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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 160021-EI FLORIDA POWER & LIGHT COMPANY AND SUBSIDIARIES

IN RE: PETITION FOR RATE INCREASE BY FLORIDA POWER & LIGHT COMPANY

FPL WITNESS KEITH FERGUSON

EXHIBIT KF-4

DISMANTLEMENT STUDY

VOLUME 1 OF 1

Florida Power & Light Company

2016 Dismantlement Study

Babcock Ranch Solar Cape Canaveral Cedar Bay Citrus Solar DeSoto Solar Ft. Myers Lauderdale Manatee Manatee Solar Martin Martin Solar Okeechobee Port Everglades Riviera Beach Sanford Scherer Space Coast Solar St. Johns River Turkey Point West County

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FLORIDA POWER & LIGHT COMPANY 2016 DISMANTLEMENT STUDY EXECUTIVE SUMMARY

Florida Power & Light Company ("FPL") engaged Burns & McDonnell Engineering Company, Inc. ("BMcD") to perform a site specific fossil plant dismantlement cost study in 2015, which estimated the cost to dismantle FPL's fossil and solar plants to be approximately \$458.8 million in 2015 dollars. BMcD's study included all of FPL's existing plants as well as plants that FPL is projected to place in service through 2020, with the exception of the Cedar Bay cogeneration facility. FPL acquired the Cedar Bay cogeneration facility in September 2015 and engaged NorthStar Demolition and Remediation LP as part of the due diligence in that transaction to provide an estimate to dismantle the facility (which was approximately \$4.5 million). That estimate did not provide a breakdown of the component costs. The total amount of FPL's dismantlement costs, including the Cedar Bay cogeneration facility, escalated through 2016 is \$476.9 million, as follows:

	(in mi 201	llions) l6 \$	% of Total
Material & Equipment	\$	300	63%
Labor		287	60%
Burial		24	5%
Cedar Bay		5	1%
Salvage		(139)	(29)%
Total	\$	477	100%

FPL's previous dismantlement study was filed in 2009 and was approved by the Florida Public Service Commission ("FPSC") in Order No. PSC-10-0153-FOF-EI (Docket No. 090130-EI). The current dismantlement study reflects the impact of the updated cost estimates, retirement and additions of several units since the last study and the amortization of a portion of the dismantlement reserve as approved by the FPSC as part of FPL's 2012 Rate Settlement in Order No. PSC-13-0023-S-EI (Docket No. 120015-EI). A comparative analysis of significant drivers of the change in the resulting accrual since the previous study is contained in Section 2.

Section 1 Executive Summary

PLANT RETIREMENTS

FPL has retired and dismantled the following generating units since the 2009 dismantlement study:

	<u>Retirement</u>
Generating Unit	<u>Date</u>
Repowered Units – Partial Dismantlement	
Cape Canaveral Unit 1	2010
Cape Canaveral Unit 2	2010
Pt. Everglades Unit 1	2012
Pt. Everglades Unit 2	2012
Pt. Everglades Unit 3	2013
Pt. Everglades Unit 4	2013
Riviera Unit 3	2011
Riviera Unit 4	2011
Final Retirement – Full Dismantlement	
Cutler Unit 5	2012
Cutler Unit 6	2012
Putnam Unit 1	2014
Putnam Unit 2	2014
Sanford Unit 3	2012

In addition, FPL plans to retire the following units during 2016 and begin dismantlement in 2017:

	<u>Retirement</u>
Generating Unit	<u>Date</u>
Cedar Bay	2016
Fort Myers Gas Turbines	2016
Lauderdale Gas Turbines	2016
Pt. Everglades Gas Turbines	2016

FPL has also converted Turkey Point Units 1 and 2 from steam generating units to synchronous condensers in 2016 and 2013, respectively. As part of the conversion, FPL has and will incur costs to partially dismantle these units, but ultimate dismantlement is assumed to occur following the retirement of Turkey Point Unit 5 estimated to be in 2047.

Section 1 Executive Summary

PLANT ADDITIONS

FPL has added or will add by 2020 the following generating units since the 2009 dismantlement study.

Generating Unit	In-Service
Babcock Ranch Solar	2016
Cape Canaveral Clean Energy Center	2012
Cedar Bay (purchase date)	2015
Citrus Solar	2016
Fort Myers Peaking Units	2016
Lauderdale Peaking Units	2016
Manatee Solar	2016
Okeechobee Clean Energy Center	2019
Pt. Everglades Clean Energy Center	2016
Riviera Clean Energy Center	2014

DISMANTLEMENT RESERVE AMORTIZATION

As part of the 2012 Rate Settlement approved by the FPSC in Order No. PSC-13-0023-S-EI (Docket No. 120015-EI), FPL was authorized to amortize up to \$176 million of the dismantlement reserve, subject to certain conditions. This amount was reduced to \$146 million as part of the Cedar Bay settlement approved by the FPSC in Order No. PSC-15-0401-AS-EI (Docket No. 150075-EI). The utilization of the entire \$146 million of dismantlement reserve amortization has been reflected in the current dismantlement study.

RETIREMENT DATES

The estimated retirements dates contained in the current dismantlement study are based on the retirement dates estimated in the 2016 depreciation study prepared by Gannett Fleming, which has also been filed in this docket.

ESCALATION RATES

The future cost of dismantlement is forecast by analyzing the individual cost categories from BMcD's cost study as described above. The 2015 cost of each category is divided into components of labor, material and equipment, disposal and salvage. These components are escalated by the estimated inflationary rates for compensation per hour, Producer Price Index (Intermediate Material), Gross Domestic Product (Implicit Price Deflator) and Metal and Metal Products. Section 5 contains a schedule of the applicable escalation rates for each category. FPL used the same data vendor, Global Insight, to obtain the inflation forecast as was used in the previous study. Global Insight, a division of IHS Inc., is an economics organization and considered a leading provider of economic data and analytics, and serves over 3,800 clients in industry, finance and

government, employing more than 600 staff in 23 offices in 13 countries.

The cost estimate obtained by applying Global Insight rates yields the future cost of dismantlement using currently available technologies and procedures, as shown in Section 4. The methodology used to determine the escalation rate for converting the current estimated dismantlement cost to future estimated dismantlement cost is consistent with the guidance set out in FPSC Rule 25-6.04364 and that used in the preparation of the prior dismantlement.

CONTINGENCY ALLOWANCE

The overall contingency allowance of 16% used by the Company in its prior study and approved in Order No. PSC-10-0153-FOF-EI (Docket 090130-EI) was increased by BMcD to 20% in the 2016 study, which is consistent with BMcD's experience with actual costs relative to estimated costs.

CONCLUSION

The annual dismantlement accrual for FPL is \$27.6 million, based on total dismantlement cost in 2016 dollars of \$476.9 million. FPL requests that the annual accrual be effective January 1, 2017. Section 6 of this report provides the calculation of the annual accrual.

Drivers of Change in Dismantlement Accrual

	<u>20</u>	<u>09 Study</u>		<u>Plant</u>			<u>Reserve</u>	<u>Upd</u>	ated Costs and	2	2016 Study	
	Annu	al Accrual ¹	R	etirements/Adj ¹	<u>New Plants</u>	Ar	nortization ²	Esc	alation Rates ³	An	nual Accrual	dif
Clause	\$	453,816	\$	-	\$ -	\$	-	\$	306,456	\$	760,272	\$ 306,456
Steam		9,711,696		(3,258,085)	1,130,063		2,613,459		2,403,625		12,600,757	2,889,061
Other		8,302,875		(769,136)	4,051,889		3,344,414		(694,025)		14,236,016	5,933,141
-	\$	18,468,387	\$	(4,027,222)	\$ 5,181,951	\$	5,957,873	\$	2,016,056	\$	27,597,046	\$ 9,128,659

Notes:

¹ Includes St. Lucie Wind which was not constructed

² Reflects amortization of \$146 million of dismantlement reserve enabled by Order No. PSC-13-0023-S-EI (Docket No. 120015-EI).

³ Includes \$54 million reallocation of theoretical dismantlement reserve surplus

Comparison of Current Accruals and Proposed Accruals

Plant Site	Per Docket No. 090130-EI Order No. PSC-10-0153-FOF- Annual Accrual	EI	Proposed Annual Accrual Effective 1/1/2017	Increase / (Decrease) in Annual Dismantlement Accrual
Babcock Ranch Solar ¹	\$	0\$	335,077	\$ 335,077
Cape Canaveral ²	252,2)3	824,770	572,567
Cedar Bay ¹		0	1,130,063	1,130,063
Citrus Solar ¹		0	335,077	335,077
Cutler ²	333,8	01	0	(333,801)
Desoto Solar	72,7	12	127,737	55,025
Ft. Myers	1,317,3)5	1,448,408	131,103
Lauderdale	1,251,1	91	2,245,516	994,325
Manatee	2,559,4	15	3,116,518	557,104
Manatee Solar ¹		0	335,077	335,077
Martin	2,533,0	98	3,577,086	1,043,989
Martin Solar	346,1	50	586,954	240,794
Okeechobee ¹		0	560,859	560,859
Port Everglades ²	2,802,3	50	2,600,158	(202,202)
Putnam ²	405,2	97	0	(405,297)
Riviera ²	89,1	82	692,886	603,704
Sanford ²	1,493,3	96	1,108,930	(384,466)
Scherer	1,634,1	57	2,280,024	645,868
Space Coast Solar	34,9	44	45,582	10,637
St. Johns River	869,5	86	939,516	69,930
St. Lucie Wind ³	30,0	38	0	(30,038)
Turkey Point ²	1,111,1	93	3,182,823	2,071,630
West County	1,332,3	48	2,123,984	791,636
Total	\$ 18,468,3	<u>87</u> \$	27,597,046	\$ 9,128,659 [/

 [A] Total increase in dismantlement accrual
 \$ 9,128,659

 Less accrual for solar units (DeSoto, Martin and Space Coast) recovered through clause
 306,456

 Increase in base rate dismantlement accrual
 \$ 8,822,204

Notes:

1 Added since 2009 Dismantlement Study

² Plant was partially dismantled or fully dismantled since 2009 Dismantlement Study as a result of a repowering, final retirement of a unit or conversion to synchronous condenser (Turkey Point)

³ Plant was not constructed

⁴ After-tax amount of \$5,419,038 is reflected as a Per Book Company Adjustment on MFR C-3 for both the 2017 Test Year and 2018 Subsequent Year.

Calculation of Current and Future Jurisdictional Dismantlement Costs

2017 Jurisdictional Factor:	95.05950%		Jurisd	ictional
Site/Unit	Dismantlement Cost in 2016 Dollars	Dismantlement Cost in Future Dollars	Dismantlement Cost in 2016 Dollars	Dismantlement Cost in Future Dollars
Babcock Ranch Solar	\$ 5,706,117	\$ 16,208,515	\$ 5,424,207	\$ 15,407,733
Cape Canaveral				
Common Unit 1	8,763,564	28,930,131	8,330,600 6 707 543	27,500,838
	1,000,102	20,202,010	0,707,545	20,005,515
Cedar Bay	4,520,250	4,520,250	4,296,927	4,296,927
<u>Citrus Solar</u>	5,706,117	16,208,515	5,424,207	15,407,733
DeSoto Solar	2,038,160	4,598,011	1,937,464	4,370,847
Ft. Myers				
Common Unit 2	8 961 104	48,289,938	8 518 381	45,904,173
Unit 3	1,536,098	4,432,087	1,460,207	4,213,119
Unit 4 (Combustion Turbine Peakers)	1,699,258	7,614,811	1,615,306	7,238,601
	274,581	274,078	201,010	200,119
Common	19,026,453	34,110,031	18,086,451	. 32,424,825
Unit 4	4,288,639	8,485,698	4,076,759	8,066,462
Unit 5	4,281,144	8,473,410	4,069,634	8,054,781
Unit 6 (Combustion Turbine Peakers)	4,795,551	20,187,770	4,558,626	19,190,393
Gas Turomes	262,103	201,430	249,155	207,534
Manatee	21 224 265	50.014.625	20 681 725	49 300 199
Unit 1	10,492,716	17.921.880	9,974,323	17.036.450
Unit 2	10,492,716	17,921,880	9,974,323	17,036,450
Unit 3	6,662,213	20,822,629	6,333,067	19,793,887
<u>Manatee Solar</u>	5,706,117	16,208,515	5,424,207	15,407,733
Martin				
Common	46,271,997	79,759,971	43,985,929	75,819,430
Unit 1	10,031,905	19,085,942	9,536,279	18,143,001
Unit 3	2,795,692	6,109,056	2,657,571	5,807,238
Unit 4	2,808,357	6,101,645	2,669,610	5,800,193
Unit 8	6,502,837	20,595,397	6,181,564	19,577,881
<u>Martin Solar</u>	10,711,734	28,364,842	10,182,521	26,963,477
Okeechobee Common	5 661 780	34 865 046	5 382 060	33 142 539
Unit 1	6,541,355	50,281,041	6,218,179	47,796,906
Port Everglades				
Common	6,282,876	24,623,128	5,972,470	23,406,622
Gas Turbines	1,921,876	2,054,921	1,826,926	1,953,397
Riviera Beach				
Common	6,449,725	21,751,693	6,131,076	20,677,050
Unit 5	7,001,431	28,884,031	6,655,525	27,457,016
Sanford				
Common Unit 4	6 379 216	24,843,058	9,728,590	23,615,68/
Unit 5	6,352,092	17,581,072	6,038,267	16,712,479
Scherer				
Common	33,857,016	79,953,858	32,184,311	76,003,738
Unit 4 Handling	14,720,600 995,494	33,139,419 2,237,289	13,993,329 946,312	31,502,166 2,126,756
Space Coast Solar	765,922	1,796,012	728,081	1,707,280
St. Johns River				
Common	14,572,012	33,225,027	13,852,082	31,583,545
Unit I Unit 2	3,239,655	7,321,551	3,079,600	6,959,830
Handling	381,656	1,086,682	362,800	1,032,994
Turkey Point				
Common	13,734,913	37,157,605	13,056,339	35,321,834
Unit 1	14,000,963	43,080,725	13,309,245	40,952,322
Unit 2 Unit 5	14,000,963 9,383,582	43,080,725 30,913,211	13,309,245 · 8,919,986	40,952,322 29,385,944
West County				
Common	19,678,037	58,313,110	18,705,844	55,432,151
Unit 1	6,415,899	23,378,340	6,098,921	22,223,333
Unit 2 Unit 3	6,402,368	23,350,920	6,086,059 6,074,019	22,197,268
	0,509,701	23,000,322	0,077,018	23,047,123
Totals	\$ 476,896,436	\$ 1,262,201,433	\$ 453,335,368	\$ 1,199,842,371

.

Calculation of Current and Future Jurisdictional Dismantlement Costs

2018 Jurisdictional Factor: 95.12840%

			Jurisd	ictional
Site/Unit	Dismantlement Cost in 2016 Dollars	Dismantlement Cost in Future Dollars	Dismantlement Cost in 2016 Dollars	Dismantlement Cost in Future Dollars
Babcock Ranch Solar	\$ 5,706,117	\$ 16,208,515	\$ 5,428,138	\$ 15,418,901
Cape Canaveral				
Common	8,763,564	28,930,131	8,336,638	27,520,771
Unit I	7,056,152	28,282,618	6,/12,405	26,904,802
<u>Cedar Bay</u>	4,520,250	4,520,250	4,300,042	4,300,042
<u>Citrus Solar</u>	5,706,117	16,208,515	5,428,138	15,418,901
<u>DeSoto Solar</u>	2,038,160	4,598,011	1,938,869	4,374,015
Ft. Myers				
Common	19,662,896	48,289,938	18,704,998	45,937,445
Unit 2 Unit 3	8,961,104	26,187,652	8,524,555	24,911,894
Unit 4 (Combustion Turbine Peakers)	1,558,098	7,614,811	1,401,200	7,243,847
Gas Turbines	274,581	294,678	261,205	280,322
<u>Lauderdale</u>				
Common	19,026,453	34,110,031	18,099,560	32,448,327
Unit 5	4,281,144	8,403,090	4,079,714	8,060,619
Unit 6 (Combustion Turbine Peakers)	4,795,551	20,187,770	4,561,930	19,204,303
Gas Turbines	262,103	281,438	249,334	267,728
Manatee		PA *** ***		
Common Unit 1	31,224,365	50,914,625	29,703,239	48,434,268
Unit 2	10,492,716	17,921,880	9,981,553	17,048,798
Unit 3	6,662,213	20,822,629	6,337,657	19,808,234
<u>Manatee Solar</u>	5,706,117	16,208,515	5,428,138	15,418,901
Martin				
Common	46,271,997	79,759,971	44,017,811	75,874,385
Unit 1 Unit 2	10,031,905	19,085,942	9,543,191	18,156,151
Unit 3	2 795 692	6,109,055	2,659,497	5.811.447
Unit 4	2,808,357	6,101,645	2,671,545	5,804,397
Unit 8	6,502,837	20,595,397	6,186,045	19,592,071
<u>Martin Solar</u>	10,711,734	28,364,842	10,189,902	26,983,020
Okeechobee	5 661 700		5 305 6 4	20.144.54
Unit 1	5,661,780 6,541,355	34,865,046 50,281,041	5,385,961 6,222,686	33,166,561 47,831,550
Port Everylades				
Common	6,282,876	24,623,128	5,976,799	23,423,588
Unit 5	5,982,695	28,597,772	5,691,242	27,204,603
Gas Turbines	1,921,876	2,054,921	1,828,250	1,954,813
Riviera Beach				
Common Unit 5	6,449,725 7,001,431	21,751,693 28,884,031	6,135,520 6,660,349	20,692,037 27,476,917
Sanford	.,,		-,,-	
Common	10.234.211	24.843.058	9.735.641	23.632.804
Unit 4	6,379,216	18,279,244	6,068,446	17,388,753
Unit 5	6,352,092	17,581,072	6,042,644	16,724,593
Scherer				
Common Unit 4	33,857,016	79,953,858	32,207,638	76,058,826
Handling	995,494	2,237,289	946,998	2,128,297
Space Coast Solar	765,922	1,796,012	728,609	1,708,518
St. Johns River				
Common	14,572,012	33,225,027	13,862,122	31,606,437
Unit I Unit 2	3,239,655	7,321,551	3,081,832	6,964,874
Handling	381,656	1,086,682	363,063	1,033,743
Turkey Point				
Common	13,734,913	37,157,605	13,065,803	35,347,435
Unit 1	14,000,963	43,080,725	13,318,892	40,982,005
Unit 5	14,000,963 9 383 582	43,080,725	13,318,892 8,926,452	40,982,005
	,	50,713,211	0,720,432	27,407,243
West County	10 678 027	58 313 110	18 710 /07	55 477 378
Unit 1	6,415,899	23,378,340	6,103,342	22,239,441
Unit 2	6,402,368	23,350,920	6,090,470	22,213,356
Unit 3	6,389,701	25,086,522	6,078,421	23,864,407
Totals	\$ 476.896.436	\$ 1,262,201,433	\$ 453,663,949	\$ 1,200,712,028

