	0.8856	
Feb-94	125.9	57.5	1.1025	0.7012	0.9179	

	REBASED TO 1986 = 100							
	PPI for Fuels &	PPI for Light	PPI for Fuels &	PPI for Light	Energy Escalation			
	Related Products	Fuel Oils	Related Products	Fuel Oils	Factor (E)			
	(1982 = 100)	. (1982=100)	(1986 = 100)	(1986=100)	for BWR			
	(P) =Industrial Energy Power	(F) = Light Fuel Oils	(P) =Industrial Energy Power	(F) = Light Fuel Oils	(Humboldt)			
	· ,		BWR wt = 0.54	BWR wt = 0.46	(**************************************			
Mar-94	125.8	56.2	1.1016	0.6854	0.9101			
Apr-94	125.4	54.7	1.0981	0.6671	0.8998			
May-94	126.0	54.7	1.1033	0.6671	0.9027			
Jun-94	133.5	54.1	1.1690	0.6598	0.9347			
Jul-94	134.5	56.3	1.1778	0.6866	0.9518			
Aug-94	134.5	57.5	1.1778	0.7012	0.9586			
Sep-94	134.9	57.7	1.1813	0.7037	0.9616			
Oct-94	129.1	57.7	1.1305	0.7037	0.9341			
Nov-94	127.0	58.8	1.1121	0.7171	0.9304			
Dec-94	127.4	54.7	1.1156	0.6671	0.9093			
Jan-95	127.6	54.7	1.1173	0.6671	0.9102			
Feb-95	128.0	53.3	1.1208	0.6500	0.9043			
Mar-95	128.3	54.3	1.1235	0.6622	0.9113			
Apr-95	126.4	57.1	1.1068	0.6963	0.9180			
May-95	. 130.2	59.1	1.1401	0.7207	0.9472			
Jun-95	135.3	55.8	1.1848	0.6805	0.9528			
Jul-95	136.6	53.5	1.1961	0.6524	0.9460			
Aug-95	136.5	55.6	1.1953	0.6780	0.9573			
Sep-95	133.7	58.2	1.1708	0.7098	0.9587			
Oct-95	131.4	57.8	1.1506	0.7049	0.9456			
Nov-95	127.6	59.5	. 1.1173	0.7256	0.9371			
Dec-95	127.7	60.6	1.1182	0.7390	0.9438			
Jan-96	127.9	62.6	1.1200	0.7634	0.9560			
Feb-96 Mar-96	127.1	59.7	1.1130	0.7280	0.9359			
Apr-96	127.8	63.5	1.1191	0.7744	0.9605			
Арі- <del>э</del> б Мау-96	129.1 135.0	74.7 72.0	1.1305 1.1821	0.9110	1.0295			
Jun-96	137.5	62.8	1.2040	0.8780 0.7659	1.0423			
Jul-96	136.0	64.3	1,1909	0.7841	1.0025			
Aug-96	136.2	66,5	1.1926	0.8110	1.0038			
Sep-96	136.2	73.4	1.1926	0.8951	1.0171 1.0558			
Oct-96	131.2	79.7	1.1489	0.9720	1.0675			
Nov-96	127.1	76.5	1,1130	0.9329	1.0301			
Dec-96	127.7	76.1	1.1182	0.9280	1.0307			
Jan-97	128.3	73.7	1.1235	0.8988	1.0201			
Feb-97	128.1	72.3	1.1217	0.8817	1.0113			
Mar-97	128.2	65.2	1.1226	0.7951	0.9720			
Apr-97	127.3	65.3	1.1147	0.7963	0.9683			
May-97	129.7	64.2	1.1357	0.7829	0.9734			
Jun-97	135.1	60.8	1.1830	0.7415	0.9799			
Jul-97	135.9	57.8	1.1900	0.7049	0.9669			
Aug-97	134.7	61.5	. 1.1795	0.7500	0.9819			
Sep-97	136.0	60.4	1.1909	0.7366	0.9819			
Oct-97	130.1	64.8	1.1392	0.7902	0.9787			
Nov-97	127.9	65.8	1.1200	0.8024	0.9739			
Dec-97	128.3	59.4	1,1235	0.7244	0.9399			
Jan-98	127.4	54.1	1.1156	0.6598	0.9059			
Feb-98	127.2	52.0	1.1138	0.6341	0.8932			
Mar-98	126.7	48.3	1.1095	0.5890	0.8701			

	REBASED TO 1986 = 100							
	PPI for Fuels & Related Products	PPI for Light Fuel Oils	PPI for Fuels & Related Products	PPI for Light Fuel Oils	Energy Escalation Factor (E)			
	(1982 = 100)	(1982=100)	(1986 = 100)	(1986=100)	for BWR			
	(P) =Industrial Energy Power	(F) = Light Fuel Oils	(P) =Industrial Energy Power	(F) = Light Fuel Oils	(Humboldt)			
	•	•	BWR wt = 0.54	BWR wt = 0.46	(**************************************			
Apr-98	126.4	50.2	1.1068	0.6122	0.8793			
May-98	129.2	50.0	1.1313	0.6098	0.8914			
Jun-98	133.8	46.3	1.1716	0.5646				
Jul-98	134.8	45.0	1.1710	0.5488	0.8924			
Aug-98	135.2	44.0			0.8898			
Sep-98	135.2	48.3	1.1839	0.5366	0.8861			
Oct-98	130.4	47.4	1.1839	0.5890	0.9103			
Nov-98	127.6	46.2	1.1419	0.5780	0.8825			
Dec-98			1.1173	0.5634	0.8625			
Jan-99	126.6	38.8	1.1086	0.4732	0.8163			
	126.1	40.9	1.1042	0.4988	0.8257			
Feb-99	125.5	38.2	1.0989	0.4659	0.8077			
Mar-99	125.5	42.8	1.0989	0.5220	. 0.8335			
Apr-99	125.2	52.5	1.0963	0.6402	0.8865			
May-99	127.4	52.6	1.1156	0.6415	0.8975			
Jun-99	131.0	52.4	1.1471	0.6390	0.9134			
Júl-99	133.9	58.7	1.1725	0.7159	0.9624			
Aug-99	133.9	63	1.1725	0.7683	0.9866			
Sep-99	134.1	67.6	1.1743	0.8244	1.0133			
Oct-99	129.5	65.5	1.1340	0.7988	0.9798			
Nov-99	127.5	71.3	1.1165	0.8695	1.0029			
Dec-99	126.5	72.9	1.1077	0.8890	1.0071			
Jan-00	126.8	75.3	1.1103	0.9183	1.0220			
Feb-00	126.7	87.9	1.1095	1.0720	1.0922			
Mar-00	126.7	89.7	1.1095	1.0939	1.1023			
Apr-00	126.8	83.1	1.1103	1.0134	1.0658			
May-00	128.6	82.9	1.1261	1.0110	1.0731			
Jun-00	133.6 .	86.2	1.1699	1.0512	1,1153			
Jul-00	136.2	88.7	1.1926	1.0817	1.1416			
Aug-00	137.4	91.6	1.2032	1.1171	1.1636			
Sep-00	137.8	110.1	1.2067	1.3427	1.2692			
Oct-00	134.1	108.6	1.1743	1.3244	1.2433			
Nov-00	130.9	108.4	1.1462	1.3220	1.2271			
Dec-00	132.7	100.6	1.1620	1.2268	1.1918			
Jan-01	136.4	96.1	1.1944	1.1720	1.1841			
Feb-01	136.4	91.6	1.1944	1.1171	1.1588			
Mar-01	136.5	83.1	1.1953	1.0134	1.1116			
Apr-01	135.1	86.2	1.1830	1.0512	1.1224			
May-01	136.2	94.2	1.1926	1.1488	1.1725			
Jun-01	148.4	90.2	1.2995	1.1000	1.2077			
Jul-01	149.5	81.3	1.3091	0.9915	1.1630			
Aug-01	148.9	83.2	1.3039	1.0146	1.1708			
Sep-01	148.2	93	1.2977	1:1341	1.2225			
Oct-01	143.8	76.8	1.2592	0.9366	1.1108			
Nov-01	137.3	70.5	1.2023	0.8598	1.0447			
Dec-01	136.9	56.6	1.1988	0.6902	0.9649			
Jan-02	136.3	58.3	1.1935	0.7110	0.9715			
Feb-02	135.4	59.6	1.1856	0.7268	0.9715			
Mar-02	135.7	69.1	1.1883	0.7268	1.0293			
Apr-02	135.4	76.4	1.1856	0.9317	1,0293			
, tpr 02	100.7	10.4	1.1000	0.9317	, 1.0000			

Coming recognition	REBASED TO 1986 = 100							
	PPI for Fuels &	PPI for Light	PPI for Fuels &	PPI for Light	Energy Escalation			
	Related Products	Fuel Oils	Related Products	Fuel Oils	Factor (E)			
	(1982 = 100)	(1982=100)	(1986 = 100)	(1986=100)	for BWR			
	(P) =Industrial Energy Power	(F) = Light Fuel Oils	(P) =Industrial Energy Power	(F) = Light Fuel Oils	(Humboldt)			
	(F) -Industrial Energy Fower	(i ) = Eigni i dei Olis	BWR wt = 0.54	BWR wt = 0.46	(Hambolat)			
			DV/( Wt ~ 0.54	DVVI\ W( = 0.40				
May-02	137.9	75	1.2075	0.9146	1.0728			
Jun-02	143.6	71.4	1.2574	0.8707	1.0796			
Jul-02	144.9	75.5	1.2688	0.9207	1.1087			
Aug-02	145.0	77.9	1.2697	0.9500	1.1226			
Sep-02	145.8	89.5	1.2767	1.0915	1.1915			
Oct-02	140.0	95.1	1.2259	1.1598	1.1955			
Nov-02	139.5	82.8	1.2215	1.0098	. 1.1241			
					1.1347			
Dec-02	139.6	84.6	1.2224	1.0317				
Jan-03	140.3	95.7	1.2285	1.1671	1.2003			
Feb-03	140.6	120.4	1.2312	1.4683	1.3402			
Mar-03	143.3	128.9	1.2548	1.5720	1.4007			
Apr-03	144.3	98.3	1.2636	1.1988	1.2338			
May-03	145.1	85.5	1.2706	1.0427	1.1657			
Jun-03	. 148.3	87.2	1.2986	1.0634	1.1904			
Jul-03	151.6	90.1	1.3275	1.0988	1.2223			
Aug-03	151.3	94.1	1.3249	1.1476	1.2433			
Sep-03	152.0	88.2	1.3310	1.0756	1.2135			
Oct-03	147.4	97.8	1.2907	1.1927	1.2456			
Nov-03	142.7	93.0	1.2496	1.1341	1.1965			
Dec-03	142.9	95.8	1.2513	1.1683	1.2131			
Jan-04	143.1	106.8	1.2531	1.3024	1.2758			
Feb-04	143.1	100.8	1.2531	1.2293	1.2421			
Mar-04	. 143.1	107.8	1.2531	1.3146	1.2814			
Apr-04	143.1	115.2	1.2531	1.4049	1.3229			
May-04	144.2	116	1.2627	1.4146	1.3326			
Jun-04	152.4	111.5	1.3345	1.3598	1.3461			
Jul-04	152.2	119.3	1.3327	1.4549	1.3889			
Aug-04	154.0	131.1	1.3485	1.5988	1.4636			
Sep-04	. 154.0	136.8	1.3485	1.6683	1.4956			
Oct-04	145.8	161.7	1.2767	1.9720	1.5965			
Nov-04	144.9	153.6	1.2688	1.8732	1.5468			
Dec-04	146.2	133.8	1.2802	1.6317	1.4419			
Jan-05	148.9	138.5	1.3039	1.6890	1,4810			
Feb-05	148.0	146	1.2960	1.7805	1.5188			
Mar-05	148.1	169.4	1.2968	2.0659	1.6506			
Apr-05	148.7	170.9	1.3021	2.0841	1.6618			
		165.3	1.3231	2.0159	1.6418			
May-05	151.1 159.7	180.6	1.3984	2.2024	1.7683			
Jun-05		186.2		2.2707	1,8110			
Jul-05	162.1		1.4194		1.8595			
Aug-05	162.5	194.5	1,4229	2.3720				
Sep-05	162.8	209.9	1.4256	2.5598	1.9473			
Oct-05	159.5	252.0	1.3967	3.0732	2.1679			
Nov-05	161.1	199.1	1.4107	2.4280	1.8787			
Dec-05	161.4	193.6	1.4133	2.3610	1.8492			
Jan-06	167.0	191.8	1.4623	2.3390	1.8656			
Feb-06	168.6	190.0	1.4764	2.3171	1.8631			
Mar-06	167.4	199.2	1.4658	2.4293	1.9090			
Apr-06	169.6	221.9	1.4851	2.7061	2.0468			
May-06	170.8	231.4	1.4956	2.8220	2.1057			
	4	•						