Escalation Rates Used to Calculate Future Dismantlement Costs

INFLATION FORECAST

The U.S. Economy GLOBAL INSIGHT 30 Year Outlook (May 2015)

50 1041 0		Compensation per	Hour (Non-Farm)	Producer Price Index	(Intermediate Materials)		GDP Deflat	or (Implicit)	METAL & ME	TAL PRODUCTS
	- 1	ANNUAL	COMPOUNDED	ANNUAL	COMPOUNDED	ſ	ANNUAL	COMPOUNDED	ANNUAL	COMPOUNDED
		RATE OF	MULTIPLIER	RATE OF	MULTIPLIER		RATE OF	MULTIPLIER	RATE OF	MULTIPLIER
YEAR		CHANGE	FROM 2015	CHANGE	FROM 2015		CHANGE	FROM 2015	CHANGE	FROM 2015
2015		2.7%	1.000	-7.3%	1.000	~	1.1%	1.000	-5.0%	1.000
2016		3.5%	1.035	0.9%	1.009		2.0%	1.020	-0.6%	0.994
2017		3.7%	1.073	2.6%	1.036		2.0%	1.040	1.8%	1.013
2018		3.9%	1.115	2.4%	1.061		1.9%	1.060	2.8%	1.041
2019		3.9%	1.158	2.0%	1.082		2.0%	1.081	1.7%	1.058
2020		3.9%	1.203	0.5%	1.088		1.9%	1.101	1.4%	1.073
2021		3.9%	1.249	1.1%	1.100		2.0%	1.124	1.4%	1.088
2022		3.9%	1.298	1.9%	1.121		2.1%	1.147	1.4%	1.103
2023		3.9%	1.349	2.0%	1.143		2.2%	1.172	1.4%	1.119
2024		4.0%	1.402	1.4%	1.160		2.1%	1.197	1.3%	1.133
2025		4.0%	1.458	0.9%	1.170		2.1%	1.222	1.4%	1.148
2026		3.9%	1.515	0.8%	1.179		2.1%	1.247	1.7%	1.168
2027		3.9%	1.573	1.0%	1.191		2.1%	1.273	2.1%	1.192
2028		3.9%	1.634	1.2%	1.205		2.1%	1.299	2.2%	1.218
2029		3.8%	1.697	1.1%	1.218		2.1%	1.327	2.2%	1.245
2030		3.8%	1.763	1.0%	1.230		2.1%	1.355	2.1%	1.272
2031		3.9%	1.831	1.2%	1.244		2.2%	1.385	2.2%	1.300
2032		3.9%	1.902	0.9%	1.256		2.2%	1.416	2.1%	1.327
2033		3.9%	1.975	1.0%	1.269		2.2%	1.447	2.1%	1.354
2034		3.9%	2.052	1.1%	1.283		2.2%	1.480	2.0%	1.382
2035		3.9%	2.131	1.0%	1.296		2.2%	1.513	2.0%	1.409
2036		3.9%	2.214	.10%	1.309		2.2%	1.546	1.9%	1.437
2037		3.9%	2.300	1.1%	1.323		2.2%	1.580	1.9%	1.465
2038		3.9%	2.390	1.1%	1.338		2.2%	1.616	1.9%	1.493
2039		3.9%	2.482	1.2%	1.354		2.3%	1.653	1.9%	1.522
2040		3.9%	2.579	1.2%	1.370		2.3%	1.690	1.9%	1.550
2041		3.9%	2.680	1.2%	1.386		2.3%	1.729	1.9%	1.580
2042		3.9%	2.784	1.2%	1.402		2.3%	1.769	1.9%	1.609
2043		3.9%	2.893	1.2%	1.418		2.3%	1.811	1.8%	1.639
2044		3.9%	3.005	1.2%	1.436		2.4%	1.853	1.8%	1.668
2045		3.9%	3.123	1.2%	1.433		2.4%	1.897	1.8%	1.698
2040		3.9%	3.244	1.276	1.470		2.470	1.942	1.876	1.728
2048		3.9%	3 502	1.2%	1.505		2.4%	2.034	1.8%	1.701
2049		3.9%	3 6 3 9	1.2%	1.503		2.176	2.082	1.8%	1 822
2050		3.9%	3.780	1.2%	1.541		2.4%	2.131	1.8%	1.855
2051		3.9%	3.928	1.2%	1.559		2.4%	2.182	1.8%	1.888
2052		3.9%	4.081	1.2%	1.578		2.4%	2.233	1.8%	1.921
2053		3.9%	4.240	1.2%	1.596		2.4%	2.286	1.8%	1.956
2054		3.9%	4.405	1.2%	1.615		2.4%	2.340	1.8%	1.991
2055		3.9%	4.577	1.2%	1.634		2.4%	2.395	1.8%	2.026
2056		3.9%	4.755	1.2%	1.654		2.4%	2.451	1.8%	2.062
2057		3.9%	4.941	t.2%	1.673		2.4%	2.509	1.8%	2.099
2058		3.9%	5.133	1.2%	1.693		2.4%	2.568	1.8%	2.136
2059		3.9%	5.333	1.2%	1.713		2.4%	2.629	1.8%	2.174
2060		3.9%	5.541	1.2%	1.734		2.4%	2.691	1.8%	2.213
2061	Ì	3.9%	5.757	1.2%	1.754		2.4%	2.754	1.8%	2.252
2062		3.9%	5.982	1.2%	1.775		2.4%	2.819	1.8%	2.292
2063		3.9%	6.215	1.2%	1.796		2.4%	2.885	1.8%	2.333
2064		3.9%	6.457	1.2%	1.817		2.4%	2.953	1.8%	2.375
2065		3.9%	6.709	1.2%	1.839		2.4%	3.023	1.8%	2.417
2066		3.9%	6.970	1.2%	1.861		2.4%	3.094	1.8%	2.460
2007		3.9%	7.242	1.2%	1.883		2.4%	3.167	1.8%	2.504
2008		3.9%	7.524	1.2%	1.905		2.4%	3.242	1.8%	2.548
2009	ļ	3.9%	1.017	1.2%	1.928		2.4%	3.318	1.6%	2.594
2070		3.9%	0.122 9.439	1.270	1.731		2.470	3.57	1.070	2.040
2072		3.9%	8 767	1.270	1.7/4		2.4%	3.477	1.070	2.08/
2073		3.9%	9 109	1.2%	2.021		2.4%	3 643	1.8%	2.755
2074		3.9%	9.464	1.2%	2.045		2.4%	3.728	1.8%	2.833
2075		3.9%	9.833	1.2%	2.069		2.4%	3.816	1.8%	2.883

Annual Accrual Calculation

		<u> </u>	ear	Future Cost		Diff	erence	Annual Accrual						
Unit	Dismantlement Cost in 2016 Dollars	Economic Recovery Year	Recovery Period As of 1/1/2017	lst Yr Expense (Future S)	2nd Yr Expense (Fature S)	Total Future S Cast	Adj Reserve as of 12/31/2016	Amount To Accrue	2017	2018	2019	2020	4 Year Average	Monthly Accrual
Babcock Ranch Solar	\$ 5,706,117	2046	29	\$ 4,753,253	\$ 11,455,262	\$ 16,208,515	s -	\$ 16,208,515	\$ 316,633	\$ 328,624	\$ 341,068	\$ 353,983	\$ 335,077	\$ 27,923
Cane Canaveral														
Common	8,763,564	2053	36	8,491,333	20,438,798	28,930,131	-	28,930,131	418,692	433,077	447,956	463,347	440,768	36,731
Unit 1	7,056,152	2053	36	8,275,122	20,007,496	28,282,618	-	28,282,618	361,503	376,105	391,298	407,104	384,002	32,000
<u>Cedar Bav</u>	4,520,250	2017	1	N/A	N/A	4,520,250	-	4,520,250	1,130,063	1,130,063	1,130,063	1,130,063	1,130,063	94,172
Citrus Solar	5,706,117	2046	29	4,753,253	11,455,262	16,208,515	-	16,208,515	316,633	328,624	341,068	353,983	335,077	27,923
DeSoto Solar	2,038,160	2039	22	1,349,541	3,248,470	4,598,011	508,956	4,089,055	120,460	125,187	130,098	135,202	127,737	10,645
Ft. Mvers														76 000
Common	19,662,896	2043	26	14,185,937	34,104,001	48,289,938	12,436,940	35,852,998	855,578	886.203	380.897	951,226	382.059	75,228
Unit 3	1 536 098	2043	26	1 297 202	3 134 885	4 432 087	1.551.230	2.880.856	62.124	64,808	67,609	70,530	66,268	5,522
Unit 4 (Combustion Turbine Peakers)	1,699,258	2056	39	2,227,421	5,387,390	7,614,811	-	7,614,811	83,801	87,171	90,678	94,325	88,994	7,416
Gas Turbines	274,581	2017	1	86,266	208,412	294,678	287,825	6,853	6,853	7,768	8,805	9,980	8,351	696
Lauderdale														
Common	19,026,453	2033	16	10,039,813	24,070,219	34,110,031	-	34,110.031	1,581,538	1,642,458	1,705,725	1,771,429	1,675,288	139,607
Unit 4	4,288,639	2033	16	2,490,179	5,995,519	8,485,698	5,091,419	3,394,279	148,459	155,256	162,364	169,797	158,909	13,247
Unit 5 Unit 6 (Combustion Turbing Bashare)	4,281,144	2055	10	5 910 338	14 277 432	20 187 770	5,084,040	20 187 770	231 545	240 438	249 673	259 263	245.230	20.436
Gas Turbines	262,103	2017	1	82,383	199.055	281,438	275,450	5,988	5,988	6,798	7,717	8,760	7,316	610
Manatee														
Common	31,224,365	2028	11	14,976,333	35,938,292	50,914,625	23,226,652	27,687.973	1,973,377	2,067,332	2,165,761	2.268,875	2,118,836	176,570
Unit 1	10,492,716	2028	11	5,265,716	12,656,165	17,921,880	14,130,713	3,791,167	262,439	276,399	291,101	306,584	284,131	23,678
Unit 2	10,492,716	2028	11	5,265,716	12,656,165	17,921,880	14,056,377	3,805,504	267,585	281,818	296,808	312,596	289,702	24,142
Umit 5	0,002,215	2045	20	0,092,947	14,750,281	20,822,027	-	20,822,023	397,430	414,540	454,557		123,043	
Manatee Solar	5,706,117	2046	29	4,753,253	11,455,262	16,208,515	-	16,208,515	316,633	328,624	341,068	353,983	335,077	27,923
Martin											1			
Common	46,271,997	2031	14	23,477,729	56,282,242	79,759,971	38,788,133	40,971,839	2,220,703	2,312,314	2,407,704	2,507,029	2,361,937	196,828
Unit 1	10,031,905	2031	14	5,601,245	13,484,698	19,085,942	13,846,664	5,239,278	267,560	280,904	294,915	309,624	288,251	24,021
Unit 2	10,031,905	2031	14	5,001,245	13,484,098	6 100 056	3 512 707	5,544,064	100.602	280,322	110 883	116 412	108 379	9.032
Unit 3	2,793,092	2034	17	1,787,034	4,320,022	6 101 645	3 508 446	2 593 199	100,802	105,832	111.064	116,555	108,574	9.048
Unit 8	6,502.837	2045	28	6,024,299	14,571,098	20,595,397	-	20,595,397	389,679	406,680	424,423	442,940	415,930	34,661
Martin Solar	10,711,734	2045	28	8,327,687	20,037,154	28,364,842	2,105,831	26,259,011	555,920	576,116	597,045	618,734	586,954	48,913
Okeechobee														
Common	5,661,780	2069	52	10,209,790	24,655,256	34,865,046	· ·	34,865,046	236,803	245,342	254,188	263,353	249,921	20,827
Unit l	6,541,355	2069	52	14,689,181	35,591,860	50,281,041	-	50,281,041	292,517	304,468	316,908	329,856	310,937	25,911
Port Everglades														
Common	6,282,876	2056	39	7,217,932	17,405,196	24,623,128		24,623,128	296,368	307,120	318,262	329,808	312,889	26,074
Unit 5	5,982,695	2056	39	8,358,027	20,239,745	28,597,772	· ·	28,597,772	301,455	314,145	327,369	341,150	321,030	26,752
Gas Turbines	1,921,876	2017		601,973	1,452,947	2,054,921	414,572	1,640,349	1,640,349	1,840,783	2,065,708	2,518,117	1,966,239	103,853
Riviera Beach				1			1							
Common	6,449,725	2054	37	6,384,527	15,367,166	21,751,693	· ·	21,751,693	302,349	312,631	323,264	334,258	318,125	26,510
Unit 5	7,001,431	2054	37	8,451,343	20,432,688	28,884,031	-	28,884,031	352,971	367,116	381,827	397,129	374,761	31,230
<u>Riviera Brach</u> Common Unit 5	6,449,725 7,001,431	2054 2054	37 37	6,384,527 8,451,343	15,367,166 20,432,688	21,751,693 28,884,031	-	21,751,693 28,884,031	302,349 352,971	312,631 367,116	323,264 381,827	334,258 397,129	318,125 374,761	26, 31,

Annual Accrual Calculation

Year			Future Cost				Difference Annuel Accruel							
		· · · · · ·												
Unit	Dismantlement Cost in 2016 Dollars	Economic Recovery Year	Recovery Period As of 1/1/2017	1st Yr Expense (Future \$)	2nd Yr Expense (Future S)	Total Future \$ Cost	Adj Reserve as of 12/31/2016	Amount To Accrue	2017	2018	2019	2020	4 Year Average	Monthly Accrual
Sanford														
Common	10,234,211	2043	26	7,299,620	17,543,438	24,843,058	8,370,416	16,472,643	395,563	409,634	424,205	439,295	417,174	34,765
Unit 4	6,379,216	2043	26	5,350,873	12,928,372	18,279,244		18,279,244	395,996	412,979	430,691	449,162	422,207	35,184
Unit 5	6,352,092	2042	25	5,146,940	12,434,133	17,581,072	6,592,902	10,988,170	252,700	263,615	275,001	286,879	269,549	22,462
Scherer														
Common	33,857,016	2039	22	23,456,139	56,497,719	79,953,858	21,556,477	58,397,382	1,685,966	1,755,047	1,826,958	1,901,815	1,792,446	149,371
Unit 4	14,720,600	2039	22	9,728,643	23,410,776	33,139,419	18,558,075	14,581,345	430,860	447,651	465,097	483,223	456,708	38,059
Handling	995,494	2039	22	656,846	1,580,443	2,237,289	1,252,882	984,407	29,128	30,260	31,436	32,657	30,870	2,573
Space Coast Solar	765,922	2040	23	526,988	1,269,025	1,796,012	235,872	1,560,140	42,982	44,671	46,425	48,249	45,582	3,798
St. Johns River														
Common	14.572.012	2038	21	9,748,445	23,476,582	33,225,027	11,109,095	22,115,932	682,589	710,723	740,018	770,519	725,962	60,497
Unit I	3.239.655	2038	21	2,147,971	5,173,580	7,321,551	4,306,795	3,014,756	93,187	97,015	101,001	105,150	99,088	8,257
Unit 2	3,239,655	2038	21	2,147,971	5,173,580	7,321,551	4,246,500	3,075,051	95,051	98,955	103,021	107,253	101,070	8,422
Handling	381,656	2038	21	317,384	769,298	1,086,682	630,275	456.406	12,380	13,034	13,722	14,447	13,396	1,116
Turkey Point														
Common	13.734.913	2047	30	10,915,710	26,241,895	37,157,605		37,157,605	726,127	751,154	777,044	803,827	764,538	63,712
Unit I	14,000,963	2047	30	12,625,340	30,455,386	43,080,725	5,578,624	37,502,101	677,915	704,474	732,073	760,753	718,804	59,900
Unit 2	14.000.963	2047	30	12,625,340	30,455,386	43,080,725	(15,923,728)	59,004,454	1,066,607	1,108,393	1,151,817	1,196,941	1,130,940	94,245
Unit 5	9,383,582	2047	30	9,046,374	21,866,836	30,913,211	-	30,913,211	534,042	556,411	579,717	603,999	568,542	47,379
West County														
Common	19,678,037	2051	34	17,131,283	41,181,827	58,313,110	-	58,313,110	952,827	984,364	1,016,944	1,050.603	1,001,184	83,432
Unit 1	6,415,899	2049	32	6,836,874	16,541,466	23,378,340		23,378,340	355,610	370,764	386,564	403,037	378,994	31,583
Unit 2	6,402,368	2049	32	6,828,749	16,522,171	23,350,920		23,350,920	354,974	370,113	385,898	402,355	378,335	31,528
Unit 3	6,389,701	2051	34	7,335,240	17,751,283	25,086,522	· ·	25,086,522	343,056	357,584	372,728	388,513	365,470	30,456
												e 30.427.000	1 17 EDT 0.46	\$ 2 200 764
Grand Total	\$ 476,896,436			\$ 368,838,494	\$ 888,842,689	\$ 1,262,201,433	\$ 228,537,844	5 1,033,663,589	S 25,821,802	\$ 26,962,265	5 28,166,118	s 29,4 <i>5</i> 7,999	3 27,597,046	<u> </u>

Section 7 *Future Expenditures by Year*

	Projected Dismantlement
Year	Expenditures
2017	\$ 5,290,873
2018	1,860,414
2033	25,507,765
2034	61,250,621
2036	34,680,218
2037	83,251,637
2038	15,016,544
2039	39,628,771
2040	8,634,525
2043	14,361,771
2044	69,784,210
2045	85,264,396
2046	1,269,025
2047	5,146,940
2048	48,230,415
2049	86,235,697
2050	20,444,334
2051	63,598,294
2052	79,578,549
2053	109,019,502
2054	13,665,623
2055	33,063,637
2056	24,466,523
2057	58,933,110
2058	16,766,455
2059	55,282,164
2060	35,799,854
2061	23,713,718
2062	57,309,763
2074	24,898,971
2075	60,247,116
Grand Total	\$ 1,262,201,433

Future Dismantlement Expenditures by Year (Per 2016 Dismantlement Study)

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Section 8

.

Dismantlement Cost Analysis Prepared by Burns & McDonnell

BURNS MGDONNELL

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March 1, 2016

Jon-Paul Zabala Asset Recovery & Analysis Florida Power & Light Company 700 Universe Boulevard, Juno Beach, FL 33408

Re: FPL Decommissioning Cost Study

Dear Mr. Zabala,

Burns & McDonnell is pleased to present its report to Florida Power & Light Company (FPL) on the Decommissioning Cost Study (Study) for power generation assets in Florida and Georgia, excluding nuclear.

The objective of the Study was to review the facilities and to make a recommendation to FPL regarding the total cost in 2015 dollars to decommission the facilities at the end of their useful lives. The preparation of the cost estimates included in the Study were performed in accordance with Rule 25-6.04364, Electric Utilities Dismantlement Studies, Florida Administrative Code.

Burns & McDonnell appreciates the opportunity to provide our professional consulting services to FPL. Please feel free to contact me at any time to discuss questions that may arise during your review of the Study. You may reach me by phone at (816) 822- 4239 or via email at jkopp@burnsmcd.com. We look forward to working with you again on any future projects.

Respectfully Submitted, BURNS & MCDONNELL

Juny Kopp

Jeff Kopp, PE Project Manager

JTK/kps

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Fossil Dismantlement Study

prepared for

Florida Power & Light Company Fossil Dismantlement Study Miami, Florida

Project No. 84400

Final 03/01/2016

prepared by

Burns & McDonnell Engineering Company, Inc. Enter City, State of Office Location

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.

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LIST OF ABBREVIATIONS

<u>Abbreviation</u>	Term/Phrase/Name
Babcock Ranch Solar	Babcock Ranch Solar Energy Center
BMcD	Burns & McDonnell
C&D	Construction & Demolition
Citrus Solar	Citrus Solar Energy Center
Desoto Solar	DeSoto Next Generation Solar Energy Center
FPL	Florida Power & Light Company
GE	General Electric
HRSG	Heat recovery steam generator
kV	kilovolt
Manatee Solar	Manatee Solar Energy Center
MW	Megawatt
NO _x	Mono-nitrogen oxides
OCEC	Okeechobee Clean Energy Center
РСВ	Polychlorinated Biphenyl
Plants	Fleet of gas, fuel oil, solar, and coal-fired generation facilities reviewed in this Study.
SCR	Selective catalytic reduction
Space Coast Solar	Space Coast Next Generation Solar Energy Center
Study	Fossil Dismantlement Study

1.0 EXECUTIVE SUMMARY

1.1 Introduction

Burns & McDonnell ("BMcD") was retained by Florida Power & Light ("FPL") to conduct a Decommissioning Cost Study ("Study") for power generation assets ("Plants") in Florida and Georgia, excluding nuclear units. The assets include natural gas, fuel oil, solar, and coal-fired generating facilities. Individuals from BMcD visited each of the existing Plants covered by the Study in May of 2015, along with a representative from Brandenburg, a demolition contractor who is serving as a sub-consultant to BMcD on the Study. The purpose of the Study was to review the facilities and to make a recommendation to FPL regarding the total cost in 2015 dollars to decommission the facilities at the end of their useful lives. The preparation of the cost estimates included in the Study were performed in accordance with Rule 25-6.04364, Electric Utilities Dismantlement Studies, Florida Administrative Code.

The decommissioning costs were developed using the information provided by FPL, in-house data available to BMcD, and information supplied by Brandenburg. Quantity take-offs were performed for major plant facilities and equipment based on observations from the site visits and review of drawings provided for each Plant. Decommissioning activities were determined and labor hours were estimated to complete each decommissioning activity. Current market pricing for labor rates and unit pricing were then developed for each task, and these rates were applied to the estimated quantities for the Plants to determine the total cost of decommissioning.

1.2 Results

When FPL determines that the Plants should be retired, the above grade equipment and steel structures are assumed to have sufficient scrap value to a salvage contractor to offset a portion of the decommissioning costs. FPL will incur costs in the demolition and restoration of the sites less the salvage value of equipment and bulk steel. BMcD has prepared estimates in current year dollars (2015\$) for the decommissioning of the Plants, as summarized in Table 1-1. Further breakdowns of these costs are presented in Table A-1 through Table A-18 in Appendix A. BMcD has also prepared annual costs for groundwater monitoring associated with closed ash ponds and/or landfills, as presented in Table 1-2. Note that the regulatory requirement for groundwater monitoring extends over a 30 year period following the closure.

Plant	Decommissioning Costs	Credits	Net Project Cost
Cape Canaveral	\$19,985,993	(\$4,616,199)	\$15,369,794
DeSoto Solar	\$3,009,309	(\$1,037,431)	\$1,971,878
Ft. Myers	\$41,318,932	(\$10,119,993)	\$31,198,939
Lauderdale	\$39,067,982	(\$7,264,398)	\$31,803,584
Manatee	\$73,550,541	(\$16,363,554)	\$57,186,987
Martin	\$112,835,115	(\$26,204,511)	\$86,630,603
Port Everglades	\$21,011,928	(\$7,317,093)	\$13,694,835
Riviera	\$17,447,262	(\$4,387,026)	\$13,060,236
St. Johns River ²	\$115,885,000	(\$11,470,000)	\$104,415,000
Sanford	\$31,299,119	(\$9,043,912)	\$22,255,207
Scherer ^{2,3}	\$203,999,000	(\$9,629,000)	\$194,370,000
Space Coast Solar	\$1,150,000	(\$410,000)	\$740,000
Turkey Point	\$63,351,729	(\$13,677,173)	\$49,674,556
West County	\$53,833,211	(\$16,156,521)	\$37,676,690
Babcock Ranch Solar ⁴	\$8,569,000	(\$3,052,000)	\$5,517,000
Citrus Solar ⁴	\$8,569,000	(\$3,052,000)	\$5,517,000
Manatee Solar ⁴	\$8,569,000	(\$3,052,000)	\$5,517,000
Okeechobee ⁴	\$17,354,000	(\$5,560,000)	\$11,794,000

Table 1-1: Decommissioning Cost Summary (2015\$)1

¹ Cost estimates were rounded to the nearest \$1,000 and then site inventory costs and recoverable scrap for inventory was added to the rounded estimate resulting in the values shown.

²Costs for Scherer and St. Johns River have not been adjusted for FPL's ownership percentage.

³ Scherer estimate includes only Unit 4 and all common facilities.

⁴ Proposed facility.

Table 1-2: Annual G	roundwater Monitoring	Costs	(2015\$)
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Plant	Annual Cost	
St. Johns River	\$175,000	
Scherer	\$1,175,300	

Monitoring installation costs included in decommissioning costs.

The total project costs presented above include the costs to return the sites to an industrial condition suitable for reuse for development of an industrial facility. Included are the costs to dismantle the power generating equipment owned by FPL as well as the costs to dismantle the FPL-owned balance of plant facilities and environmental site restoration activities.

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1.3 Statement of Limitations

In preparation of this decommissioning study, BMcD has relied upon information provided by FPL. BMcD acknowledges that it has requested the information from FPL that it deemed necessary to complete this study. While we have no reason to believe that the information provided to us, and upon which we have relied, is inaccurate or incomplete in any material respect, we have not independently verified such information and cannot guarantee its accuracy or completeness.

Engineer's estimates and projections of decommissioning costs are based on Engineer's experience, qualifications and judgment. Since Engineer has no control over weather, cost and availability of labor, material and equipment, labor productivity, construction contractors' procedures and methods, and other factors, Engineer does not guarantee the accuracy of its estimates and projections.

Engineer's estimates do not include allowances for unforeseen environmental liabilities associated with unexpected environmental contamination due to events not considered part of normal operations, such as fuel tank ruptures, oil spills, etc. Estimates also do not include allowances for environmental remediation associated with changes in classification of hazardous materials.

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2.0 INTRODUCTION

2.1 Background

Burns & McDonnell ("BMcD") was retained by Florida Power & Light ("FPL") to conduct a Decommissioning Cost Study ("Study") for power generation assets ("Plants") in Florida and Georgia, excluding nuclear units. The assets include natural gas, fuel oil, solar, and coal-fired generating facilities. Individuals from BMcD visited each of the existing Plants covered by the Study in May of 2015, along with a representative from Brandenburg, a demolition contractor who is serving as a sub-consultant to BMcD on the Study. The purpose of the Study was to review the facilities and to make a recommendation to FPL regarding the total cost in 2015 dollars to decommission the facilities at the end of their useful lives.

2.2 Study Methodology

The site decommissioning costs were developed using information provided by FPL, information developed by Brandenburg, and in-house data BMcD has collected from previous project experience. BMcD estimated quantities for equipment based on a visual inspection of the facilities, review of engineering drawings, BMcD's in house database of plant equipment quantities, and BMcD's professional judgment. This resulted in an estimate of quantities for the tasks required to be performed for each decommissioning effort. Current market pricing for labor rates, equipment, scrap materials, and unit pricing were then developed for each task. These pricing inputs were developed for each site based on costs specific to the area in which the work is to be performed. These rates were applied to the quantities for the Plants to determine the total cost of decommissioning for each site.

The decommissioning costs include the cost to return the site to an industrial condition, suitable for reuse for development of an industrial facility. Included are the costs to decommission all of the assets owned by FPL at the site, including power generating equipment and balance of plant facilities along with environmental site restoration activities.

2.3 Site Visits

Representatives from BMcD and Brandenburg visited the sites. The site visits consisted of a tour of each facility with plant personnel to review the equipment installed at each site.

Mr. Jon-Paul Zabala, served as the FPL representative throughout the site visits, along with plant personnel at each of the sites.

The following BMcD and Brandenburg representatives comprised the site visit team:

- Mr. Jeff Kopp, BMcD, Project Manager
- Mr. Kory Sandven, BMcD, Project Engineer
- Mr. Parker Hills, BMcD, Project Engineer
- Mr. Andy Debrowski, Brandenburg, Demolition Contractor Representative

The site visits were performed on the following dates.

Plant	Site Visit Date
Martin	14-May-15
DeSoto Solar	20-May-15
Ft. Myers	20-May-15
Riviera Beach	21-May-15
West County	21-May-15
Scherer	26-May-15
St. Johns River	27-May-15
Cape Canaveral	27-May-15
Sanford	28-May-15
Manatee	28-May-15
Turkey Point	29-May-15
Lauderdale	29-May-15
Port Everglades	29-May-15

 Table 2-1:
 Site Visit Dates



Figure 2-1: FPL Facilities Visited

3.0 EXISTING PLANT DESCRIPTIONS

Following are plant descriptions for each of the existing power plants included in this Study.

3.1 Cape Canaveral

The Cape Canaveral plant is located in Cape Canaveral, Florida. Originally, the facility consisted of two (2) natural gas fired boilers, however, those units were fully demolished and removed from the site and replaced with a single 3-on-1 combined cycle unit (Unit 1). Unit 1 consists of three Siemens 8000H combustion turbines, three heat recovery steam generators ("HRSGs"), and one steam turbine. The total capacity is 1,210 megawatts ("MW") at the summer peak rating. Additionally, this unit includes a selective catalytic reduction ("SCR") for reducing mono-nitrogen oxides ("NO_x") emissions. The facility also includes a man-made cooling water intake and discharge canal which has a manatee heating station.

3.2 DeSoto Next Generation Solar Energy Center

The DeSoto Next Generation Solar Energy Center ("Desoto Solar") is a photovoltaic solar power facility located approximately 30 miles northeast of Port Charlotte, in Arcadia, Florida. The facility currently includes approximately 90,504 single axis tracking SunPower solar panels with a total plant capacity of 25 MW at the summer peak rating.

3.3 Fort Myers

The Fort Myers plant is located along the Caloosahatchee River approximately 7 miles northeast of downtown Fort Myers, Florida. The facility includes a single 6-on-2 combined cycle unit (Unit 2) which incorporates six General Electric ("GE") 7FA combustion turbines, six Foster Wheeler HRSGs, and two steam turbines with a capacity of 1,470 MW at the summer peak rating. The facility also includes 2 simple cycle GE 7FA combustion turbines (Units 3A and 3B) with a combined capacity of 314 MW at the summer peak rating and 12 small simple cycle combustion turbines. By the end of 2016, 10 of the 12 simple-cycle combustion turbines will be retired. Water for the facility's condensing cooling system is provided via Caloosahatchee River with water discharge from the cooling towers to a man-made canal that discharges to the Orange River.

3.4 Lauderdale

The Lauderdale plant is located in Fort Lauderdale, Florida. Originally, the facility included two conventional boiler steam units and associated steam turbines that were repowered in the mid 1990's to combined cycle units (Units 4 and 5). The repowered combined cycle units can each be fired with either natural gas or fuel oil and each include two Westinghouse 501F combustion turbines, two HRSGs, and

one steam turbine. These two combined cycle units have a combined capacity of 884 MW or 442 MW each at the peak summer rating. Unlike many of the other FPL combined cycle units, the combustion turbines and generators are completely enclosed within a building. In addition to the combined cycle units, the facility has 24 simple-cycle combustion turbines. By the end of 2016, 22 of the 24 simple-cycle combustion turbines will be retired. The brackish water used in the facility's condensing cooling system is provided by the Dania Cut-Off Canal and discharged into a man-made canal to the South Fork New River.

3.5 Manatee

The Manatee plant is located within Manatee County, approximately 5 miles east of Parrish, Florida. The facility includes two fuel oil-fired boilers (Unit 1 and Unit 2), rated at approximately 809 MW each at the summer peak rating, and a 4-on-1 combined cycle unit (Unit 3) which includes four GE 7FA combustion turbines, four HRSGs, and one steam turbine with a combined capacity of 1,140 MW at the summer peak rating. In its entirety, the plant is rated to produce over 2,700 MW. The facility also includes a cooling pond to the east of the generation units which encompasses approximately 3,700 acres. Fuel oil is provided to the facility via a fuel oil pipeline that interconnects with offsite fuel oil storage tanks located at the port in Manatee County, approximately 20 miles away.

3.6 Martin

The Martin plant is located within Martin County, along the northeastern side of Lake Okeechobee and approximately 4 miles west of Indiantown, Florida. The facility includes two fuel oil-fired boilers (Unit 1 and Unit 2), with a combined capacity of 1,626 MW at the summer peak rating. The plant also includes two 2-on-1 combined cycle units (Unit 3 and Unit 4) which consist of two GE 7FA combustion turbines, two HRSGs, and one steam turbine with a combined capacity of 469 MW at the summer peak rating for each of these units. The facility also features an integrated solar thermal station which integrates solar thermal energy with Unit 8, a 4-on-1 combined cycle unit. The solar unit is capable of supporting up to 75 MW worth of steam, the equivalent of excess steam produced by duct firing the HRSGs on Unit 8. Although the solar thermal station supports Unit 8, the HRSGs for this unit are capable of providing rated capacity of the steam turbine without the aid of the solar station. In its entirety, the plant is rated to produce over 3,500 MW. The facility also includes a cooling pond to the east of the generation units which encompasses approximately 6,500 acres.