	•		REBASED TO 1986 =	•	
	PPI for Fuels &	PPI for Light	PPI for Fuels & .	PPI for Light	Energy Escalation
	Related Products	Fuel Oils	Related Products	Fuel Oils	Factor (E)
	(1982 = 100)	(1982=100)	(1986 = 100)	(1986=100)	for BWR
	<ul><li>(P) =Industrial Energy Power</li></ul>	(F) = Light Fuel Oils	(P) ≍Industrial Energy Power	(F) = Light Fuel Oils	(Humboldt)
		*	BWR wt = 0.54	BWR wt = 0.46	, ,
Jun-06	181.2	238.1	1.5867	2,9037	2.1925
Jul-06	181.9	231.6	1.5928	2.8244	2.1593
Aug-06	180,2	241.4	1.5779	2.9439	2.2063
Sep-06	181.0	203.1	1.5849	2.4768	1.9952
Oct-06	171,2	198.1	1.4991	2.4159	1.9208
Nov-06	167.2	198.2	1.4641	2.4171	1.9025
Dec-06	167.8	200.4	J 1,4694	2.4439	1.9176
Jan-07	171.9	180.0	1.5053	2.1951	1.8226
Feb-07	175.7	191.5	1.5385	2.3354	1.9051
Mar-07	172.1	215.1	1.5070	2.6232	2.0204
Apr-07	173.1	231.8	1.5158	2.8268	2.1189
May-07	179.2	225.3	1.5692	2.7476	2.1112
Jun-07	186.7	222.4	1.6349	2.7122	2.1304
Jul-07	187.0	237.8	1.6375	2.9000	2.2182
Aug-07	187.6	225.5	1.6427	2.7500	2.1521
Sep-07	188,4	238.9	1.6497	2.9134	2.2310
Oct-07	182.7	243.3	1.5998	2.9671	2.2288
Nov-07	180.3	288.2	1.5788	3.5146	2.4693
Dec-07	180.0	266.7	1.5762	3.2524	2.3473
Jan-08	181.9	273.8	1.5928	3.3390	2.3961
Feb-08	180.0	280.2	1.5762	3.4171	2.4230
Mar-08	183.1	339.6	1.6033	4.1415	2.7709
Apr-08	185,2	352.5	1.6217	4.2988	2.8532
May-08	189.5	384.9	1.6594	4.6939	3.0553
Jun-08	191.9	410.5	1.6804	5.0061	3.2102
Jul-08	196.1	423.8	1.7172	5.1683	3.3047
Aug-08	197.1	343.9	1.7259	4.1939	2.8612
Sep-08	195.9	335.1	1.7154	4.0866	2.8062
Oct-08	193.0	279.0	1.6900	3.4024	2.4777
Nov-08	187.7	218.2	1.6436	2.6610	2.1116
Dec-08	188.3	163.0	1.6489	1.9878	1.8048
Jan-09	190.3	159.8	1.6664	1.9488	1.7963
Feb-09	190.3	145.6	1.6664	1.7756	1.7166
Mar-09	187.6	136.8	1.6427	1.6683	1.6545
Apr-09	186.9	159.9	1.6366	1.9500	1.7808
May-09	190.5	158.6	1.6681	1.9341	1.7905
Jun-09	193.3	183.7	1.6926	2.2402	1.9445
Jul-09	196.2	165.2	1.7180	2.0146	1.8545
Aug-09	194.7	196.1	1.7049	2.3915	2.0207
Sep-09	194.9	186.6	1.7067	2.2756	1.9684
Oct-09	191.7	193.7	1.6786	2.3622	1.9931
Nov-09	186.4	208.2	1.6322	2.5390	2.0494
Dec-09	187.1	197.7	1.6384	2.4110	1.9938
Jan-10	188.1	220.1	1.6471	2.6841	2.1241
			*** ** *	.=	

Oct 09 through Jan 10 are Preliminary Values from PPI Indices

	Employment Cost West Region	Labor
	Private Industry (1989=100)	Escalation Factor
Jan-86 Feb-86	89.8	1.00000
Mar-86 Apr-86 May-86	90.8	1.01114
Jun-86 Jul-86 Aug-86	91.2	1.01559
Sep-86 Oct-86 Nov-86	91.6	1.02004
Dec-86 Jan-87 Feb-87	92.5	1.03007
Mar-87 Apr-87 May-87	92.6	1.03118
Jun-87 Jul-87 Aug-87	93.7	1.04343
Sep-87 Oct-87 Nov-87	94.1	1.04788
Dec-87 Jan-88 Feb-88	95.4	1.06236
Mar-88 Apr-88 May-88	96.3	1.07238
Jun-88 Jul-88 Aug-88	97	1.08018
Sep-88 Oct-88 Nov-88	97.7	1.08797
Dec-88 Jan-89 Feb-89	98.8	1.10022
Mar-89 Apr-89 May-89	100	1.11359
Jun-89 Jul-89 Aug-89	101	1.12472
Sep-89 Oct-89 Nov-89	101.8	1.13363

	Employment Cost Inc	dust
	West Region	Labor
	Private Industry	Escalation
	(1989=100)	Factor
D 90		
Dec-89	103.3	1.15033
Jan-90 Feb-90	103.3	1,15055
Mar-90		
Apr-90	104.5	1.16370
May-90	104.5	1.10370
Jun-90		
Jul-90	105.6	1.17595
Aug-90	100.0	
Sep-90		
Oct-90	106.3	1.18374
Nov-90		
Dec-90		
Jan-91	107.5	1.19710
Feb-91		
Mar-91		
Apr-91	108.9	1.21269
May-91		
Jun-91		
Jul-91	110	1.22494
Aug-91		
Sep-91		
Oct-91	110.9	1.23497
Nov-91		
Dec-91	444.0	4.04040
Jan-92	111.9	1.24610
Feb-92		
Mar-92	442.0	4.05704
Apr-92	112.9	1.25724
May-92 Jun-92		
Jul-92 Jul-92	114.1	1.27060
Aug-92	117,1	1.27000
Sep-92		
Oct-92	114.9	1.27951
Nov-92		,
`Dec-92		
Jan-93	1,16.2	1.29399
Feb-93		
Mar-93		
Apr-93	116.4	1.29621
May-93		
Jun-93		
Jul-93	117.8	1.31180
Aug-93		
Sep-93		
Oct-93	118.1	1.31514

	Employment Cost I	ndust
	West Region	Labor
	Private Industry (1989=100)	Escalation Factor
	(1303-100)	1 actor
Nov-93		
Dec-93		
Jan-94	119.4	1.32962
Feb-94		
Mar-94		
Apr-94	120.5	1.34187
May-94		
Jun-94		
Jul-94	121.3	1.35078
Aug-94		
Sep-94		
Oct-94	121.7	1.35523
Nov-94		
Dec-94	100.0	
Jan-95	122.6	1.36526
Feb-95		•
Mar-95	400.4	
Apr-95	123.4	1.37416
May-95		<u>,</u>
Jun-95	400.0	4.07070
Jul-95	123.9	1.37973
Aug-95		
Sep-95	405	4.00400
Oct-95	125	1.39198
Nov-95		
Dec-95	105.0	4 40000
Jan-96 Feb-96	125.9	1.40200
Mar-96		
Apr-96	127.3	1.41759
Дрг-90 Мау-96	127.5	1.41709
Jun-96		
Jul-96	128.3	1.42873
Aug-96	. 120.0	1.42075
Sep-96		
Oct-96	128.9	1.43541
Nov-96	,20.0	1.10011
Dec-96		
Jan-97	130.3	1.45100
Feb-97	•	
Mar-97		
Apr-97	131.4	1.46325
May-97		
Jun-97		
Jul-97	132.5	1.47550
Aug-97		•
Sep-97		

	Employment Cost Ind West Region Private Industry	lust Labor Escalation
	(1989=100)	Factor
Oct-97	133.4	1.48552
Nov-97		
Dec-97		
Jan-98	135.2	1.50557
Feb-98		
Mar-98	•	
Apr-98	136.6	1.52116
May-98		
Jun-98		
Jul-98	138.5	1.54232
Aug-98		*
Sep-98		
Oct-98	140	1.55902
Nov-98	·	
Dec-98		4 50000
Jan-99	140.3	1.56236
Feb-99		
Mar-99	142.1	1.58241
Apr-99	142.1	1.30241
May-99 Jun-99		
Jul-99	143.3	1.59577
Aug-99		1.55577
Sep-99		
Oct-99	144.7	1.61136
Nov-99		
Dec-99		
Jan-00	147	1.63697
Feb-00		
Mar-00	,	
Apr-00	148.8	1.65702
May-00		
Jun-00		
Jul-00	150.8	1.67929
Aug-00		
Sep-00		
Oct-00	151.8	1.69042
Nov-00		
Dec-00		
Jan-01	154.3	1.71826
Feb-01	•	
Mar-01		1
Apr-01	156	1.73719
May-01		
Jun-01	467.0	. 4 75504
Jul-01	157.6	1.75501
Aug-01		

	Employment Cost Ind	ust
	West Region	Labor
	Private Industry	Escalation
•	(1989=100)	Factor
Sep-01		
Oct-01	159.4	1.77506
Nov-01		1.77000
Dec-01		
Jan-02	160.4	1.78619
Feb-02		
Feb-02		
Mar-02		
Apr-02	162.9	1.81403
May-02	•	
Jun-02		
Jul-02	163.8	1.82405
Aug-02		
Sep-02		
Oct-02	165	1.83742
Nov-02		
Dec-02		
Jan-03	167.3	1.86303
Feb-03		
Mar-03		
Apr-03	169.5	1.88753
May-03		
Jun-03		
Jul-03	171.4	1.90869
Aug-03		
Sep-03	170.0	1.01750
Oct-03 Nov-03	172.2	1.91759
Dec-03		
Jan-04	175.3	1.95212
Feb-04	173.5	1.93212
Mar-04		
Apr-04	176.8	1.96882
May-04	,,,,,,,	
Jun-04		
Jul-04	178:1	1.98330
Aug-04		•
Sep-04		
Oct-04	179.0	1.99332
Nov-04		
Dec-04		
Jan-05	181.4	2.02004
Feb-05		
Mar-05		
Apr-05	183.3	2.04120
May-05		
Jun-05	4	

	Employment Cost West Region Private Industry (1989=100)	Indust Labor Escalation Factor
Jul-05 Aug-05	184	2.04900
Sep-05 Oct-05 (Note 1) Nov-05	100	2.06000
Dec-05 Jan-06 Feb-06	100.6	2.07236
Mar-06 Apr-06 May-06	101.8	2.09708
Jun-06 Jul-06 Aug-06	102.5	2.11150
Sep-06 Oct-06 Nov-06	103	2.12180
Dec-06 Jan-07 Feb-07	104.2	2.14652
Mar-07 Apr-07 May-07	104.9	2.16094
Jun-07 Jul-07 Aug-07	105.7	2.17742
Sep-07 Oct-07 Nov-07	106.5	2.19390
Dec-07 Jan-08 Feb-08	107.8	2.22068
Mar-08 Apr-08 May-08 Jun-08	108.4	2.23304
Jul-08 Jul-08 Aug-08 Sep-08	109.3	2.25158
Oct-08 Nov-08 Dec-08	109.4	2.25364
Jan-09 Feb-09 Mar-09	109.9	2.26394
Apr-09 May-09	110.1	2.26806

	Employment Cost I West Region Private Industry (1989=100)	ndust Labor Escalation Factor
Jun-09		
Jul-09	110.3	2.27218
Aug-09		
Sep-09		
Oct-09	110.7	2.28042
Nov-09		
Dec-09		
Jan-10	111.4	2.29484

Jan-10 is an estimate based on the difference between Jul-09 and Oct-09 added to Oct-09

Development of Burial Escalation

Developed from NUREG-1307 Revision 13

Table 2.1 "VALUES OF B SUB-X AS A FUNCTION OF LLW BURIAL SITE, WASTE VENDOR, AND YEAR" (Summary for non-Atlantic Compact)
Revised to Bx Values for Generic LLW Disposal Site (Assumed to be same as that provided for the Atlantic Compact for lack of a better alternative at this time.