3.7 Port Everglades

The Port Everglades plant is located within the boundaries of the Port Everglades port, in the City of Fort Lauderdale, Florida. Similar to the Cape Canaveral plant, originally the Port Everglades plant consisted

of two (2) natural gas fired boilers, however, those units were fully demolished and removed from the site and replaced with a single 3-on-1 combined cycle unit (Unit 5). Unit 5 consists of three Siemens 8000H combustion turbines, three heat recovery steam generators ("HRSGs"), and one steam turbine. The total capacity is 1,237 MW at the summer peak rating. Additionally, this unit includes an SCR for reducing NO_x emissions. The Port Everglades plant also includes 12 small simple cycle combustion turbines, all of which will be retired by the end of 2016.

3.8 Riviera

The Riviera plant is located on approximately 22 acres of land in Palm Beach County, approximately 10 miles north of the city of West Palm Beach, Florida. Similar to the Cape Canaveral and Port Everglades plants, originally the Riviera plant consisted of two (2) natural gas fired boilers, however, it was recently reconstructed as a single 3-on-1 combined cycle unit (Unit 5). Unit 5 consists of three Siemens 8000H combustion turbines, three HRSGs, and one steam turbine. The total capacity is 1,237 MW at the summer peak rating. Additionally, this unit includes an SCR for reducing NO_x emissions.

3.9 St. Johns River Power Park

The St. Johns River Power Park Plant is located in northeast area of Jacksonville, Florida. This facility is jointly owned between Jacksonville Electric Authority and FPL with ownership percentages of 80 and 20 percent, respectively. The facility includes two coal-fired steam turbine units (Units 1 and 2) with a combined capacity of 1,270 MW at the summer peak rating. The coal handling system for the facility includes a rotary rail car dumper equipped with a static weight scale, a train positioner, a receiving bin, four short belt feeders, a cross conveyor, two elevating conveyors, and two magnetic separators. In addition, the plant includes a coal unloading facility on Blount Island for coal delivered by barge, along with a system of coal conveyers from Blount Island to the plant. For cooling, the facility includes two hyperbolic natural draft cooling towers which are located in the northeast boundary of the site.

3.10 Sanford

The Sanford plant is located on approximately 1,718 acres of land in Volusia County, approximately 2.5 miles south of DeBary, Florida. Originally, the facility included two conventional boiler steam units which were repowered in the mid 1990's to two 4-on-1 combined cycle units (Units 4 and 5). During the retrofit process, the boilers and associated equipment were removed, however, the steam turbines remained and are currently used in combined cycle mode. Each combined cycle unit operates using natural gas as the primary fuel supply and includes four GE 7FA combustion turbines, four HRSGs, and one steam turbine. These two units have a combined capacity of 2,010 MW or 1,005 MW each at the

summer peak rating. Additionally, the site includes a 1,100 acre cooling pond to the north of the generation units which is connected via a 4,500 foot canal.

3.11 Scherer

The Scherer Steam Plant is located approximately 17 miles north of Macon, Georgia and includes four coal-fired steam turbine units. The Facility is jointly owned between Georgia Power Corporation, Jacksonville Electric Authority and FPL, with FPL having 76.36 percent ownership Unit 4 only. Unit 4 has a capacity of 634 MW at the summer peak rating and consists of a boiler, steam turbine generator, condenser, electrostatic precipitator, flue gas desulfurization unit, SCR, baghouse, one 530-foot tall natural draft-cooling tower, and a shared stack with Unit 3. Common facilities evaluated as part of this Study consist of the power house, the recycle pond, stormwater ponds, settling ponds, ash pond, ash settling landfill, coal storage yard, and limestone storage area.

3.12 Space Coast Next Generation Solar Energy Center

The Space Coast Next Generation Solar Energy Center ("Space Coast Solar") is a photovoltaic solar power facility located at the Kennedy Space Center in Cape Canaveral, Florida. The facility includes 35,000 single axis tracking SunPower solar panels with a total plant capacity of 10 MW at the summer peak rating. The Space Coast Solar facility uses the same panels as the Desoto Solar Center.

3.13 Turkey Point

The Turkey Point plant is located on the western coast of Biscayne Bay approximately 15 miles south of Miami, Florida. The facility includes two natural gas-fired boiler steam units (Units 1 and 2), two nuclear generating units (Units 3 and 4), and a 4-on-1 combined cycle unit (Unit 5). For the purpose of this study, the nuclear generating units and associated common facility equipment are excluded from the decommissioning estimates. Units 1 and 2 were originally designed with the plan for future conversion to burn coal, however, this conversion was never made. Unit 2 has been converted to a synchronous condenser and Unit 1 will be converted to a synchronous condenser in 2016. Unit 5 is a combined cycle unit which includes four 170-MW GE "F" Class combustion turbines with dry low NO_x combustors, four HRSGs, and one steam turbine with a combined capacity of 1,187 MW at the summer peak rating. The facility's condensing cooling system includes intake from the Biscayne Bay and discharges to a manmade series of canals that are associated with the nuclear unit. For purposes of this Study, the canal system was excluded from the decommissioning estimates, since it is a nuclear generation asset.

3.14 West County

The West County Energy Center is located approximately 15 miles west of West Palm Beach, in Palm Beach County, Florida. The facility includes three 3-on-1 combined cycle units, each configured with three Mitsubishi 501G1 combustion turbines, 3 Nooter Eriksen HRSGs, and one steam turbine with a combined capacity of 3,657 MW at the summer peak rating for the entire facility. Additionally, each unit has an SCR for reducing NO_x emissions. Each combined cycle unit includes a dedicated mechanical draft cooling tower.

4.0 PROPOSED PLANTS DESCRIPTIONS

FPL currently has several generation facilities under development which are anticipated to have a commercial operation date between 2016 and mid-2019 that were included for evaluation in the Study. Because these facilities are still in the development stage, as-built drawings of these facilities were unavailable. Instead, the decommissioning costs for these plants were estimated based on BMcD's experience with demolition of facilities similar to those proposed.

Following are plant descriptions for each of the proposed power plants included in this Study.

4.1 Babcock Ranch Solar Energy Center

The Babcock Ranch Solar Energy Center ("Babcock Ranch Solar") is proposed to be built by the end of 2016 as a photovoltaic solar power facility located near Babcock, Florida, with a proposed capacity of 74.5 MW at the summer peak rating and a facility size of approximately 440 acres. The facility is proposed to include approximately 229,000 panels in conjunction with 40 GE 2 MVA inverters and one 85 MVA step-up transformer.

4.2 Citrus Solar Energy Center

The Citrus Solar Energy Center ("Citrus Solar") is proposed to be built by the end of 2016 as a photovoltaic solar power facility located in DeSoto County, Florida, with a proposed nameplate capacity of 74.5 MW and a facility size of approximately 841 acres. The facility is proposed to include approximately 229,000 Hanwha 325 W panels in conjunction with 40 GE 2 MVA inverters and one 85 MVA step-up transformer.

4.3 Fort Myers

It is anticipated that by the end of 2016, the Fort Myers plant will replace 10 of the 12 simple-cycle combustion turbines with two GE 7FA.05 combustion turbines, each rated for 231 MW. For purposes of this Study, decommissioning estimates have been prepared based on the configuration of the plant after this replacement project occurs.

4.4 Lauderdale

It is anticipated that by the end of 2016, the Lauderdale plant will replace 22 of the 24 simple-cycle combustion turbines with five GE 7FA.05 combustion turbines, each rated for 231 MW. For purposes of this Study, decommissioning estimates have been prepared based on the configuration of the plant after this replacement project occurs.

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4.5 Manatee Solar Energy Center

The Manatee Solar Energy Center ("Manatee Solar") is proposed to be built by 2016 as a photovoltaic solar power facility located in Manatee County, Florida, with a proposed capacity of 74.5 MW at the summer peak rating and a facility size of approximately 762 acres. The facility is proposed to include approximately 229,000 panels in conjunction with 40 GE 2 MVA inverters and one 85 MVA step-up transformer.

4.6 Okeechobee Clean Energy Center

The Okeechobee Clean Energy Center ("OCEC") is proposed to be built prior to June 2019 and will be located in northeast Okeechobee County, Florida, approximately 24 miles west of Vero Beach and 27 miles north-northeast of Okeechobee on the border with Indian River County. The OCEC will include approximately 189 acres and utilize three "H" Class combustion turbines, three HRSGs, and a steam turbine. The plant will have an approximate generating capability of 1,633 MW at the summer peak rating.. Additionally, each HRSG will have an SCR for reducing NO_x emissions. For cooling, Unit 1 is anticipated to have a 30-cell mechanical draft cooling tower and basin located at the site. The facility will use equipment similar to that at the Riviera Plant.

5.0 DECOMMISSIONING COSTS

BMcD has prepared decommissioning cost estimates for the Plants. When FPL determines that each site should be retired, the above grade equipment and steel structures are assumed to have sufficient scrap value to a demolition contractor to offset a portion of the site decommissioning costs. However, FPL will incur costs of decommissioning of the Plants and restoration of the site to the extent that those costs exceed the salvage value of equipment and bulk steel.

The decommissioning costs include the cost to return the site to an industrial condition, suitable for reuse for development of an industrial facility. Included are the costs to dismantle all of the assets owned by FPL at the site, including power generating equipment and balance of plant facilities, as well as environmental site restoration activities.

For purposes of this study, BMcD has assumed that each site will be decommissioned as a single project, allowing the most cost effective demolition methods to be utilized. It is BMcD's understanding, based on information provided by FPL, that this methodology was used for demolition of the other FPL facilities that were fully retired. A summary of several of the means and methods that could be employed is summarized in the following paragraphs; however, means and methods will not be dictated to the contractor by BMcD. It will be the contractor's responsibility to determine means and methods that result in safely decommissioning the Plants at the lowest possible cost.

Asbestos remediation would take place prior to commencement of any other demolition activities. Abatement would need to be performed in compliance with all state and federal regulations, including, but not limited to requirements for sealing off work areas and maintaining negative pressure throughout the removal process. Final clearances and approvals would need to be achieved prior to performing further demolition activities.

High grade assets would then be removed from the site, to the extent possible. This would include items such as transformers, transformer coils, circuit breakers, electrical wire, condenser plates and tubes, and heater tubes. High grade assets include precious alloys such as copper, aluminum, brass tubes, stainless steel tubes, and other high value metals occurring in plant systems. High grade asset removal would occur up-front in the schedule, to reduce the potential for vandalism, to increase cash flow, and for separation of recyclable materials, in order to increase scrap recovery. Methods of removal vary with the location and nature of the asset. Small transformers, small equipment, and wire would likely be removed and shipped as-is for processing at a scrap yard. Large transformers, combustion turbines, steam turbines, and condensers would likely require some on-site disassembly prior to being shipped to a scrap yard.
Construction and Demolition ("C&D") waste includes items such as non-asbestos insulation, roofing, wood, drywall, plastics, and other non-metallic materials. C&D waste would typically be segregated from scrap and concrete to avoid cross-contaminating of waste streams or recycle streams. C&D demolition crews could remove these materials with equipment such as excavators equipped with material handling attachments, skid steers, etc. This material would be consolidated and loaded into bulk containers for disposal.

In general, boilers and HRSGs could be felled and cut into manageable sized pieces on the ground. First the structures around the boilers would need to be removed using excavators equipped with shears and grapples. Stairs, grating, elevators, and other high structures would be removed using an "ultra-high reach" excavator, equipped with shears. Following removal of these structures, the boilers or HRSGs would be felled, using explosive blasts. The boilers would then be dismantled using equipment such as excavators equipped with shears and grapples, and the scrap metal loaded onto trailers for recycling.

After the surrounding structures and ductwork have been removed, the stacks would be imploded, using controlled blasts. Following implosion the stack liners and concrete would be reduced in size to allow for handling and removal.

Balance of plant structures and foundations would likely be demolished using excavators equipped with hydraulic shears, hydraulic grapples, and impact breakers, along with workers utilizing open flame cutting torches. Steel components would be separated, reduced in size, and loaded onto trailers for recycling. Concrete would be broken into manageable sized pieces and stockpiled for crushing on-site. Concrete pieces would ultimately be loaded in a hopper and fed through a crusher to be sized for on-site disposal.

The Turkey Point plant would likely be demolished utilizing "ultra-high reach" excavators equipped with shears and a concrete processor, excavators, and skid steers, since it cannot be felled, due to the proximity of the adjacent nuclear unit.

5.1 General Assumptions for All Sites

The following assumptions were made as the basis of all of the cost estimates.

- 1. Pricing for all estimates are in 2015 dollars.
- 2. Scrap values are based on the American Metals Market Monthly Report for September 2015.
- 3. All work will take place in a safe and cost efficient method.
- 4. Labor costs are based on a regular 40 hour workweek without overtime.

- 5. Labor rates are based on RS Means values for a demolition crew B-8 with rates adjusted based on the local site cost index for the Plants.
- 6. The estimates are inclusive of all costs necessary to properly dismantle and decommission all sites to a marketable or usable condition. For purposes of this study and the included cost estimates, the facilities will be restored to a condition suitable for industrial use.
- 7. All facilities will be decommissioned to zero generating output. Existing utilities will remain in place for use by the contractor for the duration of the demolition activities.
- 8. It is assumed that all of the power stations will be dismantled after all units at a single site are taken out of service, allowing dismantlement of entire sites at once.
- 9. Soil testing and any other on-site testing has not been conducted for this study.
- 10. Transmission switchyards and substations within the boundaries of the plant are not part of the demolition scope. Switchyards that are associated with the facilities only and are not part of the transmission system are included for demolition. For purposes of this study, the division between generation assets and transmission assets is at the high side of the generator step-up transformers.
- 11. The costs for relocation of transmission lines, or other transmission assets, are specifically excluded from the decommissioning cost estimates. Any costs necessary to support on-going operations of adjacent or newly proposed units will be allocated to the operating costs of the units not being decommissioned.
- 12. Step-up transformers, auxiliary transformers, and spare transformers are included for demolition and scrap in all estimates.
- 13. Abatement of asbestos will precede any other work. After final air quality clearances have been obtained, demolition can proceed.
- 14. All demolition and abatement activities, including removal of asbestos, will be done in accordance with any and all applicable Federal, State and Local laws, rules and regulations.
- 15. Asbestos estimates were provided by FPL and escalated at 2.5 percent from 2014 to 2015 to represent 2015 year dollars unless noted otherwise in the site specific sections below.
- 16. FPL will remove or consume all burnable coal, fuel oil and chemicals prior to commencement of demolition activities.
- 17. Hazardous material abatement is included for all sites as necessary, including asbestos, mercury, and polychlorinated biphenyls ("PCBs"). Lead paint coated materials will be handled by certified personnel as necessary, but lead paint will not be removed prior to demolition.
- 18. Intake and discharge canals including any manatee heater equipment are assumed to remain at the site after demolition and thus have been excluded from decommissioning estimates.

- 19. No environmental costs have been included to address cleanup of contaminated soils, hazardous materials, or other conditions present on-site having a negative environmental impact, other than those specifically listed in these assumptions. No allowances are included for unforeseen environmental remediation activities.
- 20. Handling and disposal of hazardous material will be performed in compliance with the approved methods of FPL's Environmental Services Department.
- 21. Refractory brick on the coal fired boilers is handled and disposed of as hazardous waste, due to the likelihood of the presence of arsenic contamination.
- 22. Existing ash ponds will be pumped dry, filled with inert debris, capped with 40 mil geomembrane, geo-net drainage layer, 24 inches of soil, and vegetated cover.
- 23. Stormwater ponds will be pumped dewatered, graded to drain to natural drainage patterns, and seeded.
- 24. Cooling lakes/ponds will remain as-is.
- 25. Site areas will be graded to achieve suitable site drainage to natural drainage patterns, but grading will be minimized to the extent possible.
- 26. All above grade structures will be demolished. All below grade structures, including foundations, will be removed to two feet below grade. Additional structures and foundations greater than two feet below grade will be abandoned in-place unless deemed hazardous by FPL or otherwise stated in the assumptions as being demolished.
- 27. Existing basements will be used to bury non-hazardous debris. Concrete in trenches and basements will be perforated to create drainage. Non-hazardous debris, such as concrete and brick, will be crushed and used as clean fill on-site once the capacity of all existing basements has been exceeded. All inert debris will be disposed of on-site. Costs for offsite disposal are included for materials not classified as inert debris.
- 28. Major equipment, structural steel, combustion turbines, generators, inlet filters, exhaust stacks, transformers, electrical equipment, cabling, wiring, pump skids, above ground piping, and equipment enclosures for the above equipment will be sold for scrap and removed from the Plant site by the demolition contractor. All other demolished materials are considered debris.
- 29. Except for the circulating water lines, underground piping will be abandoned in place. Circulating water system pipes will be capped, have the tops broken out, and backfilled with onsite soil.
- 30. Sewers, catch basins and ducts will be filled and sealed on the upstream side. Horizontal runs will be abandoned in place after being closed.