	BWR Buriat Costs (South Carolina)	BWR Restated to 1986 = 100
1986	1.561	1.0000
1987		
1988	1.831	1.1730
1989		
1990 1991	2.361	4 5405
1991	2.301	1.5125
1992	9.434	6.0436
1994	9.794	6.2742
1995	10.42	6.6752
1996	10.379	6.6489
1997	13.837	8.8642
1998	13.948	8.9353
1999	10.010	0.0000
2000	16.244	10.4061
2001	16.474	10.5535
2002	16.705	10.7015
2003	17.326	11.0993
2004	17.970	11.5119
2005	19.339	12.3889
2006	20.813	13.3331
2007	22.399	14.3491
2008	22.504	14.4164
2009	23.404	14.9931
2010	24.332	15.5874

Table 2.1 Note ('c) From 7/1/95 through 6/30/2000 access was allowed for all states except North Carolina. Effective 7/1/2000 rates are based on whether a waste generator is or is not a member of the Atlantic Compact.

2001 has no information in NUREG-1307 Rev 12. 2001 is an estimate that is calculated by applying the average % change between 2000 and 2002 and adding to the 2000 base

2003 has no information in NUREG-1307 Rev 12. 2003 is an estimate that is calculated by applying the average % change between 2002 and 2004 and adding to the 2002 base

2005 has no information in NUREG-1307 Rev 12. 2005 is an estimate that is calculated by applying the average % change between 2004 and 2006 and adding to the 2004 base.

2007 has no information in NUREG-1307 Rev 12. 2007 is an estimate that is calculated by applying the average % change between 2004 and 2006 and adding to the 2006 base.

2008 has no information in NUREG-1307 Rev 12. 2008 is an estimate that is calculated by applying the average % change between 2004 and 2006 and adding to the 2007 base.

2009 has no information in NUREG-1307 Rev 13. 2009 is an estimate that is calculated by applying the average % change between 2006 and 2008 and adding to the 2008 base.

2010 has no information in NUREG-1307 Rev 13. 2010 is an estimate that is calculated by applying the average % change between 2006 and 2008 and adding to the 2008 base

Humboldt Bay Power Plant Unit 3

Decommissioning Cost Estimate

(9 Pages)

			2		Tho	usands of 20	08 Dollars										Thous	ands of 2010 D	ollars			
						Off-Site	LLRW												LLRW			
Activity		Decon	Removal	Packaging	Transport	Processing	Disposal	Other	Total			Class B		GTCC	Decon	Removal Packagin	g Transport			Other	Total	То
Index	Activity Description	Cost	Cost	Costs	Costs	Costs	Costs	Costs	Contingency	Costs	Cu. Feet	Cu. Feet	Cu. Feet	Cu. Feet	Cost	Cost Costs	Costs	Costs	Costs	Costs C	ontingency	Cos
PERIOD 2 -	- SAFSTOR Dormancy																			-		
······	ISFSI Completed Projects																					
	ISFSI Design & Licensing 1998-2000			-		-		5,362		5,362		-	_	· .	_		<del>-</del>			5,362		5,36
	ISFSI Design & Licensing 2001		· · ·	-	-	· -	-	398		398	-	-	-	· -	-			-	-	398	-	39
	ISFSI Design & Licensing 2002		-	-			-	114		114		-	-	-		- :		-	-	114		11
	ISFSI Design & Licensing 2003			-	-	-	-	2,539		2,539		-	-		-	- '	-	-	-	2,539	-	2,53
	ISFSI Design & Licensing 2004	ļ			-	-	-	1,445		1,445	-		-			-	-	-	-	1,445	-	1,44
	ISFSI Design & Licensing 2005			-	-	-		1,672		1,672		-	-	-	-		<u> </u>	-	-	1,672	-	1,67
	ISFSI Design & Licensing 2006 ISFSI Design/Licensing/Construction 2007		-	·	-	<u> </u>	-	3,547 9,509		3,547 9,509	-				-		-			3,547		3,54
	ISFSI Design/Licensing/Construction 2007 ISFSI Design/Licensing/Construction 2008	ļ					-	29,200		29,200	<u>-</u>	-	-				<u> </u>	-	-	9,509		9,50
	ISFSI Design/Licensing/Construction 2009			-	<u>-</u>		<del></del>	500		500	-		·				-			29,200 500		29,20 50
			,																	300		
1-1-1-77	HBPP Unit #3 1996 - 2008 Completed Projects					-											-					
	Dismantlement of Ventilation Stack			-	_	-	-	5,740		5,740		-	-		-	-	·	-	-	5,740	-	5,74
	Caisson In-Leakage Repair			-	-	-	-	1,528		1,528		-	-	<u>'`-</u>	-		-	-		1,528	-	1,52
	Suppression Chamber/Remove Baffling & Floor Pla	tes		-	-	-		7,931		7,931	-		-	-	-		· <u> </u>	-	-	7,931	-	7,93
	Site Characterization for Dismantlement			-		-	-	1,150		1,150	-	-	-		-			-		1,150		1,15
	Miscellaneous Dismantlement Activities			-	•	•	-	300		300	-	-	-		-		-	-	-	300		30
	Planning Decommissioning Activity/Misc Dismantler	ment Activi	ities		<del></del>		- <del></del>	864		864			_		_					864		86
	Remove & Dispose Asbestos	TICHE / LOUI VI	1000	_			1	800		800	-	-			-					800		80
	Radiological Characterization Plant Systems			-	-	_	-	732		732	_		-		_				-	732		73
	Irradiated Hardware Spent Fuel Pool Cleanout and I	Disposal		-	•	-	-	2,676		2,676	-	-	-	-	-			-	-	2,676	-	2,67
	Removal & Disposal Energy Absorber			-	٠.	-	-	122		122		-	-	-	-		-	-	-	- 122	-	12:
	Removal & Disposal Control Rod Drive Hydraulic Po	ump Equip	ment	-	•	-	- 1	201		201	-	-	-	-	-				-	201	-	20
	Removal & Disposal Service Water Heat Exchange	r Equipme	nt	-	-	-	-	66		66		-	-	-	-	· -	-	-	-	66	-	6
	Removal & Disposal Reactor Water Cleanup Demin		esin Tank	-	-	-	-	· 37		37	-	-	-		-	-		-	-	37		3
•	Removal/Disposal Class A Radioactive Waste Mate	erial	ļ	-		-	-	1,045		1,045		<u> </u>		-			-		-	1,045		1,04
	Removal/Disposal Class B & C Materials incl Resin			- 1	<u>-</u>	-	-	4,822		4,822	-	-	-			•	·	-		4,822		4,82
		<u> </u>																				
PERIOD 2	TOTALS		-	-	-	-	-	82,301	· -	82,301	-	-	-	-	-	-		-	-	82,301		
PERIOD 3b	o - Planning and Preparation	ļ																				
Period 3b A	Additional Costs																					
3b.2.1	Additional Support Facilities - Radiological Protection	)	-	-	-	-	-	1,385	267	1,652	-	-	-		-					1,465	282	1.74
3b.2.2	Additional Support Facilities - Access, Fencing, Layd	own Areas	<b>,</b>	-	-	-	-	378	73	451	-		- 1	-	-		-	-	-	400	77	47
3b.2.3	Personnel & Material Access RB Access Shaft			-	•	-	-	520	100	620		-	-	-	-	-   .	-		-	550	106	65 95
3b.2.4	Cross Contamination Plan			-			·.	720	180	900		-	-	-				-	-	762	190	95
3b.2.5	Replacement of Rad Protection Access Software Sys	stem	ļ	-			-	480	120	600			-		-		-		-	508	127	63
3b.2.6	Employee Emergency Notification System			-			-		80	400			-		-		··		<u>-</u>	338	85	42
3b.2.7	Infrastructure for Facility Modifications		ļ	3	7				180	900	126	1	-	-			-		- 70	762	190	95
3b.2.8 3b.2.9	Mixed Waste Disposal Rebuild Refueling Building Crane			- 3		<del></del>	61	1,418	21 273	92 1,691	126			·	-		. 8		70	1,500	23	10 1,78
3b.2.9 3b.2.10	Sr-90 Groundwater Program	1		-			<u> </u>	454	87	541	<del></del> -	-			-	<del></del>	·   -	<del></del>		480	289 93	1,78 57
3b.2.11	Package Legacy Class B & C Waste		<u> </u>	-			_	1,535	296	1,831		-					-	-		1,624	313	1,93
3b.2.12	Procure Initial Inventory of Tools and Equipment	-		-	-		.   -	2,100	405	2,505		-	-						-	2,221	428	2,65
3b.2	Subtotal Period 3b Additional Costs		-	. 3	7		61		2,083	12,183	126		-	_	-		8	-	70	10,609	2,203	12,89
	Collateral Costs																					
3b.3.1	Decon equipment	954	-	- 1	-	-	-	•	613	1,568		-	-		1,010		-				649	1,65
3b.3.2	DOC staff relocation expenses	-	1				-	1,436	277	1,713	-		<del> </del>	-	-		-	-	-   -	1,519	293	1,81
3b.3.3	Pipe cutting equipment		1,000			-	-	- 4400	321	1,321	<u>-</u>		-		- 1 010	1,058	-				340	1,39
3b.3	Subtotal Period 3b Collateral Costs	954	1,000	-			-	1,436	1,211	4,602	-	<u>-</u>	-	<del>-</del>	1,010	1,058	-	-		1,519	1,281	4,86
	Period-Dependent Costs				<u> </u>			L			1	I	, l			1.	1	1 1	1	1	1	