- 31. Costs are included to clean out the fuel oil tanks and lines. Costs have also been included to remove three feet of soil directly below each of the fuel oil tanks to account for the potential for this soil to be contaminated during normal operations.
- 32. Disturbed site areas will be seeded or surfaced with crushed concrete after they are graded to provide a suitable ground cover to prevent soil erosion.
- 33. BMcD assumes that spare parts will be sold to the extent possible prior to decommissioning. Any remaining spare parts will be sold as scrap by the demolition contractor.
- 34. Rolling stock, including rail cars, dozers, plant vehicles, etc. is assumed to be removed by FPL prior to decommissioning.
- 35. Valuation and sale of land and all replacement generation costs are excluded from this scope.
- 36. For purposes of this study, it is assumed that none of the equipment will have a salvage value in excess of the scrap value of the materials in the equipment at the time of the decommissioning study. The decommissioning cost estimate is based on the end of useful life of each facility. All equipment, steel, copper, and other metals will be sold as scrap. Credits for salvage value are based on scrap value alone. Resale of equipment and materials is not included.
- 37. The scope of the costs included in this Study is limited to the decommissioning activities that will occur at the end of useful life of the facilities and groundwater monitoring activities associated with closure of ash ponds and landfills. Groundwater monitoring costs associated with the closed ash ponds and landfills are reported as the annual cost for one year, in 2015 dollars. These monitoring activities will be required for 30 years. Additional on-going costs may be required for maintenance of the site, depending on the condition of the site and ownership of the site. No additional ongoing costs have been included in the cost estimates provided in this Study.
- 38. Contingency is included in the cost estimate to cover expenses that are unknown at the time the estimate was prepared, but can reasonably be anticipated to be expended on the project. When preparing a cost estimate, there is always some uncertainty as to the precision of the quantities in the estimate, how work will be performed, and what work conditions will be like when the project is executed. Uncertainties are greater in a demolition project than in a construction project due to the nature of the drawings used for quantity takeoffs and the likelihood of encountering unknown conditions, such as hazardous materials, or environmental contamination. Other unknown conditions that could impact the costs include, but are not limited to, changing market conditions and weather delays. These uncertainties will impact the actual costs of the project relative to the estimated cost. The estimator is aware of these unknowns when preparing the cost estimate and includes contingency to cover these costs. A 20 percent contingency was included on the direct costs in the estimates prepared as part of this study to cover unknowns.

39. Indirect costs are included in the cost estimate to cover owner expenses such as management trailers, utilities, demolition oversight, and home office general and administrative costs. An indirect cost of 5 percent was included in the estimates to cover such costs.

Market conditions may result in cost variations at the time of contract execution.

5.2 Site Specific Decommissioning Assumptions

The following assumptions were made specific to each plant cost estimate.

5.2.1 Cape Canaveral

The following assumptions were made specific to the Cape Canaveral plant.

- 1. Intake and discharge canals including any manatee heater equipment are assumed to remain in place after demolition and have been excluded from the decommissioning estimate.
- 2. The laydown yard south of intake and discharge canals is assumed to be separate from the plant and is excluded from the demolition estimate.
- 3. Crushed concrete is assumed to be disposed of onsite and spread across the site. No topsoil or seeding costs are included in the demolition estimate.
- 4. The collector switchyard equipment, located west of the gas turbines, and the overhead transmission line from the onsite collector switchyard to the adjacent substation are included in the demolition estimate. The plant substation will remain in place and is not included in the decommissioning estimate.
- 5. The natural gas feeder station located north of the onsite switchyard is assumed to remain in place after demolition and has been excluded from the decommissioning estimate.
- 6. Cost estimate includes cost for importing topsoil, grading, and seeding the stormwater pond.

5.2.2 DeSoto Next Generation Solar Energy Center

The following assumptions were made specific to the DeSoto Next Generation Solar Center facility.

1. The cost estimate includes cost for grading, and seeding the site. No imported topsoil is assumed necessary for the solar facility due to the small footprint of the equipment foundations.

5.2.3 Space Coast Next Generation Solar Energy Center

The following assumptions were made specific to the Space Coast Solar Center facility.

1. The cost estimate includes cost for grading, and seeding the site. No imported topsoil is assumed necessary for the solar facility due to the small footprint of the equipment foundations.

5.2.4 Fort Myers

- 1. The property south of State Road 80 which is leased to the city for the manatee park is excluded from the decommissioning estimates.
- 2. The collector switchyard equipment immediately adjacent to the combustion turbines will be removed and all salvageable material will be scrapped including the overhead transmission lines to the plant substation. The plant substation and switchyard will remain and all access roads on the site that are specifically for the plant substation are not included in the decommissioning estimate.
- 3. The discharge canal located central to the plant site will remain and is excluded from the estimate.
- 4. Cooling water piping from intake and to discharge canals is assumed to be below two (2) feet and will be capped and left in place.
- 5. The estimate includes the proposed two GE 7FA.05 combustion turbines in replacement of 10 of the existing simple-cycle combustion turbines, with two simple-cycle combustion turbines remaining at the site and included in the decommissioning estimate. For reference, the proposed GE 7FA.05 combustion turbines were classified as Unit 4.

5.2.5 Lauderdale

- 1. The discharge canal located north of the steam turbines site will remain and is excluded from the estimate.
- 2. The collector switchyard equipment immediately adjacent to the combustion turbines will be removed and all salvageable material will be scrapped including the overhead transmission lines to the plant substation. The plant substation and switchyard will remain in place and all access roads on the site that are specifically for the plant substation are not included in the decommissioning estimate.
- The site includes a bridge to access the main entrance of the site. This bridge is assumed to remain after decommissioning of site and has been excluded from the decommissioning cost estimate.
- 4. The estimate includes the proposed five GE 7FA.05 combustion turbines in replacement of 22 of the existing simple-cycle combustion turbines, with two simple-cycle combustion turbines remaining at site and included in decommissioning estimate. For reference, the proposed GE 7FA.05 combustion turbines were classified as Unit 6.

5.2.6 Manatee

- 1. The collector switchyard equipment immediately south of the combustion turbines will be removed and all salvageable material will be scrapped including the overhead transmission lines to the plant substation.
- 2. The plant substation and switchyard located south of the boilers will remain and all access roads on the site that are required for access to the plant substation are not included in the decommissioning estimate.
- 3. Units 1 and 2 have electrostatic precipitators for air quality controls.
- 4. The cooling pond located northeast of site is assumed to remain after decommissioning of plant and all costs associated with pond have been excluded from the decommissioning estimate.
- 5. Condenser tube material for Units 1 and 2 are sea cure. Unit 3 condenser tube material is 316 stainless.
- 6. Fuel oil tanks at the nearby port are assumed to be separate from the plant and are excluded from the decommissioning estimate. The fuel pipeline from the port to the plant will be flushed, capped, and abandoned in place.
- 7. The soil contamination estimate was provided by FPL and performed by FPL's environmental team based on known contamination issues at the site. BMcD did not independently verify these estimates.

5.2.7 Martin

- 1. The site includes two substations, both of which are assumed to remain in place and are excluded from the decommissioning estimate.
- 2. The cooling pond located on the west side of the site is assumed to remain in place and all costs associated with the pond have been excluded from the decommissioning estimate.
- 3. Unit 8 includes a parabolic solar thermal facility. The parabolic troughs will be removed and disposed of in the onsite landfill. The structural framing for the parabolic troughs is made of aluminum and will be recycled, along with the steel columns that support the aluminum framing. The foundations below the columns will be removed to two feet below grade.

5.2.8 Port Everglades

1. The Plant was under construction during the time of the Study. Estimates are based on the anticipated layout of the facility after construction is complete.

- 2. The two plant substations and switchyards located south and southwest of the facility will remain and all access roads on the site that are required for access to the plant substations are not included in the decommissioning estimate.
- 3. The discharge canal is assumed to remain at site and was excluded from the decommissioning estimate.
- 4. The 12 CTs located north of Unit 5 are assumed to be removed, including foundation, equipment, and interconnection to plant substations.
- 5. The above ground piping at the natural gas metering area is included in the decommissioning estimate, however, all piping below ground is assumed to be below 2 feet below grade and is excluded from the estimate.

5.2.9 Riviera

 The collector switchyard equipment immediately south of the combustion turbines will be removed and all salvageable material will be scrapped including the overhead transmission lines to the plant substation. The plant substation and switchyard located west of the combustion turbines will remain and all access roads on the site that are specifically for the plant substation are not included in the decommissioning estimate.

5.2.10 Sanford

- 1. The gazeebo and associated parking lot located in the southwest section of the site is assumed to remain and is excluded from the decommissioning estimate.
- 2. The collector switchyards immediately adjacent to the combustion turbines will be removed and all salvageable material will be scrapped including the overhead transmission lines to the plant substation. The plant substation will remain and all access roads on the site that are specifically for the plant substation are not included in the decommissioning estimate.
- 3. The plant includes two (2) condensate tanks within a containment area which were originally used for fuel oil storage. Soil remediation under these tanks is included.
- 4. The cooling pond and associated canal system are assumed to remain after decommissioning of plant and all costs associated with pond have been excluded from the decommissioning estimate.
- 5. The concrete separator between intake and discharge canal is assumed to remain in place and is excluded from decommissioning estimate.
- 6. The site includes ash landfills which were approved as closed prior to this Study. No costs are included in the current estimates for these landfills

5.2.11 Scherer

- The decommissioning estimate includes the complete cost for demolition of Unit 4 and all common facilities. BMcD notes that FPL has percentage ownership of Unit 4 and common facilities; however, the costs presented in this Study are based on the full removal costs of each of these items, with no ownership percentages applied to these values. FPL will apply their ownership percentage to determine their portion of the cost obligations.
- 2. The plant substation will remain and all access roads on the site that are specifically for the plant substation are not included in the decommissioning estimate.
- 3. All railroad spurs from highway 87 to site are included in the decommissioning estimate. This includes the railroad tracks used for both limestone and coal transportation.
- 4. The coal pile area will have 2 feet of soil excavated and replaced with clean fill, covered with imported topsoil, and seeded.
- 5. The powdered activated carbon ("PAC") and gypsum landfills located north of the Plant will be closed by rough grading of berms and sediment for cap base, importing material for cap base, installing geotextile over base soil, installing a 40-mil HDPE liner, installing geotextile on top of FML, importing and placing 24 inches of cover soil, grading cover soil, and hydroseeding.
- 6. The site includes an ash pond which will be closed by dewatering, rough grading of berms and sediment for cap base, importing material for cap base, installing geotextile over base soil, installing a 40-mil HDPE liner, installing geotextile on top of FML, importing and placing 24 inches of cover soil, grading cover soil, and hydroseeding.
- 7. The recycle pond will be closed by dewatering the pond, excavating ash residuals (estimated at 2 feet), transporting the residuals to the ash pond, removing the dam and transporting material the to the ash pond, grading the area, and hydroseeding.
- 8. The site includes a river pumping station located approximately five (5) miles southeast of the Plant and a water supply pipeline, which transports intake water from the river pumping station to the Plant. These pipes will be excavated to the top of pipe, have the tops broken out, and backfilled with soil.
- 9. Each unit includes a dedicated parabolic cooling tower.
- 10. There is a small and large dry stack, each of which is shared between two (2) units (i.e., Unit 4 shares stacks with Unit 3). Half of the costs associated with demolishing the Unit 3 and Unit 4 stacks has been included in the Unit 4 decommissioning costs.
- 11. The asbestos cost estimate was provided by FPL which included 20 percent for contingency and 5 percent for indirects in 2013 year-dollars. BMcD removed the contingency and indirects and then escalated value to represent 2015 year-dollars.

5.2.12 St. Johns River Power Park

- 1. BMcD notes that FPL has percentage ownership of the plant, however, the costs presented in this Study are based on the full removal costs for the plant, with no ownership percentages applied to these values. FPL will apply their ownership percentage to determine their portion of the cost obligations.
- 2. The plant substation will remain and all access roads on the site that are specifically for the plant substation are not included in the decommissioning estimate.
- 3. All railroad spurs surrounding the Plant are included for demolition up to the main railway located approximately 0.5 miles west of the Plant.
- 4. The coal pile area will have 2 feet of soil excavated and replaced with clean fill covered with imported topsoil, and seeded.
- 5. The limestone storage area located east of the boiler units will have 2 feet of soil excavated and replaced with clean fill, covered with imported topsoil, and seeded.
- 6. The site includes two (2) ash landfills which will be closed by rough grading of berms and sediment for cap base, importing material for cap base, installing geotextile over base soil, installing a 40-mil HDPE liner, installing geotextile on top of FML, importing and placing 24 inches of cover soil, grading cover soil, and hydroseeding.
- 7. The soil contamination estimate was provided by FPL and performed by FPL's environmental team based on known contamination issues at the site. BMcD did not independently verify these estimates.
- 8. North of the plant is the old city landfill that is assumed to be separate from the Plant. All costs associated with this landfill have been excluded from the decommissioning costs.
- 9. The site includes a telecommunication tower onsite which is not owned by the Plant. This tower is assumed to remain onsite after the decommissioning of the Plant.
- 10. The Plant includes an unloading dock located offsite. The coal is transported from the unloading dock to the Plant via a three (3) mile conveyor. The conveyor system is assumed to be removed at time of demolition, however, the unloading dock will remain in place, and was excluded from the decommissioning costs.

5.2.13 Turkey Point

 Due to the proximity of the two nuclear units, this facility will require specialized dismantling to minimize vibrations which may impact the safety and operation of the nuclear facility. Since explosive blast to topple the boilers and stacks will not be allowed, the crew size was adjusted to include two additional iron workers and an upgraded crane from a 25 ton load to 90 ton load. This estimate was adjusted to account for selective equipment dismantlement methodology.

- 2. Unit 1 and 2 are natural gas-fired boiler units which burn low-sulfur fuel oil and have no air quality control equipment.
- 3. Several components of the two boiler units are shared with the nuclear units. The nuclear units were excluded from this decommissioning study and therefore, any components that are integrated were excluded from this study. Such components include:
 - i) Discharge canal;
 - ii) 6,500 acre cooling basin located south of Turkey Point;
 - iii) Water treatment facility;
 - iv) Project substation;
 - v) All parking lots located south of Units 1 and 2;
 - vi) Steam turbine crane track south of Unit 1 and 2 (crane is included); and
 - vii) Boundary fence.
- 4. Decommissioning estimate includes a cost of \$350,000 for the removal of the firewater protection surrounding the boiler units. This value was provided by FPL and was not independently evaluated by BMcD.
- 5. FPL has completed several studies regarding the method and cost for dismantling the stacks for Unit 1 and 2 in order to protect from impacting the nearby nuclear units. These studies include a vibrations study which evaluates the maximum size of sections which can be dropped off the stacks in order to be below the vibrations limit of the nuclear units. Based on the findings of the studies, and as described to BMcD by FPL, BMcD prepared an estimated cost for removing the stacks based on the removal process determined from these studies.

5.2.14 West County

- The collector switchyard equipment adjacent to the combustion turbines will be removed and all salvageable material will be scrapped including the overhead transmission lines to the plant substation. The plant substation located north of the combustion turbines will remain and all access roads on the site that are specifically for the plant substation are not included in the decommissioning estimate.
- 2. Cooling water piping from the steam turbine to cooling towers is assumed to be below two (2) feet and will be capped and left in place at the steam turbine and at the cooling towers. All other cooling water piping will be removed and scrapped.

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5.2.15 Babcock Ranch Solar Energy Center

The following assumptions were made specific to the Babcock Ranch Solar Energy Center facility.

2. The plant is currently in the development stage. Estimates were scaled based on the DeSoto Next Generation Solar Center facility.

5.2.16 Citrus Solar Energy Center

The following assumptions were made specific to the Citrus Solar Energy Center facility.

3. The plant is currently in the development stage. Estimates were scaled based on the DeSoto Next Generation Solar Center facility.

5.2.17 Manatee Solar Energy Center

The following assumptions were made specific to the Manatee Solar Energy Center facility.

4. The plant is currently in the development stage. Estimates were scaled based on the DeSoto Next Generation Solar Center facility.

5.2.18 Okeechobee

1. The plant is currently in the development stage. Estimates were based on a typical 3-on-1"H" Class combustion turbine combined cycle plant.

5.3 Results

Table 5-1 presents a summary of the decommissioning cost for each Plant. This summary provides a breakout of the major decommissioning activities and the scrap value for the Plant. Further breakdowns of these costs are presented in Table A-1 through Table A-18 in Appendix A. BMcD has also prepared annual costs for groundwater monitoring associated with closed ash ponds and/or landfills, as presented in Table 5-2. Note that the regulatory requirement for groundwater monitoring should be for a period of 30 years following the closure.

Plant	Decommissioning Costs	Credits	Net Project Cost
Cape Canaveral	\$19,985,993	(\$4,616,199)	\$15,369,794
DeSoto Solar	\$3,009,309	(\$1,037,431)	\$1,971,878
Ft. Myers	\$41,318,932	(\$10,119,993)	\$31,198,939
Lauderdale	\$39,067,982	(\$7,264,398)	\$31,803,584
Manatee	\$73,550,541	(\$16,363,554)	\$57,186,987
Martin	\$112,835,115	(\$26,204,511)	\$86,630,603
Port Everglades	\$21,011,928	(\$7,317,093)	\$13,694,835
Riviera	\$17,447,262	(\$4,387,026)	\$13,060,236
St. Johns River ²	\$115,885,000	(\$11,470,000)	\$104,415,000
Sanford	\$31,299,119	(\$9,043,912)	\$22,255,207
Scherer ^{2,3}	\$203,999,000	(\$9,629,000)	\$194,370,000
Space Coast Solar	\$1,150,000	(\$410,000)	\$740,000
Turkey Point	\$63,351,729	(\$13,677,173)	\$49,674,556
West County	\$53,833,211	(\$16,156,521)	\$37,676,690
Babcock Ranch Solar ⁴	\$8,569,000	(\$3,052,000)	\$5,517,000
Citrus Solar ⁴	\$8,569,000	(\$3,052,000)	\$5,517,000
Manatee Solar ⁴	\$8,569,000	(\$3,052,000)	\$5,517,000
Okeechobee ⁴	\$17,354,000	(\$5,560,000)	\$11,794,000

Table 5-1: Site Decommissioning Cost (2015\$)¹

¹ Cost estimates were rounded to the nearest \$1,000 and then site inventory costs and recoverable scrap for inventory was added to the rounded estimate resulting in the values shown

added to the rounded estimate resulting in the values shown. ² Costs for Scherer and St. Johns River have not been adjusted for FPL's ownership percentage.

³ Scherer estimate includes only Unit 4 and all common facilities.

⁴ Proposed facility.

6.0 LIMITATIONS

In preparation of this decommissioning study, BMcD has relied upon information provided by Florida Power & Light. BMcD acknowledges that it has requested the information from Florida Power & Light that it deemed necessary to complete this study. While we have no reason to believe that the information provided to us, and upon which we have relied, is inaccurate or incomplete in any material respect, we have not independently verified such information and cannot guarantee its accuracy or completeness.

Engineer's estimates and projections of decommissioning costs are based on Engineer's experience, qualifications and judgment. Since Engineer has no control over weather, cost and availability of labor, material and equipment, labor productivity, construction contractors' procedures and methods, and other factors, Engineer does not guarantee the accuracy of its estimates and projections.

Engineer's estimates do not include allowances for unforeseen environmental liabilities associated with unexpected environmental contamination due to events not considered part of normal operations, such as fuel tank ruptures, oil spills, etc. Estimates also do not include allowances for environmental remediation associated with changes in classification of hazardous materials.

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APPENDIX A - COST BREAKDOWNS

,

Table A-1 Cape Canaveral Power Plant Decommissioning Cost Summary

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(4,616,199)

\$

\$

19,985,993 \$

15,369,794

			1	Material and								
		Labor		Equipment		Disposal	E	invironmental		Total Cost		Salvage
Cape Canaveral Power Plant												
Unit 1												
GTs and HRSGs	S	2.670.000	\$	2,917,000	\$		\$	-	S	5,587,000	\$	-
Stearn Turbine & Pedestal	5	1,174,000	\$	1,282,000	\$	-	S	-	S	2,456.000	\$	-
SCR	\$	135,000	\$	147,000	\$	-	\$	-	s	282,000	S	-
GSU & Electrical	\$	227,000	\$	248,000	\$	-	\$	-	s	475,000	S	
Stack	\$	95,000	\$	103,000	\$	-	S	-	S	198,000	s	
On-site Concrete Crushing & Disposal	5	-	\$	-	\$	182,000	5	-	S	182,000	5	-
Scrap	\$	-	5	-	\$	-	\$	-	\$	-	\$	(4,218,000)
Subtotal	\$	4,301,000	\$	4,697,000	\$	182,000	\$	-	\$	9,180,000	\$	(4,218,000)
Соттоп												
Auxiliary, Switchyard and Substation	\$	31 000	\$	34 000	S	-	\$	-	s	65.000	s	-
Cooling Water Intakes and Circulating Water Pumps	ŝ	172 000	s	188 000	ŝ	-	ŝ	_	s	360.000	ŝ	-
Roads	\$	193,000	s	211.000	s	212 000	s	-	s	616.000	ŝ	-
All BOP Buildings	\$	521.000	s	569.000	S	-	ŝ		S	1.090.000	ŝ	-
Fuel Oil Storage Tanks	\$	110.000	s	121.000	5	-	ŝ	-	S	231.000	\$	-
All Other Tanks	\$	113,000	s	124 000	5	-	ŝ		S	237 000	ŝ	
Contaminated Soil Removal	\$		ŝ	-	ŝ	-	ŝ	101.000	s	101.000	ŝ	-
Fuel Oil Storage Tank Cleaning	ŝ	-	5		s	-	ŝ	1 504 000	s	1 504 000	ŝ	
Fuel Oil Line Flushing/Cleaning	. \$		s	-	ŝ	-	ŝ	154 000	s	154 000	ŝ	-
Settling Pond Closure	\$	-	s	-	ŝ	-	ŝ	1 085 000	ŝ	1 085 000	ŝ	-
On-site Concrete Crushing & Disposal	¢ S		-s	-	s	65 000	ŝ	-	s	65 000	ŝ	_
Seeding and Grading	ŝ	-	5		5		ŝ	154 000	s	154 000	ŝ	
Debris	\$	_	s	-	ŝ	1 000	ŝ		ŝ	1 000	ŝ	-
Scrap	ŝ		s	-	5	1,000	s		š		ŝ	(255.000)
Subtotal	\$	1,140,000	\$	1,247,000	\$	278,000	\$	2,998,000	\$	5,663,000	\$	(255,000)
Cape Canaveral Energy Center Subtotal	\$	5,441,000	\$	5,944,000	\$	460,000	\$	2,998,000	\$	14,843,000	\$	(4,473,000)
TOTAL COST (CREDIT)									\$	14,843,000	\$	(4,473,000)
PROJECT INDIRECTS (5%)									\$	742,000		
CONTINGENGY (20%)		,							\$	2,969,000		
SITE INVENTORY COST (CREDIT) ¹									\$	1,431,993	\$	(143,199)

TOTAL PROJECT COST (CREDIT)

TOTAL NET PROJECT COST (CREDIT)

¹ Site inventory costs and recoverable scrap of inventory estimates (10%) were provided by FPL and were not independently reviewed by BMcD.

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Table A-2 DeSoto Next Generation Solar Energy Center Decommissioning Cost Summary

			I	Material and							
		Labor		Equipment	Disposal	E	Invironmental		Total Cost		Salvage
DeSoto Next Generation Solar Energy Center											
Unit 1											
Demolition	\$	564.000	\$	846,000	\$ -	5		S	1,410,000	\$	-
Collector System	s	44.000	\$	66,000	\$ -	S	-	S	110,000	\$	-
Project Buildings	S	6.000	\$	9,000	\$ -	\$	-	S	15.000	5	-
Hazardous Material Disposal	S	-	\$	-	\$ 393,000	\$	-	S	393,000	\$	-
On-site Concrete Crushing & Disposal	\$	-	\$	-	\$ 25,000	Ş	-	S	25,000	\$	-
Site Restoration	\$	-	\$	-	\$ -	S	300.000	S	300,000	\$	-
Debris	5	-	\$	-	\$ 47,000	5	-	S	47,000	5	-
Scrap	\$		5	-	\$ -	\$	-	Ş	**	\$	(1,024,000)
Subtotal	\$	614,000	\$	921,000	\$ 465,000	\$	300,000	\$	2,300,000	\$	(1,024,000)
Desoto Solar Energy Center Subtotal	\$	614,000	\$	921,000	\$ 465,000	\$	300,000	\$	2,300,000	\$	(1,024,000)
TOTAL COST (CREDIT)								\$	2,300,000	\$	(1,024,000)
PROJECT INDIRECTS (5%)								\$	115,000		
CONTINGENGY (20%)								\$	460,000		
SITE INVENTORY COST (CREDIT) ¹								\$	134,309	\$	(13,431)
TOTAL PROJECT COST (CREDIT)								\$	3,009,309	\$	(1,037,431)
TOTAL NET PROJECT COST (CREDIT)								\$	1,971,878		

¹ Site inventory costs and recoverable scrap of inventory estimates (10%) were provided by FPL and were not independently reviewed by BMcD.

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Table A-3 Ft. Myers Power Plant Decommissioning Cost Summary

		Labor	Material and Equipment	Disposal	Environmental	Total Cost		Salvage
. Myers Power Plant								
GTs and HRSGs	5	4 272 000	5 4 668 000	<u>د</u>	s .	S 8.940.00	0 5	
Steam Turbines & Pedestals	s	1 079 000	\$ 1,000,000 \$ 1,179,000	s -	s	S 2.258.00	0 S	-
SCR	s	144,000	\$ 158,000	s -	Š -	S 302,00	0 5	
GSUs & Electrical	5	174,000	\$ 190,000	s -	S -	S 364,00	0 \$	-
Stack	5	174,000	\$ 190,000	S -	S -	S 364,00	0 \$	
Cooling Tower and Basin	\$	136,000	\$ 149,000	s -	S	S 285,00	0 \$	
On-site Concrete Crushing & Disposal	S		s -	\$ 384.000	S -	\$ 384,00	0 \$	-
Scrap	\$		s -	S -	\$ -	S -	\$	(6,883,000)
Subtotal	\$	5,979,000	\$ 6,534,000	\$ 384,000	\$ -	\$ 12,897,00	0\$	(6,883,000)
Unit 3								
GTs	\$	750,000	\$ 820,000	S -	\$-	\$ 1,570,00	0\$	-
SCR	\$	110,000	\$ 121,000	s -	ş -	S 231,00	0\$	-
GSUs & Electrical	\$	67,000	\$ 73,000	s -	ş -	s 140,00	0\$	
Stack	\$	62.000	\$ 68,000	S -	\$ -	\$ 130,00	0\$	-
On-site Concrete Crushing & Disposal	\$	-	s -	\$ 66,000	\$ -	5 66.00	0\$	-
Scrap	\$		ş -	S	5 -	\$ -	\$	(1,090,000)
Subtotal	\$	989,000	\$ 1,082,000	\$ 66,000	\$ -	\$ 2,137,00	0\$	(1,090,000)
Unit 4 (Proposed 2x GE 7FA.05s)								
Turbines & Foundations	5	947,000	\$ 1,035,000	s -	S -	\$ 1,982,00	0\$	-
GSU	\$	87.000	\$ 95,000	s -	S -	\$ 182,00	0\$	-
Stack	\$	6,000	\$ 6,000	\$ -	s -	S 12,00	0\$	-
On-site Concrete Crushing & Disposal	5	- :	ş -	\$ 75,000	\$	S 75,00	0\$	-
Scrap	\$	-	s -	5 -	\$ -	S -	\$	(1,066,000)
Subtotal	\$	1,040,000	\$ 1,136,000	\$ 75,000	\$	\$ 2,251,00	0\$	(1,066,000)
GTs 1 & 2								
GTs & Foundations	\$	218,000	\$ 238,000	ş -	s -	S 456,00	0\$	-
GSUs & Electrical	\$	15,000	\$ 16.000	S -	\$-	\$ 31,00	0\$	-
On-site Concrete Crushing & Disposal	\$		5 -	\$ 11,000	\$-	\$ 11,00	0\$	-
Scrap	\$		\$-	s -	\$ -	S -	Ş	(338,000)
Subtotal	\$	233,000	\$ 254,000	\$ 11,000	\$-	\$ 498,00	0\$	(338,000)
Common Facilities								
Asbestos Removal ¹	\$		S -	s -	\$ 14,000	S 14,00	0\$	
Cooling Water Intakes and Circulating Water Pumps	\$	500,000	\$ 547,000	\$-	S -	S 1.047.00	0\$	-
Roads	\$	734,000	\$ 802,000	\$ 805,000	s -	\$ 2.341.00	0\$	-
All BOP Buildings	\$	861,000	s 940,000	s -	\$-	S 1.801.00	0\$	
Fuel Oil Storage Tanks	\$	132,000	5 144,000	s -	\$-	S 276.00	0\$	-
All Other Tanks	\$	198,000	\$ 217,000	\$-	\$ ` -	S 415.00	0.\$	-
Contaminated Soil Removal	\$	-	s -	\$-	\$ 167,000	S 167.00	0\$	-
Fuel Oil Storage Tank Cleaning	\$	-	s -	s -	\$ 4.854.000	S 4.854,00	0\$	-
Fuel Oil Line Flushing/Cleaning	\$		S -	\$ -	\$ 723,000	\$ 723.00	0\$	
Settling Pond Closure	S	~	s -	s -	\$ 1,036.000	\$ 1,036.00	0\$	-
On-site Concrete Crushing & Disposal	s	-	5 -	\$ 114,000	\$-	\$ 114,00	0\$	-
Seeding and Grading	\$	-	s -	\$-	\$ 369,000	\$ 369.00	0\$	-
Debris	\$	-	s -	\$ 3,000	\$ -	S 3,00	0\$	-
Scrap	\$		s -	s -	S -	s -	\$	(479,000)
Subtotal	\$	2,425,000	\$ 2,650,000	\$ 922,000	\$ 7,163,000	\$ 13,160,00	0\$	(479,000)
Ft. Myers Power Plant Subtotal	\$	10,666,000	\$ 11,656,000	\$ 1,458,000	\$ 7,163,000	\$ 30,943,00	0.\$.	(9,856,000)
Ft. Myers Power Plant Subtotal TOTAL COST (CREDIT)	\$	10,666,000	\$ 11,656,000	\$ 1,458,000	\$ 7,163,000	\$ 30,943,00 \$ 30,943,00	0.\$. 0\$	(9,856,000) (9,856,000)
Ft. Myers Power Plant Subtotal TOTAL COST (CREDIT) PROJECT INDIRECTS (5%)	5	10,666,000	\$ 11,656,000	\$ 1,458,000	\$ 7,163,000	\$ 30,943,00 \$ 30,943,00 \$ 1,547,00	0 <u>\$</u> 0 \$ 0	(9,856,000) (9,856,000)
Ft. Myers Power Plant Subtotal TOTAL COST (CREDIT) PROJECT INDIRECTS (5%) CONTINGENGY (20%)	<u>\$</u>	10,666,000	\$ 11,656,000	\$ 1,458,000	\$ 7,163,000	\$ 30,943,00 \$ 30,943,00 \$ 1,547,00 \$ 6,189,00	0 \$ 0 \$ 0	(9,8 56,000) (9,856,000)
Ft. Myers Power Plant Subtotal TOTAL COST (CREDIT) PROJECT INDIRECTS (5%) CONTINGENGY (20%) SITE INVENTORY COST (CREDIT) ²	\$	10,666,000	\$ 11,656,000	\$ 1,458,000	\$ 7,163,000	\$ 30,943,00 \$ 30,943,00 \$ 1,547,00 \$ 6,189,00 \$ 2,639,93	0 \$ 0 \$ 0 2 \$	(9,856,000) (9,856,000) (263,993)
Ft. Myers Power Plant Subtotal TOTAL COST (CREDIT) PROJECT INDIRECTS (5%) CONTINGENGY (20%) SITE INVENTORY COST (CREDIT) ² TOTAL PROJECT COST (CREDIT)	<u>(</u>	10,666,000	\$ 11,656,000	\$ 1,458,000	\$ 7,163,000	\$ 30,943,00 \$ 30,943,00 \$ 1,547,00 \$ 6,189,00 \$ 2,639,93 \$ 41,318,93	0 \$ 0 \$ 0 2 \$ 2 \$	(9,856,000) (9,856,000) (263,993) (10,119,993)
Ft. Myers Power Plant Subtotal TOTAL COST (CREDIT) PROJECT INDIRECTS (5%) CONTINGENGY (20%) SITE INVENTORY COST (CREDIT) ² TOTAL PROJECT COST (CREDIT) TOTAL NET PROJECT COST (CREDIT)	5	10,666,000	\$ 11,656,000	\$ 1,458,000	\$ 7,163,000	\$ 30,943,00 \$ 30,943,00 \$ 1,547,00 \$ 6,189,00 \$ 2,639,93 \$ 41,318,93 \$ 31,198,93	0 \$ 0 \$ 0 2 \$ 2 \$	(9,856,000) (9,856,000) (263,993) (10,119,993)

¹ Asbestos removal estimates were provided by FPL and were not independently reviewed by BMcD.
 ² Site inventory costs and recoverable scrap of inventory estimates (10%) were provided by FPL and were not independently reviewed by BMcD.