					Tho	usands of 200	8 Dollars				-							Thous	ands of 2010	Dollars			
					-	Off-Site	LLRW												Off-Site	LLRW			
Activity		Decon		<u> </u>		<u> </u>		Other	Total	Total		Class B		GTCC	Decon				Processing		Other	Total	Tot
Index	Activity Description	Cost	Cost	Costs	Costs	Costs	Costs	Costs	Contingency	Costs	Cu. Feet	Cu. Feet	Cu. Feet	Cu. Feet	Cost	Cost	Costs	Costs	Costs	Costs	Costs	Contingency	Cos
3b.4.1	Decon supplies	14	-	-	-		-	-	5	19	-		-	-	15	-		-	-	-		. 5	2
Period 3b Pe	eriod-Dependent Costs (continued)														-	-			_	-	-	-	
3b.4.2	Insurance	· -	-	-	-	-	-	20	3	23	-	-	-	-		-	-		-		. 21	3	2
	Property taxes Health physics supplies	-	146		-	<del>-</del>	-		47	192		-	-		•	154		-	-		-	49	20
	Heavy equipment rental	-	74	-		<del>                                     </del>		-	24	97	-		-	-	-	154 78		<u>-</u>			-	25	20 10
	Disposal of DAW generated	-	-	0	. 0	-	29		9	39	116	-	-	-		-	0	0	<u>-</u>	34	-	10	
3b.4.7	Plant energy budget	-	-	-	-	-	, -	45	9	53	-	-	-	-		-	-		-	-	47	9	
3b.4.8	NRC Fees	-	<u> </u>			ļ <u>-</u>	-	61	8	69	-	-				-	-	-	-	-		8	
	Emergency Planning Fees Environmental / Engineering Support		-	-	-	-	-	25 999	3 192	28 1,191		-	-		-	-				-		204	1,26
	ISFSI Operating Costs			-			-	21	. 4	25			-						-	-	22	4	
	Security Staff Cost			-	-		-	897	173	1,070	-	-		-	-	-	-	-	-	-		183	1,13
3b.4.13	DOC Staff Cost	-	-	<i>-</i>		-	-	2,151	415	2,566			-	-	-	-	-	-	-	-	2,276	439	2,71
	Utility Staff Cost	-	-		-		-	1,246	240	1,486	- 110	-		-		-		•	-	-		254	1,57
3b.4	Subtotal Period 3b Period-Dependent Costs	14	219	0	0	-	29	5,465	1,131	6,860	116	-	-	-	15	232	0	0	-	34	5,781	1,196	7,25
3b.0	TOTAL PERIOD 3b COST	969	1,219	4	7		- 90	16,931	4,425	23,645	242		-	-	1,025	1,290	4	8	_	104	17,909	4,681	25,02
			,					,	.,	,		-			.,	,,200					,		
PERIOD 3 T	TOTALS	969	1,219	4	7	-	90	16,931	4,425	23,645	242	-	-	-	1,025	1,290	4	8	-	104	17,909	4,681	25,021
PERIOD 4a	- Systems Removal					·	}																
Period 4a Di	irect Decommissioning Activities									-													
0,,00 10 2																							
	Major Equipment																						
4a.1.1	Main Turbine/Generator	<u>-</u>	555	70	102		1,469	-	679	2,875	5,850		-	-	-	587	74	118	-	1,698	-	718	
4a.1.2	Main Condensers	-	496	914	41	-	3,047	-	1,264	5,762	12,135		•	-	-	525	966	48	-	3,521	-	1,337	6,397
4a.1.3	Remove Spent Fuel Racks	55	11	23	21	-	510	-	210	830	2,025	-	-	-	58	11	24	24	-	590	-	222	929
4a.1.4	Fuel Pool Cleanup	-	-		-	-	-	415	80	495	-		-		-	-	-	-		-	439	85	524
Diamanal af l	Plant Systems			ļ		ļ																	
	RB2-1		119	20	6	-	169		96	410	868		_			126	21	6	_	196		102	45
	RB2-2	-	124		7		233	-		509	1,089	-	-	-		131	27	. 8		269		126	56
4a.1.5.3	RB2-3	-	205		2	-	20	-	74	310	322	-	-	-	-	217	10	2	-	. 23	-	78	33
4a.1.5.4	RB2-4	-	48		1		8	-		78	123	-	-			51	3	1		9		20	
4a.1.5.5 4a.1.5.6	RB2-5 RB2-6	<del>-</del>	284 367	54 24	10				131 143	575 604	1,551 1,024	-	-	-	· · · ·	301	57	12 8		111	-	139	61
4a.1.5.6 4a.1.5.7	RB3-1	+	95		3	-	64	-	53	229	407	-				388 100	25 , 15	3	-	73 74	-	151 56	64
4a.1.5.8	RB4-1	-	148		9	-	213	-		520	1,354	-	-	-	-	156	32	. 10	-	246	-		57
4a.1.5.9		-	283		41	-	1,620	-		2,702	6,430		-	-	-	300	129	47		1,872		070	
4a.1.5.10		-	4				-	-			-	<del>-</del>			-				-	-			
4a.1.5.11 4a.1.5.12		<del>-</del>	16 1,149	· · · · · · · · · · · · · · · · · · ·	34		1,341	-		3,462	5,321	<u>-</u>	-	-			123	39		1,550	-		
4a.1.5.13		-			-	-		-		51	- 0,021	-		-			- 120		1	- 1,000			
4a.1.5.14					23	-	429	-		1,361	3,601	-	-	-	-		90	26	-	495		335	·
4a.1.5.15		-	<u>~</u>	-		ļ· -	-	٠ -	2	8	-		-			7			-	-	<u> </u>	2	
4a.1.5.16 4a.1.5.17	TB3-3 clean area	-	117			<del>  -</del>	167	-	95	14 404	950	•	-		-	11 123	21	7	1	193		100	
4a.1.5.17 4a.1.5.18		<del>-</del>					458			1,615	2,602		<u> </u>	<del> </del>		737	65	19	<del></del>	529		404	
4a.1.5.19	TB5-1		153				141	_		406	560			-		162	13	4		163	-		-
4a.1.5.20		-	92	·			107	-	66	280	498		-	-		97	14	4		123	<b>-</b>	70	30
4a.1.5.21							131			344	742	-	-	-		116	20	5		151	-		
4a.1.5.22 4a.1.5.23		-	128				202		111	474	1,148_	<del></del>	-			136	27	8	-	234			_
	YD1-1 clean area		15			+	-		5	20			-					<del></del>	-	-		5	+
4a.1.5	Totals	-	4,719			-	5,462			14,406	28,591		-	-			692	210	-	6,311	-	3,585	
4a.1.6	Scaffolding in support of decommissioning		151	4	0	10	6		53	225	20		-			160	4	0	12	7		56	24
	LOCATIONALITY SUDDOLL OF GECOMMUSSIONING		101	. 4		. 10	. n	-	1 13													70	/ /4

			1	1							ī		1	:				T		ı			T
					Thou	sands of 2008	B Dollars										<u> </u>	Thous	ands of 2010	) Dollars			
						Off-Site	LLRW												Off-Site	LLRW			
Activity Index	Activity Description	Decon	Removal Cost	Packaging Costs	Transport Costs	Processing Costs	Disposal Costs	Other Costs	Total Contingency	Total Costs	Class A		Class C Cu. Feet	GTCC Cu Foot	Decon Cost	Removal Cost	Packaging Costs	Transport Costs	Processing Costs	Disposal Costs	Other	Total Contingency	Total Costs
IIIdex	Activity Description	0031	J	00363	00313	00313	00313	00313	Contingency	00313	Ou. 1 eet	Ou. 1 cet	Ou. 1 cet	Ou. i eet	COST	Cost	00313	Costs	Costs	COSIS	Costs	Contingency	Costs
4a.1	Subtotal Period 4a Activity Costs	55	5,932	1,664	346	10	10,495	415	5,675	24,593	48,622	-		-	58	6,275	1,760	400	12	12,127	439	6,003	27,076
Period 4a A	dditional Costs			_			·																
4a.2.1	Modifications Supporting Access for Equipment I	Removal	-	-	-	-	-	170	33	203			-	-	-	-	-	-	-	-	180	35	214
4a.2.2	Activation Analysis of Reactor		-	-	-	-		80	20	100	-	-	-	<u> </u>	-	-	-				85	21	
	Subtotal Period 4a Additional Costs	-	-	-	-	-		250	53	303			-	-	-	<u> </u>	<u> </u>	<u> </u>	-	-	264	56	320
Period 4a C	ollateral Costs		•																				
4a.3.1	Process liquid waste	15		8	34	-	26	-	26	108	104	-	-		16		8	39		30	-	27	
4a.3.2 4a.3	Small tool allowance Subtotal Period 4a Collateral Costs	15	93	- 8	34	·	26		30 56	123 232	104		-	-	16	99	- 0	39	-	30		32 59	
44.5	Subtotal Feriod 4a Collateral Costs	, 13	33		37		20		30	202	104		-		10	33		39	<u> </u>	30	-		231
	eriod-Dependent Costs																						
4a.4.1 4a.4.2	Decon supplies	117	-		-	-	-	162	37 21	154 183	-				123	-	-	<del> </del>	-		- 470	40	
4a.4.2 4a.4.3	Insurance Property taxes	-	+-	-		-		102		103					<del> </del>		-	-			172	22	194
4a.4.4	Health physics supplies	-	2,385	-	-				766	3,152		<del> </del>				2,523			-		-	811	
4a.4.5	Heavy equipment rental		1,268	-	-		-	-	1	1,675	-	-			•	1,341	-		-			431	
4a.4.6 4a.4.7	Disposal of DAW generated Plant energy budget	-	-	8	3	-	844	459	273	1,128 548	3,349	-	-	-	<del>-</del>	<u>-</u>	9	4	-	975	486	289 94	
4a.4.8	NRC Fees	-	-	-		-		1,316	169	1,485	<del>-</del>		-		<u> </u>	-	-	-	-		1,392	179	
4a.4.9	Emergency Planning Fees	-	-	-	-	-	-	202	26	228	-	-	-	-		-	-	-	-	-	214	27	241
4a.4.10	Environmental / Engineering Support		-	· -	-		-	7,273	1,402	8,675			-		-	-	-	-			7,693	1,483	
4a.4.11 4a.4.12	ISFSI Operating Costs Security Staff Cost	-	-	-		-		7,182	1,384	203 8,567		-	-		<u> </u>	-	<u>-</u>	-	-	· -	180 7,597	35 1,464	
4a.4.13	DOC Staff Cost	-	-		-	-	-	21,109	4,069	25,177		-	-	-	-	-	-	-		-	22,328	4,304	
4a.4.14	Utility Staff Cost	-	-		-	_	-	12,325	2,376	14,700		-	-			-	-		-	-	13,037	2,513	15,550
4a.4	Subtotal Period 4a Period-Dependent Costs	117	3,653	8	3	-	844	50,198	11,052	65,875	3,349	-		-	123	3,864	9	4	-	975	53,099	11,690	69,765
4a.0	TOTAL PERIOD 4a COST	187	9,679	1,680	383	10	11,365	50,863	16,835	91,003	52,075	-	-	-	198	10,238	1,777	443	12	13,133	53,802	17,808	97,411
DEDICE 4	Beech Vessel Bernauel								-														
PERIOD 4	- Reactor Vessel Removal		- ,	-							•												ļ
Period 4b [	Direct Decommissioning Activities														-	-		-	-		-		-
				1													<u> </u>						
Nuclear Ste	eam Supply System Removal CRDMs & Nis Removal	4	31	104	20	_	202		95	456	913	<del> </del>	_		5	33	110	23		233		100	504
4b.1.1.2	Reactor Vessel Internals	13	<del></del>	1,656	384	-	1,497	119		8,802	506	-	470		14		1,752	444		1,730	126	3,552	9,494
4b.1.1.3	Reactor Vessel	2	.,,	536	132	-	7,966	119		22,158	381	2,699	-	-	2	/ /	567	152		9,205	126	9,844	24,230
4b.1.1	Totals	20	5,903	2,296	536	-	9,664	238	12,759	31,416	1,800	2,699	470	-	21	6,244	2,428	- 619	-	11,168	251	13,497	34,229
Disposal of	Plant Systems		,		·										1	-							<del></del>
4b.1.2.1	RB2-7	-			6		108	-	138	585	904	-	-		-	324				124		146	
4b.1.2.2	RB2-8	115			21	-	203	-	237	906	3,267	-	ļ <u> </u>	-	122		65			234	-	251	
4b.1.2.4	RB2-9 RW1-1	115			7		192 283	-	233	886 764	3,104 1,124	-	-	<u> </u>	122	283 280	62		-	222 327	<u> </u>	246 192	958 836
4b.1.2.5	RW1-2	<del>-</del>	269		16	-	161	<u> </u>		648		1			-	284	. 57			187	-	157	703
4b.1.2.6	RW1-3	-	1	· 1	<del> </del>		8	-	4	19	34		-	-	-	6	1	0	-	9	-	5	20
4b.1.2.7	RW1-4			<del></del>			173			412	741			<u>:</u>	<u> </u>	129	16			199	-		453
4b.1.2.8 4b.1.2.9	RW1-5 RW1-6	-					140	-	1 7	343 144	554 708		-	-	<del>                                     </del>	114 52	12			161 51	-		
4b.1.2.10						-	11			47	172		<del> </del>	-	<u> </u>	21	. 5			12			
4b.1.2.11	RW1-8	-								11	34	<u> </u>		-	-	6	1		+	2			12
4b.1.2.12 4b.1.2.13	RW1-9	-						-		235	17			-		188	0			1			
4b.1.2.13 4b.1.2	Totals	230								5,006					243		293			1,531	-	1,295	
			-												I					.,		1,200	3,700
4b.1.3	Scaffolding in support of decommissioning	-	189	5	0	13	8	-	66	281	25	-	-	-	-	200	5	0	15	9	-	70	300
			<del> -</del>						<del> </del>								<u> </u>	<del>                                     </del>			<u> </u>	_ <del></del> '	
4b.1	Subtotal Period 4b Activity Costs	249	7,959	2,577	619	13	10,998	238	14,050	36,703	15,089	2,699	- 470	-	264	8,419	2,726	715	15	12,709	251	14,862	39,962
							·				·												