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Table A-4 Lauderdale Power Plant Decommissioning Cost Summary

			Material and							
auderdele Roums Plant		Labor	Equipment	Dispo	sal	Environmental		Total Cost		Salvage
GTs and HRSGs	s	1.374.000	\$ 1,501,000	\$	-	\$ -	S	2,875,000	5	-
Steam Turbine & Pedestal	5	786.000	\$ 859,000	\$	~	S ~	S	1,645,000	5	-
SCR	\$	50,000	\$ 54,000	S	~	S -	s	104,000	\$	-
GSU & Electrical	S	128,000	\$ 140,000	\$	-	S ~	S	268,000	S	
Stack	S	58.000	\$ 63,000	\$	-	S -	s	121,000	\$	-
On-site Concrete Crushing & Disposal	5	-	\$ -	\$ 13	36,000	S -	Ş	136,000	5	(0.001.000)
Scrap Subtotal	ŝ	2.396.000	\$ 2.617.000	5 5 13	36.000	s -	<u></u> ১	5.149.000	⇒ \$	(2,034,000)
		-,,								() / /
Unit 5	¢	1.274.000	¢ 1.501.000	c		¢	¢	2 875 000	¢	
Steam Turbine & Pedestal	3	786.000	\$ 1,301,000 \$ 859,000	5	-	ч с	3	2,075,000	ŝ	
SCR	5	48,000	\$ 52,000	s		\$ -	ŝ	100.000	ŝ	-
GSU & Electrical	ŝ	129.000	\$ 141.000	s	-	\$ -	ŝ	270,000	ŝ	
Stack	\$	58.000	\$ 63,000	s		s -	\$	121,000	ŝ	-
On-site Concrete Crushing & Disposal	S	-	5 -	S 13	36,000	\$ -	s	136,000	\$	-
Scrap	5	-	s -	S	-	s -	Ş	-	Ş	(2,039,000)
Subtotal	\$	2,395,000	\$ 2,616,000	\$ 13	36,000	\$-	\$	5,147 <u>,000</u>	\$	(2,039,000)
Unit 6 (Proposed 5x GE 7FA.05s)										
Turbines & Foundations	s	2,338,000	\$ 2,554,000	s	-	s -	s	4,892,000	S	-
GSU	5	218,000	\$ 239,000	\$	-	s -	S	457,000	\$	-
Stack	\$	15.000	\$ 16,000	\$		S -	s	31,000	5	
On-site Concrete Crushing & Disposal	5	-	S -	\$ 18	38,000	s -	S	188,000	\$	-
Scrap	\$	~	5 -	\$	-	ş -	\$	-	\$	(2,039,000)
Subtotal	\$	2,571,000	\$ 2,809,000	\$ 18	38,000	S -	\$	5,568,000	\$	(2,039,000)
GTs 1 & 2										
Turbines & Foundations	S	210,000	\$ 229.000	\$	-	\$-	Ş	439,000	\$	-
GSUs	\$	17,000	\$ 18.000	\$	-	\$ -	S	35,000	\$	-
On-site Concrete Crushing & Disposal	\$	-	ş -	\$	0,000	s -	S	10,000	\$	-
Scrap	5	~	s -	\$	~	\$-	S	-	\$	(332,000)
Subtotal	\$	227,000	\$ 247,000	\$ 1	0,000	\$	\$	484,000	\$	(332,000)
Common										
Asbestos Bernoval ¹	s	-	s -	s	-	\$ 195.000	S	195.000	ŝ	-
Cooling Water Intakes and Circulating Water Pumps	S	448.000	\$ 490,000	s	-	\$ -	Ş	938.000	\$	
Roads	\$	409,000	\$ 447,000	S 44	19,000	ş -	S	1,305,000	\$	-
All BOP Buildings	\$	569,000	\$ 621,000	\$	-	s -	S	1,190,000	\$	-
Fuel Oil Storage Tanks	\$	162,000	\$ 177,000	\$	-	\$-	S	339,000	S	-
All Other Tanks	\$	230,000	\$ 252,000	S	-	ş -	S	482,000	\$	-
Contaminated Soil Removal	\$	-	s -	S	-	\$ 201,000	S	201,000	\$	
Fuel Oil Storage Tank Cleaning	\$	-	S -	S	-	\$ 2,591,000	S	2.591.000	\$	-
Fuel Oil Line Flushing/Cleaning	\$	-	s -	S	-	\$ 2.734,000	S	2.734.000	\$	-
Settling Pond Closure	\$	-	s -	5	-	\$ 1,127.000	5	1,127,000	\$	
Ch-site Concrete Crushing & Disposal	3	-	5 - r	3 IV	000,000	ē 163.000	2 c	100,000	р ¢	-
Debrie		-	р - с	а С	2 000	\$ 100.000 \$	ŝ	2.000	ŝ	
Scrap	ş	-	\$ -	s	-	s -	ŝ	-	\$	(379.000)
Subtotal	٦.	1,818,000	\$ 1,987,000	\$ 55	59,000	\$ 7,011,000	\$	11,375,000	\$	(379,000)
Lauderdaia Power Plant Subtotal	5	9.407.000	\$ 10 276 000	\$ 1.02	000	\$ 7.011.000	\$	27,723,000	ŝ	(6.823.000)
	L*	3,407,000	* 10,270,000	\$ 1,07	.3,000		*	27,720,000	<u> </u>	(0,020,000)
TOTAL COST (CREDIT)							\$	27,723,000	\$	(6,823,000)
PROJECT INDIRECTS (5%)							\$	1,386,000		
CONTINGENGY (20%)							\$	5,545,000		
SITE INVENTORY COST (CREDIT) ²							\$	4,413,982	\$	(441,398)
TOTAL PROJECT COST (CREDIT)							\$	39,067,982	\$	(7,264,398)
TOTAL NET PROJECT COST (CREDIT)							\$	31,803,584		

Asbestos removal estimates were provided by FPL and were not independently reviewed by BMcD.
 ² Site inventory costs and recoverable scrap of inventory estimates (10%) were provided by FPL and were not independently reviewed by BMcD.

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Table A-5 Manatee Power Plant Decommissioning Cost Summary

				Material and								
		Labor		Equipment		Disposal		Environmental		Total Cost		Salvage
Manates Power Plant												
Unit 1												
Boiler	S	3.532.000	\$	3,859,000	\$		S	-	Ş	7,391,000	\$	-
Steam Turbine & Building	\$	1.274.000	\$	1,392,000	\$	-	S	-	Ş	2,666,000	S	-
Precipitator	5	931.000	\$	1,017,000	\$	-	Ş	-	S	1,948,000	5	-
Stack	2	189,000	\$	206,000	\$	-	\$	-	S	395,000	5	-
GSU & Foundation	5	63,000	\$	69,000	\$		\$	-	S	132,000	S	-
On-site Concrete Crushing & Disposal	5	-	ş	-	\$	289,000	5	-	S	289,000	S	-
Debris	5	-	\$	-	\$	52,000	5	-	S	52,000	Ş	-
Scrap	<u>~</u>		\$		5	-	\$	-	5		\$	(5,313,000)
Subtotal	\$	5,989,000	\$	6,543,000	\$	341,000	\$	-	\$	12,873,000	\$	(5,313,000)
Linit 2												
Poilor		2 522 000	æ	3 850 000	~		¢		c	7 004 000	ŵ	
Dollel Steam Turbine & Building	э с	3,532,000	3	3,859,000	2		ý	-	Ş	7,391,000	\$	**
Steam Turbine & Building	р С	1,274,000	ې د	1,392,000	3	-	÷	-	æ	2,665,000	э Ф	-
Stack	÷	120,000	э c	1,017,000	د د	-	ф с	-	ç	1,948,000	\$	-
GSU & Foundation	¢ ¢	63,000	ф с	200,000	0 0	-	с С	-	э с	122,000	\$ ¢	-
On site Concrete Crushing & Disponal	ф С	65,000	3	68,000	3 c	-	ç ç		с С	132,000	э с	-
Debris	φ ¢	-	а с	-	- J	269,000	ф С	-	3	269,000	э с	-
Scran	e e		ç	-	- P - C	52,000	ې د	-	с с	52,000	ф с	(5 212 000)
Subtotal	<u> </u>	5 090 000	¢	6 543 000	é	341.000	é	_	÷.	42 972 000	ې د	(5,313,000)
Subiola	<u> </u>	3,303,000	ş	0,043,000	φ	341,000	-	-	ą.	12,073,000	ş	(5,313,000)
linit 2												
	c	2.067.000	¢	2 242 000	~		e		~	0.000.000	~	
Steam Turbine & Pedectal	3 6	2,907,000	ф С	3,242,000	- D - C	-	ъ с	-	о с	0,209,000	э +	-
SCR	د د	07.000	е Ф	1,095,000	ଁ	-	э. с	-	2	2,097,000	3 -	-
GSU & Electrical	- -	236,000	e e	259,000	्		с С	-	9	203,000	с С	-
Stack	с С	116,000	φ c	200,000	э с	-	э с	-	\$	494.000	Э с	-
On-site Concrete Crushing & Disposal	ę	110.000	φ ¢	127,000	- P	474.000	ę	2	3	243,000	3	-
Scran	¢ ¢	-	9	-	e e	174.000	3 6	-	5	174,000	ф С	(4 900 000)
Subtotal	r e e e e e e e e e e e e e e e e e e e	4 418 000	é	4 828 000	¢	174.000	č		ě	9.420.000	¢	(4,909,000)
		4,410,000	÷	4,020,000	. •	114,000	*		÷	3,420,000	•	(4,303,000)
Common Facilities												
Ashestas Removal ¹			e		¢		p.	15.000	~	15 000	æ	
Cooling Mater Intakes and Circulating Mater Pumps	э с	635 00D	о с	een 000	- P	-	e e	15.000	3	1 207 000	3	-
Boade		220,000	ç ç	435,000	e e	428 000	9 6	-	°.	1,307,000	с С	-
	с С	768.000	9 9	830,000	¢.	420,000	с С	-	a c	1,240,000	e e	-
Fuel Oil Storage Tanks	- 	412.000	¢ ¢	450,000	ç	-	e	-	ç	1,007,000	9 6	-
All Other Tanks	e e	-12.000 68.000	e e	430,000	ę e	-	e e	-		122,000	о е	-
	4	30,000	9	04,000	φ α	-	3		3	122,000	5	-
Contaminated Soil Removal	5	-	Ş	-	\$	-	5	1,004,000	5	1,004,000	\$	-
Fuel Oil Storage Tank Cleaning	\$	-	Ş	-	\$	-	5	6.937.000	S	6,937,000	\$	-
Fuel Oil Line Flushing/Cleaning	5	-	\$	-	S	-	S	7,034.000	S	7,034,000	ş	-
Settling Pond Closure	5	-	\$	-	5	-	S	484.000	S	484,000	Ş	-
On-site Concrete Crusning & Disposal	5	•	5	-	S	127.000	s		S	127,000	5	-
Seeding and Grading	2	-	5	-	2	-	5	344.000	5	344,000	\$	-
Debris	3	-	5	-	ъ с	3.000	\$	-	5	3,000	\$	-
Subtatel		0.050.000	ې و	-	ş	-	÷	45 040 000	\$	-	5	(505,000)
Subtotal	\$	2,252,000	<u> </u>	2,460,000		556,000	\$	15,818,000	\$	21,086,000	\$	(000,000)
Manatas Bower Blant Subtatal	6	49 649 000		20 274 000	÷	4 442 000	*	45 949 000		50 252 000		(46 040 000)
Manatee Power Plant Subtotal	\$	18,648,000	\$	20,3/4,000	<u>ې</u>	1,412,000	\$	15,818,000	\$	55,252,000	<u>\$</u>	(16,040,000)
											•	
TOTAL COST (CREDIT)									\$	56,252,000	ð	(16,040,000)
										0.040.000		
PROJECT INDIRECTS (5%)									\$	2,813,000		
CONTINGENCY (20%)										44 250 000		
CONTINGENOT (20%)									ð	11,250,000		
SITE INVENTORY COST (CREDIT)"									\$	3,235,541	\$	(323,554)
TOTAL PROJECT COST (CREDIT)									\$	73,550,541	\$	(16,363,554)
IUIAL NEI PROJECT COST (CREDIT)									\$	57,186,987		

¹ Asbestos removal estimates were provided by FPL and were not independently reviewed by BMcD.
 ² As provided by FPL's from estimates prepared by their Environmental Group based on areas of known soil contamination that will require remediation at the time of project dismantiement.
 ³ Site inventory costs and recoverable scrap of inventory estimates (10%) were provided by FPL and were not independently reviewed by BMcD.

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Table A-6 Martin Energy Center Decommissioning Cost Summary

			Material and				
		Labor	Equipment	Disposal	Environmental	Total Cost	Salvage
Init 1							
Boiler	s	3 553 000	\$ 3 882 000	s -	\$ -	s 7.435.000	s -
Steam Turbine & Building	ŝ	1,482,000	\$ 1.619.000	\$ -	\$-	S 3,101,000	s -
Precipitator	\$	931,000	\$ 1.017,000	\$ -	\$ -	\$ 1,948,000	\$ -
Stack	\$	189,000	\$ 206,000	S -	\$-	\$ 395,000	\$ -
GSU & Foundation	\$	53,000	\$ 58,000	\$	\$-	\$ 111,000	\$ -
On-site Concrete Crushing & Disposal	\$	-	s -	\$ 311,000	\$ -	\$ 311,000	\$ -
Debris	\$	-	s -	\$ 52,000	\$ -	\$ 52.000	\$ -
Scrap		6 209 000	¢ 6 792 000	÷ ·	· · · ·	> -	5 (6,369,000) 6 (6,369,000)
Subtotal	•	6,206,000	\$ 0,702,000	a 363,000	ə -	\$ 13,353,000	\$ (0,309,000)
Unit 2 Beiler		2 552 000	e 2,002,000	~	<u>^</u>	c 7.426.000	с.
Boller Steam Turbine & Building	э с	3,553,000	\$ 3.882.000 \$ 1.619.000	5 - 6	5 ·	s 7,435,000 s 3,101,000	5 - ¢
Precipitator	5	931.000	\$ 1,019,000 \$ 1,017,000	s -	s -	S 1.948.000	у - 8 -
Stack	s	189,000	\$ 206.000	S -	\$	\$ 395,000	\$ -
GSU & Foundation	S	53,000	\$ 58,000	s -	\$-	\$ 111,000	\$-
On-site Concrete Crushing & Disposal	\$	-	\$-	\$ 311,000	s -	\$ 311,000	\$-
Debris	5	-	ş -	\$ 52,000	s -	\$ 52,000	\$-
Scrap	\$	-	\$ -	\$	\$	s -	\$ (6,369,000)
Subtotal	\$	6,208,000	\$ 6,782,000	\$ 363,000	\$-	\$ 13,353,000	\$ (6,369,000)
Unit 3							
GTs and HRSGs	\$	1.381.000	\$ 1,509,000	s .	s -	\$ 2,890,000	5 -
Steam Turbine & Pedestal	S	420.000	s 459,000	5 - e	5 - c	S 879,000	ъ -
SUR GSU & Flectrical	5	48,000	 53,000 140,000 	ə -	а - с	3 101,000 S 339,000	3 - 9
Stack		62 000	9 113,000 S 67,000	 S -		3 228,000 S 129,000	s -
On-site Concrete Crushing & Disposal		- -	\$ -	\$ 90.000	- 5 -	\$ 90.000	s -
Scrap	\$	-	\$-	\$ -	s -	\$ -	\$ (2,508,000)
Subtotal	\$	2,020,000	\$ 2,207,000	\$ 90,000	\$-	\$ 4,317,000	\$ (2,508,000)
Unit 4							
GTs and HRSGs	\$	1,378,000	\$ 1,506,000	ş	\$-	\$ 2,884,000	\$
Steam Turbine & Pedestal	\$	406,000	\$ 443,000	\$ -	ş -	\$ 849,000	\$-
SCR	\$	48,000	\$ 53,000	\$ -	\$ -	S 101.000	\$ -
GSU & Electrical	\$	95,000	\$ 104,000	S -	S -	\$ 199.000	S -
On-site Concrete Crushing & Disposal	¢.	02,000	s 07,000 s	- c s an nnn	э - с	s 129,000	
Scrap	ş	-	s -	\$ 80,000 \$ -	s -	S -	\$ (2.415.000)
Subtotal	\$	1,989,000	\$ 2,173,000	\$ 90,000	\$ -	\$ 4,252,000	\$ (2,415,000)
Unit 8						,	
GTs and HRSGs	\$	2,971,000	\$ 3.246.000	ş -	\$-	S 6,217,000	\$ -
Steam Turbine & Pedestal	S	887,000	\$ 970.000	s -	\$ -	\$ 1,857,000	ş -
SCR	\$	97,000	\$ 106.000	5 - -	\$ - -	\$ 203,000	\$ -
GSU & Electrical	ۍ د	135,000	\$ 148.000	Տ -	ъ -	\$ 283,000 ¢ 243,000	\$ - ¢
Cooling Tower and Basin	و د	240,000	s 262.000	а - 5 -	а -	s 502.000	а с
On-site Concrete Crushing & Disposal	ŝ	240,000	s -	\$ 232.000	¥ S -	S 232,000	s -
Debris	\$	-	\$ -	\$ 14,000	\$ -	\$ 14,000	\$ -
Scrap	Ş	-	s -	s -	\$-	S -	\$ (5,231,000)
Subtotal	\$	4,446,000	\$ 4,859,000	\$ 246,000	\$ -	\$ 9,551,000	\$ (5,231,000)
ISCC							
Mirrors and Frames	S	4,151,000	\$ 4,535,000	\$-	\$-	\$ 8,686,000	\$-
Hazardous Waste Disposal	5	-	s -	\$ 1,160,000	\$ -	\$ 1,160,000	\$ -
On-site Concrete Crushing & Disposal	S	-	s -	\$ 160,000	ş -	S 160,000	\$ - °
Scran	s ¢	-	3 - e .	\$ 205,000 \$	3 - \$ -	5 205,000 5 -	\$ (1.809.000)
Subtotal	<u>s</u>	4 151 000	\$ 4 535 000	\$ 1 525 000	5 .	\$ 10 211.000	\$ (1,809,000) \$ (1,809,000)
Common	Ŧ	.,		• •,-=-,	•	+,,	+ (',,,
Ashestet Berroval ¹	c		c	e	e 941.000	\$ 241,000	¢
Switchvard and Substation	ş	21 000	s 23.000	s -	\$ 241,000 \$ -	S 44.000	у ~ S -
Cooling Water Intakes and Circulating Water Pumps	Š	1.188.000	\$ 1.298.000	s -	s -	\$ 2,486,000	\$
Roads	\$	959,000	\$ 1,048,000	\$ 1,052,000	\$ -	S 3,059,000	\$ -
All BOP Buildings	\$	1,154,000	\$ 1,260,000	S -	\$ -	\$ 2,414,000	\$ -
Fuel Oil Storage Tanks	\$	2,001,000	\$ 2,187,000	s -	\$ -	\$ 4,188,000	s -
All Other Tanks	Ş	72,000	\$ 78,000	\$ -	\$ -	\$ 150.000	\$-
Contaminated Soil Removal	5	-		5 -	\$ 747,000	\$ 747,000	5 -
Fuel Oil Storage Tank Cleaning	c c	-	а с	s -	5 7,644,000 S 4,637,000	5 7,444,000 S 4,537,000	а - с
Settling Pond Closure	5	-	s -	s -	\$ 2,240,000	s 2 240 000	s -
On-site Concrete Crushing & Disposal	\$		s .	\$ 365,000	\$ -	\$ 365,000	s -
Seeding and Grading	\$	-	s -	\$ -	S 1,091,000	\$ 1,091,000	s -
Debris	\$	-	s -	\$ 5,000	5 -	\$ 5,000	\$-
Scrap	S		s -	\$	\$	s -	\$ (726,000)
subtotal	<u></u>	5,395,000	> 5,894,000	> 1,422,000	> 16,300,000	> 29,011,000	> (726,000)
Martin Energy Center Subtotal		30,417,000	ə 33,232,000	ə 4,099,000	a 16,300,000	3 84,048,000 \$ 84,048,000	
						- 4000.000	- (20,721,000)
PROJECT INDIRECTS (5%)						≱ 4,202,000	
						ə 16,810,000	
STE INVENTORY COST (CREDIT)						ə <i>(,(1</i> 5,115	a (<i>177</i> ,511)
TOTAL PROJECT COST (CREDIT)						\$ 112,835,115	\$ (26,204,511)
TOTAL NET PROJECT COST (CREDIT)						\$ 86,630,603	

¹ Asbestos removal estimates were provided by FPL and were not independently reviewed by BMcD.