<u> </u>		T																					
			<u>.</u>	1	Thou	sands of 200	8 Dollars				<u> </u>	<u> </u>						Thous	ands of 201	In Dollars			
				1	11100	Off-Site	LLRW				<del> </del>						_ · _ ·	Tilous	Off-Site				
Activity		Decon		Packaging	Transport	Processing	Disposal	Other	Total	Total			Class C	GTCC		Removal			Processing		Other	Total	Total
Index	Activity Description	Cost	Cost	Costs	Costs	Costs	Costs	Costs	Contingency	Costs	Cu. Feet	Cu. Feet	Cu. Feet	Cu. Feet	Cost	Cost	Costs	Costs	Costs	Costs	Costs	Contingency	Costs
			· · · · · · · · · · · · · · · · · · ·	-														-					
	Additional Costs																						
4b.2.1	Discharge Piping	50	21	9	36		144	285	94	354 340	2,361	-	-	-	53	22	9	41	-	167	-	99	
4b.2.2 4b.2.3	Asbestos Removal Expand Waste Packaging Laydown Area	<del>                                     </del>	-		-		-	136	55 26	162		-	-	-	<u> </u>	-	-	<del>                                     </del>	<del>                                     </del>	<u> </u>	302 144	58 -28	360 171
4b.2	Subtotal Period 4b Additional Costs	50		9	36	•	144	421	175	856	2,361		-	-	53	22	9	41	ļ -	167	445	185	923
D : 141.6	2.11.4										_												
4b.3.1	Collateral Costs Process liquid waste	31		15	68	_	53		52	218	210			_	32	_	. 16	78		61		55	242
4b.3.2	Small tool allowance				-	-	-		23	96	- 210	-	-	-	-	77		- 10	-	- 01	-	25	102
4b.3	Subtotal Period 4b Collateral Costs	31			68	_	53		75	314	210	-	-	-	32	77		78		61	-	79	344
Davied 45 F	Paried Dependent Costs		•																				
4b.4.1	Period-Dependent Costs Decon supplies	475	_	_	·		_		153	628		_		_	503	-		_	-	<u> </u>	_	162	664
4b.4.2	Insurance	-			-	_	-	122	16	138	-	-		-	-				-	-	129	17	146
4b.4.3	Property taxes	-	1			-	-	-				-		-		-	-	-	-	-	-	-	
4b.4.4 4b.4.5	Health physics supplies Heavy equipment rental		1,822		-	-		<u>-</u>	585 726	2,407 2,988	. <del>.</del>	-			-	1,927	-	1	-	-		619	2,546
4b.4.6	Disposal of DAW generated	-	2,201	- 6	3		652		211	872	2,587	-	-	-	-	2,392	7		-	753	-	768 · 223	3,160 986
4b.4.7	Plant energy budget	-		-	-	-	-	273	53	325		-	-	-	-	-			+	-	289	56	344
4b.4.8	NRC Fees	-		-	-	-	-	990	127	1,117	-	-	-	-	-	-		_		-	1,047	135	1,182
4b.4.9 4b.4.10	Emergency Planning Fees Environmental / Engineering Support	-	-		-	-	-	152 4,225	20	171		-	-	-	-	-	<u>-</u>	-	-	-	161	21	181
4b.4.10 4b.4.11	Radwaste Processing Equipment/Services	-					-	564	814 109	5,039 673	<u> </u>	-	-	<u>-</u>	-	-	-	<del>                                     </del>	<del>                                     </del>	-	4,469 597	861 115	5,330 712
4b.4.12	ISFSI Operating Costs	-				-	-	128	25	152	-	-	-	-	-			-	-	-	135	26	161
4b.4.13	Security Staff Cost	_	-	-	-	-	-	5,387	1,038	6,425	-	-	-	-	-	-	-	-	•	-	5,698	1,098	6,797
4b.4.14 4b.4.15	DOC Staff Cost Utility Staff Cost			-	<u>-</u>	-	-	14,641 9,835	2,822 1,896	17,463	<b> </b>	-	-	· -	-	· -		1		<u>-</u>	15,487	2,985	18,472
4b.4	Subtotal Period 4b Period-Dependent Costs	475		;	3	-	.652	36,316	8.594	11,731 50,129	2,587	-	-	-	503	4,319	- 7		-	753	10,404 38,415	2,005 9,090	12,409 53,089
4b.0	TOTAL PERIOD 4b COST	806	12,136	2,608	725	13	11,847	36,975	22,894	88,003	20,246	2,699	470	-	852	12,837	. 2,759	837	15	13,690	39,111	24,217	94,318
PERIOD 4	c - Prepare Buildings for Demolition	-					-															•	
			<u> </u>																				
Period 4c L	Direct Decommissioning Activities						ļ												-				
Disposal of	f Plant Systems																	-					
4c.1.1.1	HMS1-1	-	36		3	-	34	-	24	105	419	-	-	-	-	38			-	39	-	25	114
4c.1.1.2	HMS1-2	-			1		9	-	5	24	152	-	<del></del>		· ·	6				11	-	6	26
4c.1.1.3 4c.1.1.4	HMSP OTS-1	-	<del></del>		0	-	2		3 2	12	34	<u>-</u>		<u>-</u>		6	1	0	-	2		3 2	13 8
4c.1.1.5	OTS-2	-			-	-			2						-	6		-	<del>                                     </del>		-	2	8
4c.1.1.6	OTS-3	-			-	-	-		2	10						8		-	-	-		3	
	OTS-4 OTS-5	-	·		- 1	- -	21	-	15	8 65	- 84	-				6			-	- 25	-	2	
	OTS-6	<del>-</del>	<u> </u>			-	- 21	-		1	- 84		-	-	-	27		T	-	25	-	16	
4c.1.1.10		• -	88	8	2		91		59	248	361	-	-	-	-	93	i-		-	105	-	62	
4c.1.1.11						<u> </u>	29		20	85	116	1		-	-	34			<del></del>	34	-	21	
4c.1.1.12 4c.1.1.13			1		1 4	-	50	-		239	106								+	8			
4c.1.1.13			10-		4			-		239	611 711		-		-		15 17						
4c.1.1.15	RB1-6	52	211	20	6		228	-	178	695	907			<del></del>	55					264	-	189	758
4c.1.1.16		-					22			53			-		-							13	
4c.1.1.17 4c.1.1.18		-		~			76			193 47	325 148		ļ		-						-		
	RB5-1 (HVAC Scope)						. 29			80	467		1		-					·	-   -		
4c.1.1.20	RBP	23	199	2			8				135			<del></del>	25			<del></del>		·			
4c.1.1.21		-			-	-	-	-		78			<del> </del>		-			-	<u> </u>	-	-		
4c.1.1.22 4c.1.1.23		-			<u>-</u> 1	-	13			13				-		10			-	- 15		3	
4c.1.1.23 4c.1.1.24		-	t- :-				3			38			<del>                                     </del>		-					15			
				· · · · ·	<u>_</u>		·	·	·			•	<del> </del>		•	, , , , ,	·		·	<del>,</del>			

															1	1	1	1		i i			(
					Tho	usands of 200	8 Dollars					<u> </u>						Thous	ands of 2010	0 Dollars	. !		
	/			,	7.1.0	Off-Site	LLRW	i		i						<del></del>	T	111003	Off-Site	LLRW			
Activity		Decon	Removal	Packaging	Transport	Processing		Other	Total	· Total	Class A	Class B	Class C	GTCC	Decon	Removal	Packaging	Transport	Processing		Other	Total	Tota
Index	Activity Description	Cost	Cost	Costs	Costs	Costs	Costs	Costs	Contingency	Costs	Cu. Feet	Cu. Feet	Cu. Feet	Cu. Feet	Cost	Cost	Costs	Costs	Costs	Costs		Contingency	
12 4 4 05	TOTE		. 07							0.1													
	TB7-5 TB7-6		39	8	3		11 .	·	13 47		348 514	-	-			28 41				12 116	· -	14	66
	Plant Systems (continued)		. 33	10		<del>-</del>	100			155	314		-			-	<u> </u>	-	<u>-</u>	-	-	49	221
	TB7-7	-	13	-	-	-	-	-	4	18	-	-	-	-	-	14	<del>}</del>	-	-		-	. 5	19
	TBP	-	1,000	-	-		-	-	321	1,322		-	-	-		1,058	-	_	-	-	-	340	1,398
	YD1-2	-	7		1		31	-	13	55	124	<u>-</u>				8			-	36	-	14	61
	YD1-5 YD2-1	-	56	2	1		7		6 23	25 98	114 168	-			<u>-</u>				-	8	-	6	27
	YD2-2	-	19	3					9	40	133									16 10	-	10	105 43
	YD2-3	-	- 8	2	1	1		-	6	26	111	-	-	-	-	8	<del>}</del>			10	-	6	28
	YD2-4	-	116	30	. 8		001	-	156	661	1,394	-	-		-	123	31	10		406	-	165	735
	YD2-5	-	253	46	15				278	1,176	2,320	-	-			268	. 49	<del></del>	-	676		294	1,303
	YD2-6 YDP	-	185 178	28 17	9 5			-	177 78	750 331	1,390	-		-	-	196	30	10	-	405		. 188	828
	Totals	76	3.016	258	78		2,195		1,771	7,393	864 12,387	-			- 80	188 3,190	18	91		62 2,536	-	82 1,873	356 8,043
<u> </u>		'	0,0.0	200			2,100		.,	7,000	12,001				- 00	3,130	. 213	31	<u> </u>	2,330	-	1,073	0,043
tc.1.2	Scaffolding in support of decommissioning	-	38	1	0	3	2		13	56	5	-	-	-	-	40	. 1	0	3	2	-	14	60
			~			,																	
	tion of Site Buildings HMS		57				10			110	004					- 04	:	4					110
	Hot Machine Shop & Calibration	-	. 3	6	<u>4</u>	<del>                                     </del>	18	-	25 4	110	281 48	-		-	· ·	61	6		-	20 10	-	27	118 20
	RB1	91	1,748	542	180		3.807	-	1,948	8,317	18,660	-			96	1,849	574	208		4,400		2,060	9,187
	RB2	-	3,120	207	49	+	1,693	-	1,582	6,651	6,249	-			-		219	57	-	1,956	-	1,674	7,206
	RB3		99	7	3	-		-	51	214	328	-	-	-	-	105	7	<del></del>		62	-	54	232
	RB4	-	81	7	3		54		45	191	336	-	-	-	-	86	7			63	-	48	208
	RB5-1 (Refuel Bldg Roof) RW1	<del> </del>	. 19 . 534	166	3 44				11 616	2,649	190 5,192	-			-	565	176			14 1,490	-	11	52 2,933
	Refueling	_	3	4	1			-	.16	70	190	-	_		-	303			-	53		651 17	79
	TB1	-	93	8	- 5		46	-	47	198	417	-	-	-	-	98	. 9		-	53		49	215
	TB2	-	122	11	7		47	-	57	244	538	-	-	-	-	129	11		-	54	-	60	263
	TB3	-	30	. 6	4		25	-	19	84	293		-	-	-	32			-	29	-	20	92
	TB4TB5	-	<sup>-</sup> 203	11 4	<u>6</u>		73	-	91 33	385 140	565 209	-	-	-	-	215 92	. 12		-	84	-	97	415
	TB6	-	·· 76	4	3			-	29	124	196	-		-	-					15 14	-	35 31	149 132
4c.1.3.16	TB7	-	31	6	4		20	-	18	79	313	-	-	-	-				<u> </u>	23	-	19	85
	Turbine	-	4	4	1		54	-	20	83	223	-	-	-	•	. 4		-	-	63		21	93
	YD1 YD2	-	24	3	2		8	-	11	47	129	-	-	<u>-</u>		25				9	-	12	51
	Totals	91	98 6,434	1,012	330		36 7,315	-	46 4,669	19,851	582 34,940	-	-	-	96	6,805	. 12	382	-	8,453	-	49	216 21,746
0.1.0	Totalo	31	• 0,404	1,012	330		7,515	-	4,009	19,001	34,340	-	-		90	0,003	2 1,071	302		6,400		4,939	21,740
4c.1 Activity C	Costs	166	9,487	1,271	409	3	9,511	-	6,453	27,300	47,332	-	-	-	176	10,036	1,345	472	3	10,991	-	6,826	29,849
2-1-1 1 1 1	198							•				·											
	ditional Costs Contaminated Soil Removal		211	663	2,567		14,035		5,157	22,633	169,154						<u> </u>						<del> </del>
	Replacement of Drains and Catch Basins	<del> </del>	75		2,367		14,033		24		109,134	_	_			80	<u> </u>	-	<del></del>		-	26	105
4c.2.3	Caisson Mixed Waste Removal		159		40		1,175	-			. 2,433	!				1		47		1,358	-	463	
4c.2.4	Site work supporting spent fuel pool removal	-	-	-		-	-	990	191	1,180	•	-	-				-	-	-	-	1,047	202	1,249
	Removal of 3 spent fuel pool walls	-			418						24,120			-						4,020		1,516	6,835
	Removal of Yard Pipe Tunnel Contaminated Soil & Concrete Storage Facility	-	647	14	205	-	2,561	436	1,072 84		10,162			-	-		<del></del>			2,959	- 461	1,134	
	Total		1,796	754	3,230		21,250	1,425	8,398	520 36,854	205,869	-	-	<u>-</u>		1,900	798	3,732	<u> </u>	24,556	461 1,508	89 8,883	550 41,378
		1	,		5,230	1		1,120	0,000	30,004	200,000					1,300	130	3,732		27,000	1,500	0,003	71,370
	illateral Costs	ļ	•																				,
4c.3.1	Process liquid waste	28	470		61	+		-			189				. 29					55	-	49	219
	Small tool allowance Decommissioning Equipment Disposition				7				58 240		1 050			<u> </u>		190					-	61	
	Subtotal Period 4c Collateral Costs	28			68			-	344		1,058 1,247	-			29	190	218 233		624 624	- 388 443	-	254 364	
		20	,,,	220		340	303		J-14	1,702	1,47/	-				130	233	10	024	443		304	1,801
	riod-Dependent Costs				•																		
	Decon supplies	58			-	-	-	-			-	-	-		62	-			-	-	-	20	82
4c.4.2	Insurance	<u> </u>	<u> </u>	-	-	<u>-</u>	-	72	9	81	-	-			L				-	-	76	10	86

c.4.4 Hei c.4.5 Hea eriod 4c Period c.4.6 Dis c.4.7 Pia c.4.8 NR c.4.9 Em c.4.10 Env c.4.11 Rat c.4.12 ISF c.4.13 Sec	Activity Description  operty taxes ealth physics supplies eavy equipment rental d-Dependent Costs (continued) sposal of DAW generated	Decon Cost	Removal Cost	Packaging	Thou Transport	Off-Site	LLRW		<del></del>									Thous	ands of 201				
Index C.4.3 Proc.4.4 Heact C.4.5 Heact C.4.6 Disc.4.7 Place C.4.8 NR C.4.8 NR C.4.9 Em C.4.11 Rate C.4.11 Rate C.4.12 ISF C.4.13 Sec	operty taxes ealth physics supplies eavy equipment rental d-Dependent Costs (continued)				Transport				i	i	1	i	1 1										
Index C.4.3 Proc.4.4 Heact C.4.5 Heact C.4.6 Disc.4.7 Place C.4.8 NR C.4.8 NR C.4.9 Em C.4.11 Rate C.4.11 Rate C.4.12 ISF C.4.13 Sec	operty taxes ealth physics supplies eavy equipment rental d-Dependent Costs (continued)				Transport							<u> </u>							Off-Site	LLRW			
c.4.3 Pro c.4.4 Hea c.4.5 Hea eriod 4c Period c.4.6 Dis c.4.7 Pia c.4.8 NR c.4.9 Em c.4.10 Env c.4.11 Rat c.4.12 ISF c.4.13 Sec	operty taxes ealth physics supplies eavy equipment rental d-Dependent Costs (continued)	Cost	Cost				Disposal	Other	Total			Class B		GTCC					Processing		Other	Total	Tota
c.4.4 Hei c.4.5 Hea eriod 4c Period c.4.6 Dis c.4.7 Pia c.4.8 NR c.4.9 Em c.4.10 Env c.4.11 Rat c.4.12 ISF c.4.13 Sec	ealth physics supplies eavy equipment rental d-Dependent Costs (continued)	-		Costs	Costs	Costs	Costs	Costs	Contingency	Costs	Cu. Feet	Cu. Feet	Cu. Feet	Cu. Feet	Cost	Cost	Costs	Costs	Costs	Costs	Costs	Contingency	Costs
c.4.4 Hei c.4.5 Hea eriod 4c Period c.4.6 Dis c.4.7 Pia c.4.8 NR c.4.9 Em c.4.10 Env c.4.11 Rat c.4.12 ISF c.4.13 Sec	ealth physics supplies eavy equipment rental d-Dependent Costs (continued)	- <del> </del>	1.	<del> </del>										·								· .	
c.4.5 Hearing decrease in the control of the contro	eavy equipment rental d-Dependent Costs (continued)	-	624	-					200	824	<u>-</u>	-	-	-	-	660	<u> </u>	-	-	<u>-</u>		212	872
eriod 4c Period c.4.6 Dis c.4.7 Pla c.4.8 NR c.4.9 Em c.4.10 Env c.4.11 Rac c.4.12 ISF c.4.13 Sec	d-Dependent Costs (continued)	<del> </del>	1,503	-	-				290	1.793		<del></del>		<u>-</u>		1.590			-	-		307	1,897
c.4.7 Pla c.4.8 NR c.4.9 Em c.4.10 Env c.4.11 Rac c.4.12 ISF c.4.13 Sec	sposal of DAW generated		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							1,100						1,000		-				307	1,037
c.4.8 NR c.4.9 Em c.4.10 Env c.4.11 Rac c.4.12 ISF c.4.13 Sec		-	-	1	1	-	134	-	43	179	533	-	-	_	-	-	1	1	-	155	-	46	203
c.4.9 Em c.4.10 Env c.4.11 Rac c.4.12 ISF c.4.13 Sec	ant energy budget	-	-		-	-		97	19	115		-	-	-	-	-	-	-	-	-	102	20	122
c.4.10 Env c.4.11 Rac c.4.12 ISF c.4.13 Sec	RC Fees	-	-	-	-	-		658	85	743				-	-	-	. <u>-</u>	-	-	-	696	89	786
c.4.11 Rac c.4.12 ISF c.4.13 Sec	nergency Planning Fees nvironmental / Engineering Support	-	-					101	13	114		-	-	-		-	-	•	-	-	107	14	120
c.4.12 ISF c.4.13 Sec	adwaste Processing Equipment/Services	+ -	<del>-</del>	-	-	-		2,648 375	510 72	3,159 447		-		<u>-</u>		-		-	-	-	2,802	540	3,342
c.4.13 Sec	FSI Operating Costs	<del>-</del>				-	<del></del>	85	16	101		<u> </u>					<u> </u>		-		397 90	76   17	473 107
	ecurity Staff Cost	<del>-</del>	-	-	-	-	-	3,591	692	4,283	_	-			<del>-</del>		-		-		3,799	732	4,531
c.4.14 DO	OC Staff Cost	-	-	-		-	-	9,559	1,843	11,402	-	-	-		-			-	_		10,112	1,949	12,061
c.4.15 Util	ility Staff Cost	-	-	-	-	-	-1	6,662	1,284	7,946	-	-	-	-	-	-		-	-	-	7,047	1,358	8,405
c.4 Sut	ubtotal Period 4c Period-Dependent Costs	58	2,127	1	1	-	134	23,848	5,096	31,265	533	-	-	-	62	2,250	1	1	-	155	25,226	5,390	33,085
	TH PERIOD 4: 000T		45.55																				
c.0 TO	OTAL PERIOD 4c COST	252	13,590	2,247	3,707	543	31,279	25,274	20,290	97,181	254,980	-	-	-	267	14,375	2,377	4,283	- 627	36,146	26,734	21,463	106,272
								-		-													
FRIOD 4d - B	uilding Demolition, Yard Work, Soil Remediation	on	1	-																			
	anding Demonsor, Tara Work, Con Remodular	011		<del> </del>			+															-	
emolition of Sit	ite Buildings			T								-											
	ontaminated Equipment Storage	-	7	10	42	-	174	-	- 44	278	2,842	-	-	-	-	8	11	48	-	201	-	47	315
	as Stack	-	. 33	82	331	-  -	1,381	-	347	2,175	22,563	-	-	-	-	35	. 87	383	-	1,596	-	367	2,468
	ot Machine Shop & Calibration		20		95	-	394	-	101	634	6,445	-	-			22	25		-	456	-	107	719
	ew Off Gas Vault	<u> </u>	80	<del></del>	759		3,163		796	4,987	51,687	-	-		-	85	200		-	3,655	-	842	5,659
	adwaste Treatment efueling	<del>  -</del>	1,099	149 310	597   1,247	-	2,490	-	642	4,023	40,680	1	-	-		153	. 157	690	-	2,877	-	679	4,557
	blid Waste Vault	<del></del>	1,099	6	23	-	5,196 96	-	1,494	9,346 153	84,907 1,572	<del>                                     </del>	-	-		1,162	328		-	6,005	· -	1,580	10,516
	urbine	<del>                                     </del>	243	389	1.565	-	6,522		1,656	10,375	106,576					257	. 412		-	7,537	-	1,751	174 11,766
	ard Structures	-	- 57	36	143	-	598	_	158	992	9,765					60	38	1,809		691		1,751	1,122
d.1 Tot	otals	-	1,687	1,195	4,803		20,015	-	5,262	32,962	327,036	-	-	-		1.785	1,264		-	23,129		5,566	37,294
			-											-								5,000	
eriod 4d Additi																							
	ackfill of Structures and Site		1,460	-		-		-	281	1,741	-		-	-	-	1,544		-	-	-	-	298	1,842
d.2 Sul	ubtotal Period 4c Additional Costs	+ •	1,460	-		-		-	281	1,741		-			-	1,544	· -	-	-			298	1,842
eriod 4d Collat	iteral Costs		-	-																			
	mall Tool Allowance	<del>-</del>	9	-		-			2	11								<u> </u>			-		
	ubtotal Period 4d Collateral Costs	<b>-</b>	9		-	-	-	-	. 2	11			-	-	-	9			_	-		2	11
																_	-				-		
eriod 4d Perior	od-Dependent Costs		•																				
	surance		-	-	-			138	18	155		-	-	-	-	-		-	-		145	19	164
	operty taxes ealth physics supplies	+ -	- 441	-		-		-			-	-		-		-		l	-			-	
	eavy equipment rental	-	925			-	-		142 178	582 1,104	-	-	-			466	<u> </u>	<del></del>	-	-	-	150	616
	sposal of DAW generated	+-:	923	T	0		98	-	32	1,104	390	-	-	<u>-</u>		979	1			113	-	189	1,167 149
	ant energy budget		-	<del>                                     </del>	-			150	29	179	- 330					-			-	- 113	159	31	189
d.4.7 NR	RC Fees		-			-	- 1	350	45	395	-	-			-	-				-	370	48	418
d.4.8 Em	mergency Planning Fees	-	-	-			-	194	25	218		-				-	-	-	-	-	205	26	231
d.4.9 En	nvironmental / Engineering Support	-	-	-	-	-	-	3,137	605	3,742	-	-	-		-	-		-		<del>-</del>	3,319	640	3,958
	adwaste Processing Equipment/Services	<u> </u>	<u></u>	1		-	-	719	139	858		-				-	-	-	-	-	761	147	908
	FSI Operating Costs		-	<del> </del>	-			163	31	194		<del>-</del>	-	· -				<u> </u>	-		172	33	205
	ecurity Staff Cost OC Staff Cost	+ -		+		-		6,079 14,518	1,172 2,798	7,251			-	<u>-</u>	-	<u>-</u>		<u> </u>	-		6,430	1,239	7,670
	tility Staff Cost		<u> </u>					10,603	2,798	17,316 12,647	<u> </u>				-	-					15,357	2,960	18,317
	ubtotal Period 4d Period-Dependent Costs	-	1,366		0		98	36,051	7,257	44,773	390					1,445	<u> </u>				11,216 38,134	2,162 7,676	13,377 47,369
		<u> </u>	,556	<del>                                     </del>		.		55,001	1,201	77,770		-				1,773	<u> </u>		<u> </u>	113	30,134	7,070	47,309
d.0 TO	OTAL PERIOD 4d COST		4,522	1,196	4,803		20,113	36,051	12,802	79,486	327,426	-	í - í	-	-	4,783	. 1,265	5,551	- 1	23,242	38,134	13,542	86,516
	-											<u> </u>											

												-											
								-									<u> </u>					_	
		 	•	1	Tho	usands of 200 Off-Site	8 Dollars		<del></del>			-		<u> </u>	<u> </u>		<del></del>	Thous	ands of 20		1		
Activity		Decon	Removal	Packaging	Transport	Processing	Disposal	Other	Total	Total	Class A	Class B	Class C	GTCC	Decon	Removal	Packaging	Transport	Off-Site Processing		Other	Total	Tota
Index	Activity Description	Cost	Cost	Costs	Costs	Costs	Costs	Costs	Contingency	Costs		Cu. Feet		Cu. Feet		Cost	Costs	Costs	Costs	Costs		Contingency	
DEBIOD 46	- License Termination		<u> </u>																		ļ. <u> </u>		
FERIOD 46	- Cicense Terrimation		<u> </u>															-				•	
	rect Decommissioning Activities																						
4e.1.1 4e.1.2	ORISE confirmatory survey Terminate license	-	-	-	-	<u> </u>		151	29	180		-	-	-		-	<u> </u>	-	<u> </u>	-	160	31	190
	Subtotal Period 4e Activity Costs		_	-	- -	-	-	151	29	180		-			<del></del>		-	-	-	-	160	31	190
																					100		100
Period 4e Ad 4e.2.1	Iditional Costs License Termination Survey (sample analysis & equip		<u> </u>					705	070	4.004											707		1.00
	Subtotal Period 4e Additional Costs	ment)	-	-	-	<u>-</u>		725 725	279 279	1,004 1,004		-	-	-	-	-		-	-	-	767 767	296 296	
	Captotal F Citos To / Italiania F Cotto							120	2.0	1,001											707	230	1,000
	ollateral Costs																					*	
	DOC staff relocation expenses Subtotal Period 4e Collateral Costs	-	-	-	<u> </u>	-	-	1,436 1,436	277 277	1,713 1,713		-	-	-		-	-	-	-	-	1,519 1,519	293 293	
70.0	Cabician Feriod 46 Conateral Costs			<u> </u>	<u> </u>	<u> </u>	<del> </del>	1,430	211	1,713		<u> </u>	-	-	-	<del></del>	+	-	-	<u> </u>	1,519	293	1,812
	riod-Dependent Costs																						
	Insurance Property taxes	<u>-</u>	-	-	· -	-	-	24	3	27		<u> </u>			<u> </u>		-	-	-	-	25	3	29
	Health physics supplies	-	192			-	-	<del></del>	62	254	-	-	-	-	-	203	<del>  ·                                   </del>	-	-	-	-	65	269
4e.4.4	Disposal of DAW generated	-	-	0	0	-	38	-	12	51	152	-	-	-	-	-	0	0	-	44	-	13	58
	Plant energy budget	-	<u> </u>	-	-		-	16		19	-	-	-	-	-	-		-	<u> </u>	-	17	. 3	
	NRC Fees Emergency Planning Fees		<u> </u>	-	-	-	-	236 34	30	266 38		-	-	-	-	-	<u>-</u>	-	-	-	250 36	32 5	
	Environmental / Engineering Support	-	-	-	-	-		443	85	528		-		-	-	-	-	-	-	-	468	90	559
4e.4.9	ISFSI Operating Costs	-	-	-		-	-	28	5	34	-	-	-	-	-	-	-	-	-	-	30	6	36
	Security Staff Cost	-	· -	-	-	-	-	948	183	1,131		-		<u> </u>	·	-	-	-	-	-	1,003	193	
	DOC Staff Cost Utility Staff Cost		-	-	-	-	-	2,128 1,457	410 281	2,538 1,737		-	-	-	<u> </u>	-	-	-	-	<u> </u>	2,251 1,541	434 297	
	Subtotal Period 4e Period-Dependent Costs	-	192			1	38	5,314	1,080	6,624	152		-	-	-	203	. 0	0		44	5,621	1,142	
	TOTAL PERIOR 4 COOT																						
4e.0	TOTAL PERIOD 4e COST	-	192	0	0	-	38	7,626	1,665	9,522	152	-	-	-	-	203	. 0	0	-	44	8,067	1,761	10,076
PERIOD 4 T	OTALS	1,246	40,119	7,731	9,618	566	74,641	156,788	74,487	365,195	654,879	2,699	470	-	1,318	42,437	8,178	11,114	654	86,255	165,847	78,790	394,594
PERIOD 56	- Site Restoration										· · · · · · · · · · · · · · · · · · ·												
Period 5b Di	rect Decommissioning Activities							-			•								<del>                                     </del>				
																<u> </u>	,						
Site Closeou 5b.1.1	t Activities Grade & landscape site		41						13			ļ				44	<u></u>			ļ		- 44	<del> </del>
	Final report to NRC	-	. 41	-		-	<del>  </del>	195		55 233	<u>-</u>			-		44	<u> </u>	ļ <u>-</u>	<u> </u>	-	206		
	Subtotal Period 5b Activity Costs	-	41	-	-	-		195	51				-	-		44	-	-	-	-	206	54	
Dariad Sh A	Iditional Costs																			ļ			
	Disposal of Asphalt Roadways	-			-	_	-	63	12	75			<u> </u>		ļ	-	_	-	<del>                                     </del>	<del> </del>	66	13	79
5b.2.2	Disposal of Legacy Class B & C Waste	-	-	-	148	-	1,400	-	478	2,026	-	384	96	-	-	-		171		1,618	-	506	2,294
	Disposal of Intermodal Containers	-	-	-			-	975	188	1,163					-	-	-	-	-	-	1,031	199	1,230
5b.2	Subtotal Period 5b Additional Costs	-	·		148	-	1,400	1,038	678	3,264		384	96	-	<u> </u>	-	<u> </u>	171	-	1,618	1,098	717	3,604
Period 5b Co	ollateral Costs										Ī				<b> </b>								
5b.3.1	Small tool allowance	-	0		-	-	-	-		0		-	· · · -	-	-	0	<del></del>	-	-	-	•		
5b.3	Subtotal Period 5b Collateral Costs	-	0	-	-	-	-	-	0	0	-	-	-	-		0	-	-	-	-	-	0	
Period 5b Pe	priod-Dependent Costs															-	<del>  ,                                   </del>	-		-			+ .
5b.4.1	Insurance	-	-	-	-	-	-	36	5	40		•	-	· -	-	-	<u> </u>	-	-	-	38	5	43
5b.4.2	Property taxes		<del></del>								-		ļ	-	٠.		-			-			
	Plant energy budget NRC ISFSI Fees						-							<del> </del>	-		-	+	-			2	
5b.4.4 5b.4.5	Emergency Planning Fees						<del> </del>				-	-	-	-	-		-		-	+		13 7	
5b.4.6	ISFSI Operating Costs	-		-	-		-	42	8	50		<del></del>			<del>  :</del>	+	<u> </u>	_	-	+	1-	9	53
	Security Staff Cost	-	-	-	-	_					-				-			+	<del> </del>	+		290	1,794

							1				1	1	1		1		· -	T		T			
					Tho	ousands of 200	08 Dollars	l				1	-			<u> </u>	<del></del>	Thous	ands of 20	10 Dollars			
			<u> </u>	T		Off-Site	LLRW										T:	I	Off-Site				
Activity		Decon				<u> </u>	Disposal		Total	Total			Class C	GTCC	Decon			Transport	Processin	Disposal	Other	Total	Tota
Index	Activity Description	Cost	Cost	Costs	Costs	Costs	Costs	Costs	Contingency	Costs	Cu. Feet	Cu. Feet	Cu. Feet	Cu. Feet	Cost	Cost	Costs	Costs	Costs	Costs	Costs	Contingency	Cost
5b.4.8	DOC Staff Cost		-		ļ <u>.</u>	<del> </del>		. 127	24	152	<del>-</del>	<del> </del>	1	-	<u></u>	<del> </del>	ļ: -	_	_	_	134	26	160
	Period-Dependent Costs (continued)							. 121		102		+ -	_		<del></del>	-	<del>                                     </del>	<del>                                     </del>	-	-	-		100
5b.4.9	Utility Staff Cost	-	-	-	-	-	-	428	83	511	-	-	-	-	-	-	-	<u> </u>		-	453	87	
5b.4	Subtotal Period 5b Period-Dependent Costs		-	-	-	-		2,215	415	2,631		-	<del></del>	-	-	-		· -	-	-	2,343	439	2,783
5b.0	TOTAL PERIOD 5b COST		41	_	148	<del>                                     </del>	1,400	3,448	1.144	6,182	<u> </u>	384	96	_		44		171	_	1,618	3.648	1,210	6,690
33.5			1		· · · ·		1,100	0,110	.,,,,,	0,102		- 001				1 77	4			1,010	. 0,040	1,210	0,000
PERIOD 5	- Fuel Storage Operations																1						
			-			-						·					ļ						
Period 5c F	Period-Dependent Costs						-		<u> </u>			<u> </u>				-	-	<u> </u>					
5c.4.1	Insurance		-	-	-	-	-	251	32	284	-	-	-	-	-	-	<del>                                     </del>	<del> </del>	-	-	266	34	300
5c.4.2	Property taxes	-	-	-	-	-	-	-	-		-		-	-	-	-	-	-	-	-		-	
5c.4.3	Plant energy budget	-	ļ -	-	-	-	-	-	- 04	,001		-	-	-	<u> </u>	-	-	-	-	-	-		
5c.4.4 5c.4.5	NRC ISFSI Fees Emergency Planning Fees		-	-	-	-	-	709 354	91 45	801 399	-	<del> </del>	<del> </del>	-	<u> </u>	-		-	-	-	750 . 374	96 48	847 422
5c.4.6	ISFSI Operating Costs	-	-	-	<del>-</del>	-	1 -	297	. 57	355	<del>                                     </del>	+	1 -	-	-	<del>                                     </del>	+	+	-	-	315	61	375
5c.4.7	Security Staff Cost	-	-	-	-	-	-	9,998	1,927	11,925	-	<u> </u>	-	-	-	-	-	† -	-	-	10,576	2,039	12,615
5c.4.8	DOC Staff Cost	-		·	-	-	-		38	236	-	-	-		-	-	-	-	-	-	210	40	250
5c.4.9	Utility Staff Cost		· -	-	-	-	-	1,087	210	1,297	-	-	ļ <u>-</u>	-		-		-	-	-	1,150	222	1,372
5c.4	Subtotal Period 5c Period-Dependent Costs	-	-		-	-	<del>  _</del>	12,896	2,401	15,297	<u></u>		<u> </u>			_	<del> </del> -	<del>  _</del>	-	_	13,641	2,540	16,181
			1 -					12,000	2,101				<del> </del>		•			1		<del> </del>	10,041	2,040	10,101
5c.0	TOTAL PERIOD 5c COST	-	-	-	-	-	-	12,896	2,401	15,297		-	-										
DEDIOD 6	d - Spent Fuel and GTCC shipping			•							<u> </u>	<del> </del>	ļ				ļ	<u> </u>					
FERIOD S	u - Spent Fuel and GTCC snipping										· · · · · · · · · · · · · · · · · · ·										1		<del> </del>
Period 5d [	Direct Decommissioning Activities			1	-	1	1						<del> </del>			·	<del> </del>		1				
Nuclear Ste	eam Supply System Removal Vessel & Internals GTCC Disposal			95		-	346		70	519				. 17			. 400					00	F00
5d.1.1.1	Subtotal Period 5d Activity Costs		<del>                                     </del>	95		-	346	-	79 79	519	-		<del>                                     </del>	17	-	-	100		-	399 399		83 83	
		-	ļ				1.0					<u> </u>				1.	100	-				- 55	000
	Collateral Costs		ļ																				
5d.3.1 5d.3.1	Transfer Spent Fuel to DOE Subtotal Period 5d Collateral Costs	-	-		<u> </u>	-	-	462 462		551 551		-		-		<u>.</u>	<u> </u>		ļ	ļ			-
50.5.1	Subtotal Feriod 3d Collateral Costs		·	-		<u> </u>	<del></del>	402	09	331	-	-	-	-			<u> </u>						
Period 5d F	Period-Dependent Costs		·						-														
5d.4.1	Insurance	-		-	-	-	1	36	7	43	-	-	-	-	-		-	-	-	-	38	7	45
5d.4.2 5d.4.3	Property taxes Plant energy budget	-	1.		-	-			-	-		-	-			-	<u> </u>		<u> </u>	<u>-</u>		-	ļ
5d.4.4	NRC ISFSI Fees	-	_	-	<del>-</del>	-		<del></del>	13	111		ļ <u>-</u>	-	-	<u>-</u>	ļ <u>-</u>	<u>                                     </u>	<del>                                     </del>	-	-	104	13	118
5d.4.5	Emergency Planning Fees	-		-	-	-	-				-	-	-	-	-	-	-	-	-	<del>-1</del>			
5d.4.6	ISFSI Operating Costs	-	-	-	-	-	-	43			-	-	-	-			-	-	-	-			54
5d.4.7 5d.4.8	Security Staff Cost  DOC Staff Cost			-	-	-	-	1,430			-	1	<del>                                     </del>		-	-	-	+	ļ <u>-</u>	<del></del>	.,		
5d.4.9	Utility Staff Cost			-	<del> </del>	<u> </u>	<del>                                     </del>	28 156		34 186		-		-	-	<del> </del>	-		-			32	
5d.4.	Subtotal Period 5d Period-Dependent Costs	-	†· -		-	-	-	1,841	345	2,187	-	-	+	_	-	<del></del>	-		-	-		365	
5d.0	TOTAL PERIOD 5d COST	-	· -	95	-	-	346	2,303	513	3,257		ļ : <u>-</u>	<u> </u>	17	<u>-</u>	<u> </u>	. 100	-	-	399	2,436	543	3,479
PERIOD 5	e - ISFSI Decontamination	-			,		-			<u> </u>		-			· —	-	-	-	ļ	<del> </del>	<u> </u>		
							<u> </u>			-		+					-		-	<del> </del>			
	Additional Costs		Į														1.						
5e.2.1 5e.2	ISFSI Decontamination Subtotal Period 5e Additional Costs		5		<del></del>		10			1,417	116				<u> </u>	6				12		244	
5e.2	Subtotal Period be Additional Costs		0	0	· · · 2		- 10	1,169	231	1,417	116	· · · ·	-		<u> </u>	6	. 0	. 2	ļ <u>-</u>	12	1,236	244	1,500
Period 5e	Collateral Costs		•				1			-			1	-			<del> </del>	-					
5e.3.1	Small tool allowance	-				-	-	-	0	0	-		-	-		0	Ţ	-	-	-	-	0	
5e.3	Subtotal Period 5e Collateral Costs		. 0	-	<del>-</del>	-	-	-	0	0	-	-	-	-	-	. 0		-	-	-	-	0	
	1		1		<u> </u>	1	1	<u> </u>		l	<u> </u>	1	1	<u> </u>	<u> </u>		<u>'</u>			1	1	<u> </u>	<u></u>

					Tho	usands of 200	8 Dollars						·		i	<del></del>	<del></del>	Thous	ands of 201	0 Dollare			
						Off-Site	LLRW	_									T	1 TOUS	Off-Site		<del></del>		
Activity		Decon	Removal	Packaging	Transport		Disposal	Other	Total	Total	Class A	Class B	Class C	GTCC	Decon	Removal	Packaging	Transport			Other	Total	Tota
Index	Activity Description	Cost	Cost	Costs	Costs	Costs	Costs	Costs	Contingency	Costs	Cu. Feet		Cu. Feet		Cost	Cost	Costs	Costs	Costs	Costs		Contingency	Cost
Period 5e F	Period-Dependent Costs																						
5e.4.1	Insurance	-	-	-			_	23	3	26	-	-	-		<u> </u>		<del>  .</del>	<del></del>	-		25	3	28
5e.4.2	Property taxes	-	-	-		<u>-</u>	-	,	-		_	_	_	-			-		-		-		
5e.4.3	Heavy equipment rental	-	118	-	-	-	-		23	141	-	<u> </u>	-		-	125	1	_		_		24	149
5e.4.4	Plant energy budget	-	-	-		-	-	-	-		-	-	-	-		-	-		-		-		- 1-10
5e.4.5	Security Staff Cost	-	-	-	-	-	-	877	169	1,046		-	-		<u> </u>	<del>-</del>	-	-	_		928	179	1,106
5e.4.6	DOC Staff Cost	-	-	-	-	-	-	17	. 3	21	-	-	-		-	_	-	-		-	18	4	22
5e.4.7	Utility Staff Cost	-	-	-		-		95	18	114	-	-	-	-	-	-	_	_	-	-	101	19	120
5e.4.	Subtotal Period 5e Period-Dependent Costs	-	118	-	• -	-	-	1,013	216	1,347	-	-			-	125	-	-	-		1,071	229	1,425
5e.0	TOTAL PERIOD 5e COST	-	124	0	. 2	-	10	2,181	447	2,764	116	_	-		_	131	0	2	-	12	2,307	473	2,925
DEDIOD 64	- ISFSI Site Restoration																				_,,,,,		
PERIOD SI	- ISFSI Site Restoration		-																				
Period 5f A	dditional Costs																<del> </del>						
5f.2.1	ISFSI Demolition	-	270	-		-	-	48	61	380		_			·	286		-			51	65	402
5f.2	Subtotal Period 5f Additional Costs		270	-	-	-	-	48	61	380	-	-			-	286	_	<u> </u>	_	_	51	65	402
Period 5f C	collateral Costs			s																			
5f.3.1	Small tool allowance	-	3	-		-	-	_	1	3		-	_			3	-				-	1	
5f.3	Subtotal Period 5f Collateral Costs		3	-	•	•	-	-	.1	3	-	-	-		-	3		_	-		-	1	
Period 5f P	eriod-Dependent Costs		·		·												-						
5f.4.1	Insurance	-	_	-			-	-	-			_			_		<del> </del>		_		_		
5f.4.2	Property taxes	-	-	-		_	-	_	-		_		_				<del></del>						
5f.4.3	Heavy equipment rental	-	61	-	-	-	-	<u>-</u>	12	73	_	-	-	_		65	_		_			12	77
5f.4.4	Plant energy budget	-		-		-	-	-	-		_	_	-		-		_		_				
5f.4.5	Security Staff Cost	-	-	-	-	-	-	492	95	587	-	_	-		-		-	-	_		521	100	621
5f.4.6	DOC Staff Cost	-	-	-			-	10	2	12	_	_			_		-		_		10	2	12
5f.4.7	Utility Staff Cost	-	-	-	-	-	-	54	10	64	-	-		-		_	-	_			57	11	68
5f.4	Subtotal Period 5f Period-Dependent Costs		61	-	-	-	-	555	119	735		-	-		_	65	-	-	-	-	588	126	778
5f.0	TOTAL PERIOD 5f COST	-	334	-		-	-	604	181	1,119	-	-	-		_	353	-		-	-	639	191	1,183
PERIOD 5	TOTALS		499	95	140		4.750	24 422	1.000	20.040	440	2004	- 60					1=-					
			499	90	149	-	1,756	21,432	4,686	28,618	116	384	96	17	-	528	101	172	-	2,029	22,670	4,957	30,458
TOTAL CO	ST TO DECOMMISSION	2,214	41,837	7,830	9,774	566	76,487	277,452	83,598	499,759	655,237	3,083	. 566	17	2,342	44,255	8,282	11,295	654	88,388	293,483	88,428	537,128
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Humboldt Bay Power Plant Unit 3

Decommissioning Cash Flow

(Estimated in 2010 Dollars)

(1 Page)

# Humboldt Bay Power Plant Unit 3 Decommissioning Cash Flow (Note 1) (Estimated in 2010 Dollars)

			ISFSI			
			Engr/License		k.	
		Non-NRC	Construction		Cummulative	Trust Account
	NRC Scope	Scope (Non-	Operation		Decommission	Funding
	(Radiological)	Radiological)	(Note 1)	Total	Estimate	(Note 2)
Year	, ,		-			, ,
1996	\$1,678,452			\$1,678,452	\$1,678,452	
1997	\$8,663,216		į.	\$8,663,216	\$10,341,669	
1998	\$5,573,757		\$344,408	\$5,918,165	\$16,259,834	
1999	\$723,490		\$2,281,454	\$3,004,944	\$19,264,778	
2000	\$85,241		\$2,736,091	\$2,821,331	\$22,086,109	
2001	\$89,543		\$398,012	\$487,555	\$22,573,664	
2002	\$994,127		\$113,704	\$1,107,831	\$23,681,495	
2003	\$494,838		\$2,539,476	\$3,034,313	\$26,715,809	
2004	\$491,070		\$1,444,628	\$1,935,698	\$28,651,506	
2005	\$161,506		\$1,671,769	\$1,833,274	\$30,484,781	
2006	\$1,073,612		\$3,546,617	\$4,620,229	\$35,105,009	
2007	\$4,474,247		\$9,240,172	\$13,714,418	\$48,819,428	
2008	\$12,590,383		\$28,485,988	\$41,076,371	\$89,895,799	
2009	\$32,901,391		\$3,179,956	\$36,081,347	\$125,977,145	\$125,679,704
2010	\$67,823,000	\$921,000	\$4,825,000	\$73,569,000	\$199,546,145	
2011	\$69,596,000	\$921,000	\$4,465,000	\$74,982,000	\$274,528,145	
2012	\$60,244,928		\$4,633,000	\$64,877,928	\$339,406,073	
2013	\$77,278,927		\$4,633,000	\$81,911,927	\$421,318,000	\$372,334,718
2014	\$40,495,000		\$4,633,000	\$45,128,000	\$466,446,000	
2015	\$35,515,000		\$4,633,000	\$40,148,000	\$506,594,000	\$498,014,422
2016	\$4,283,000	\$137,000	\$4,633,000	\$9,053,000	\$515,647,000	
2017	\$0		\$4,633,000	\$4,633,000	\$520,280,000	
2018	\$0		\$4,633,000	\$4,633,000	\$524,913,000	
2019	\$0		\$4,633,000	\$4,633,000	\$529,546,000	
2020	\$3,470,000		\$4,112,000	\$7,582,000	\$537,128,000	•
TOTAL	\$428,700,727	\$1,979,000	\$106,448,273	\$537,128,000		

Notes:

- Cash Flow is based on construction of ISFSI and Fuel removed from HBPP in 2020 (Assumes DOE Used Fuel Repository opens 2020 allowing HBPP Fuel to be shipped during 2020)
- 2) Trust Account Value of \$372.3 million is Expense Equivalent Liquidation Value (Includes Tax Break)
  Market Value of Trust as of 12/09 was \$327.0 million, actual expended as of 12/09 was \$125.7 million
- 3) Assumes CPUC recommendation of 25% contingency in Decision 07-01-003
- 4) Assumes PG&E recommedation of \$10.044 million annual revenue for HBPP begining 2010 for

**Decommissioning Cost Study** 

for the

Humboldt Bay Power Plant Unit 3

**2010 SAFSTOR** 

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March 2009