² Site inventory costs and recoverable scrap of inventory estimates (10%) were provided by FPL and were not independently reviewed by BMcD.

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Table A-7 Port Everglades Power Plant Decommissioning Cost Summary

			N	laterial and								
		Labor		Equipment		Disposal	E	invironmental		Total Cost		Salvage
Everglades Power Plant												
Unit 5												
GTs and HRSGs	S	2,646,000	\$	2,891,000	\$	-	S	-	S	5,537,000	\$	
Steam Turbine & Pedestal	S	1,116,000	\$	1,219,000	\$	-	\$	-	S	2,335,000	Ş	-
SCR	S	135.000	\$	147,000	\$	-	\$	-	S	282,000	Ş	
GSU & Electrical	5	191.000	\$	208,000	\$	-	\$	-	S	399,000	5	-
Stack	S	95.000	\$	103,000	\$	-	\$		S	198,000	Ş	-
On-site Concrete Crushing & Disposal	\$		\$		\$	179,000	\$	-	S	179,000	S	-
Scrap	\$	-	\$	-	5	-	\$		s		\$	(4,986,000)
Subtotal	\$	4,183,000	\$	4,568,000	\$	179,000	\$	·	\$	8,930,000	\$	(4,986,000)
GTs 1-12												
Turbines & Foundations	5	1.377.000	\$	1 504 000	\$	-	s	-	S	2,881,000	\$	-
GSUs	ŝ	75.000	\$	82 000	ŝ	_	ŝ		s	157.000	ŝ	
On-site Concrete Crushing & Disposal	¢	10,000	¢	52,000	š	96,000	ě	_	s	96,000	¢	
Scran	φ \$		ŝ		ŝ	20,000	ŝ		S S	50,000	ŝ	(1.931.000)
Subtotal	, e	4 452 000	÷	1 595 000	÷	06 000	÷		ې د	3 434 000		(1,331,000)
Subtotal	a la	1,452,000	ð	1,300,000	ð	36,000	ð	-	ð	3,134,000	-3	(1,931,000)
Common												
Switchyard and Substation	\$	39,000	\$	43,000	S	-	\$	-	S	82,000	\$	-
Cooling Water Intakes and Circulating Water Pumps	S	144.000	\$	157,000	S	-	\$	-	\$	301,000	\$	-
Roads	\$	124.000	\$	135,000	\$	136,000	\$	-	S	395,000	\$	-
All BOP Buildings	\$	110.000	\$	120,000	\$	-	Ş	-	S	230,000	\$	-
Fuel Oil Storage Tanks	\$	521.000	\$	570,000	\$	-	\$	-	S	1,091,000	Ş	-
All Other Tanks	S	115,000	\$	125,000	\$	-	\$	-	S	240,000	\$	-
Contaminated Soil Removal	\$	-	\$	-	\$	-	\$	147.000	S	147,000	5	-
Fuel Oil Storage Tank Cleaning	\$	-	\$	-	\$	-	S	1,488.000	\$	1,488,000	\$	-
Fuel Oil Line Flushing/Cleaning	\$	-	\$	-	\$	-	\$	288,000	\$	288,000	\$	-
On-site Concrete Crushing & Disposal	\$	-	\$	_	\$	66.000	\$	-	s	66,000	\$	-
Seeding and Grading	\$	-	s	-	s	-	\$	228.000	s	228,000	s	-
Debris	S	-	s	-	s	5.000	\$	-	S	5.000	s	-
Scrap	Ś		S	-	s	-	\$	-	ŝ		ŝ	(377.000)
Subtotal	\$	1,053,000	\$	1,150,000	\$	207,000	\$	2,151,000	\$	4,561,000	\$	(377,000)
Port Everglades Subtotal	\$	6,688,000	\$	7,304,000	\$	482,000	\$	2,151,000	\$	16,625,000	\$	(7,294,000)
FOTAL COST (CREDIT)									\$	16,625,000	\$	(7,294,000)
PROJECT INDIRECTS (5%)									\$	831,000		
CONTINGENGY (20%)									\$	3,325,000		
SITE INVENTORY COST (CREDIT)									\$	230,928	\$	(23,093)
TOTAL PROJECT COST (CREDIT)									\$	21,011,928	\$	(7,317,093)
TOTAL NET PROJECT COST (CREDIT)									\$	13 694 835	•	(, ,,
									4	13,034,035		

¹ Site inventory costs and recoverable scrap of inventory estimates (10%) were provided by FPL and were not independently reviewed by BMcD.

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Table A-8 Riviera Beach Power Plant Decommissioning Cost Summary

			1	Material and								
		Labor		Equipment		Disposal	E	nvironmental		Total Cost		Salvage
Riviera Beach Power Plant												
Unit 5												
GTs and HRSGs	\$	2.670.000	\$	2,917,000	\$	-	\$	-	S	5,587,000	\$	-
Steam Turbine & Pedestal	\$	1.124,000	\$	1,229.000	\$	-	5	-	\$	2,353,000	5	-
SCR	5	135,000	\$	147,000	\$	-	s	-	\$	282,000	s	-
GSU & Electrical	\$	181.000	\$	197,000	\$	-	63		s	378,000	\$	*
Stack	S	95.000	S	103,000	\$	-	\$	-	S	198.000	\$	-
On-site Concrete Crushing & Disposal	5	-	S	~	\$	180,000	\$	-	\$	180.000	5	-
Scrap	\$	-	S	-	\$	•	Ş	-	S	-	\$	(4,024,000)
Subtotal	\$	4,205,000	\$	4,593,000	\$	180,000	\$	-	\$	8,978,000	\$	(4,024,000)
Common												
Switchyard and Substation	\$	20,000	s	21,000	5	-	\$	-	S	41,000	\$	-
Cooling Water Intakes and Circulating Water Pumps	\$	58,000	\$	63,000	S	-	S		S	121,000	\$	-
Roads	\$	126,000	5	138,000	s	138.000	ŝ	-	S	402,000	\$	
All BOP Buildings	\$	508.000	s	555,000	s	-	\$		S	1,063.000	\$	-
Fuel Oil Storage Tanks	\$	104,000	s	114,000	S	-	ş	-	S	218,000	\$	-
All Other Tanks	\$	112,000	s	122,000	s	-	\$	-	S	234,000	\$	
Contaminated Soil Removal	\$	-	S	-	S	-	\$	101,000	S	101,000	\$	
Fuel Oil Storage Tank Cleaning	\$		S	-	S	-	\$	1,504,000	5	1,504.000	\$	-
Fuel Oil Line Flushing/Cleaning	\$	-	S	-	\$	-	\$	144,000	S	144.000	\$	-
On-site Concrete Crushing & Disposal	\$	-	S		\$	51,000	\$		S	51,000	\$	-
Seeding and Grading	\$	-	\$	-	S	-	\$	164,000	S	164,000	\$	
Debris	\$	-	\$		s	1,000	\$	-	S	1,000	\$	-
Scrap	\$	-	\$	-	\$		\$		\$	-	\$	(246,000)
Subtotal	\$	928,000	\$	1,013,000	\$	190,000	\$	1,913,000	\$	4,044,000	\$	(246,000)
Riviera Beach Power Plant Subtotal	\$	5,133,000	\$	5,606,000	\$	370,000	\$	1,913,000	\$	13,022,000	\$	(4,270,000)
TOTAL COST (CREDIT)									\$	13,022,000	\$	(4,270,000)
PROJECT INDIRECTS (5%)									\$	651,000		
CONTINGENGY (20%)									\$	2,604,000		
SITE INVENTORY COST (CREDIT) ¹									\$	1,170,262	\$	(117,026)
TOTAL PROJECT COST (CREDIT)									\$	17,447,262	\$	(4,387,026)
									•	13 060 236		
									٠	13,000,230		

¹ Site inventory costs and recoverable scrap of inventory estimates (10%) were provided by FPL and were not independently reviewed by BMcD.

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Table A-9 St. Johns River Power Plant Decommissioning Cost Summary

		Labor	Material and Equipment		Disposal	Environmental		Total Cost		Salvage
Johns River Power Plant			Edubuou							
Unit 1							~	7 575 800	~	
Boller	ş	3,620,000	\$ 3,955,000	\$	-	\$ -	5	7,575,000	ð	-
Steam Turbine & Building	5	1,518,000	\$ 1,659,000	5		5 ·	5	3,177,000	5	-
Precipitator	5	1,283,000	\$ 1,402,000	5	•	s -	3	2,685,000	Þ	-
SCR/FGD	\$	1.059.000	\$ 1,157,000	\$	-	ş -	s	2,216,000	\$	-
Scrubbers	\$	219.000	S 240,000	\$	-	s -	\$	459,000	Ş	
Stack	S	79.000	S 86,000	\$	-	s -	s	165,000	5	-
Cooling Tower & Basins	S	244.000	\$ 267,000	\$	-	\$ -	s	511,000	\$	-
GSU & Foundation	5	143,000	\$ 156,000	\$	-	s -	S	299,000	\$	~
On-site Concrete Crushing & Disposal	\$	-	\$-	\$	534.000	S -	S	534,000	\$	-
Debris	S	-	\$-	Ş	24.000	S -	S	24,000	\$	-
Scrap	\$	-	s .	S	-	\$ -	S	-	\$	(5,455,000)
Subtotal	\$	8,165,000	\$ 8,922,000	\$	558,000	\$ -	\$	17,645,000	\$	(5,455,000)
l Init 2										
Boiler	\$	3 620 000	\$ 3,955,000	s	-	s -	5	7 575 000	s	
Steam Turbine & Building	¢ ¢	1,518,000	s 1,659,000	ŝ		s _	9	3 177 000	ŝ	
Breginiteter	с	1,010,000	s 1,009,000	2		¢ -	2	2,685,000	¢	
Precipitator	3	1,263,000	5 1,402,000	3	-	- -	3	2,060,000	÷.	-
SCR/FGD	3	1,059,000	5 1,157,000	3	-	ъ -	÷	2,216,000	\$	
Scrubbers	5	219,000	5 240,000	3	-	5 -	3	459,000	\$	-
Stack	\$	79,000	5 86,000	S	-	ş -	S	165,000	\$	-
Cooling Tower & Basins	\$	244,000	\$ 267,000	\$	-	ş -	S	511,000	\$	-
GSU & Foundation	\$	143,000	\$ 156,000	S	-	\$-	S	299,000	\$	-
On-site Concrete Crushing & Disposal	\$	-	5 -	S	534,000	\$ -	S	534,000	\$	-
Debris	\$	-	5 -	\$	24,000	\$-	Ş	24,000	\$	-
Scrap	\$	-	ş -	\$	-	s -	s		5	(5,455,000)
Subtotal	\$	8,165,000	\$ 8,922,000	\$	558,000	\$-	\$	17,645,000	\$	(5,455,000)
Handling										
Demolítion	\$	940.000	s .	5		\$	s	940.000	\$	-
Limestone Handling Facilities	e e	555,000	s .	5		s	9	555,000	5	_
Concisto Concerto Cruchino & Dianacal	3	555.000	- -	9	-		2	20,000	-	*
On-site Concrete Crushing & Disposal	5	-	- -	3	72.000	а -	\$	72,000	\$	-
Debris	5	-	\$ •	\$	23.000	ъ -	3	23,000	ş	-
Scrap	5	-	÷ -	\$	-	5 -	3		\$	(64,000)
Subtotal	\$	1,495,000	\$ <u>-</u>	\$	95,000	\$	\$	1,590,000	<u>\$</u>	(64,000)
Common										
Common Cooling Water Intakes and Circulating Water Pumps	\$	89,000	\$ 98,000	\$	-	\$-	Ş	187,000	\$	~
Common Cooling Water Intakes and Circulating Water Pumps Roads	\$ \$	89,000 535,000	\$ 98.000 \$ 585.000	\$ \$	- 854 000	\$- \$-	s s	187,000 1,974,000	\$ \$	
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildinos	\$ \$ 5	89,000 535,000 502,000	\$ 98.000 \$ 585.000 \$ 548.000	\$ \$ \$	854,000	\$- \$-	\$ \$ \$ \$	187,000 1,974,000 1,050,000	5 5 5	~
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storane Tanks	\$ \$ 5 5	89,000 535,000 502,000 1 164 000	\$ 98.000 \$ 585.000 \$ 548.000 \$ 1.271.000	\$ \$ \$ \$	854,000	\$ - \$ - \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$	187,000 1,974,000 1,050,000 2,435,000	\$ \$ \$ \$	~ ~ -
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks	99 99 99 99 99	89,000 535,000 502,000 1,164,000	\$ 98.000 \$ 585.000 \$ 548.000 \$ 1.271.000 \$ 1.271.000	\$ \$ \$ \$ \$ \$	854,000	\$- \$- \$- \$-	00000	187,000 1,974,000 1,050,000 2,435,000 289,000	5) 5) 5) 6) 6	-
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks	\$\$ \$\$ \$\$ \$\$	89,000 535,000 502,000 1,164,000 138,000	\$ 98.000 \$ 585.000 \$ 548.000 \$ 1.271.000 \$ 1.51,000	\$ \$ \$ \$	854,000 - - -	\$- \$- \$- \$- \$- 5	000000 0000000000000000000000000000000	187,000 1,974,000 1,050,000 2,435,000 289,000	\$ \$ \$ \$ \$ \$	-
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹	\$\$ \$\$ \$9 \$9 \$9 \$9 \$9 \$9	89,000 535,000 502,000 1,164,000 138,000 -	\$ 98.000 \$ 585.000 \$ 548.000 \$ 1.271.000 \$ 151,000 \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 178,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	187,000 1,974,000 1,050,000 2,435,000 289,000 178,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning	୫ ୫ ୫ ୫ ୬ ୨ ୫	89,000 535,000 502,000 1,164,000 138,000 - -	\$ 98.000 \$ 585.000 \$ 548.000 \$ 1.271.000 \$ 151,000 \$ - \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	854,000 - - - -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 178,000 \$ 92,000	0 0 0 0 0 0 0	187,000 1,974,000 1,050,000 2,435,000 289,000 178,000 92,000	\$ \$ \$ \$ \$ \$ \$ \$ \$	-
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning	\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	89,000 535,000 502,000 1,164,000 138,000 - -	\$ 98,000 \$ 585,000 \$ 548,000 \$ 1,271,000 \$ 151,000 \$ - \$ - \$ - \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$	- 854,000 - - - - - -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 178.000 \$ 92.000 \$ 381.000	\$\$\$\$\$\$\$	187,000 1,974,000 1,050,000 2,435,000 289,000 178,000 92,000 381,000	\$ \$ \$ \$ \$ B B B	-
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	89,000 535,000 502,000 1,164,000 138,000 - - - -	\$ 98.000 5 555.000 5 548.000 5 1.271.000 5 1.51.000 5 - 5 - 5 - 5 - 5 -	୫୫୫୫୫୫୫	B54,000 - - - - - - - -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	187,000 1,974,000 1,050,000 2,435,000 289,000 178,000 92,000 381,000 313,000	\$\$\$\$ \$ \$ \$\$ \$\$ \$\$ \$\$ \$\$ \$ \$ \$ \$ \$ \$ \$ \$	
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill	\$ \$ 5 5 \$ 5 \$ 5 \$ 5 \$ 5	89,000 535,000 502,000 1,164,000 138,000 - - - - -	\$ 98.000 \$ 585.000 \$ 548.000 \$ 1.271.000 \$ 151.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	****	854,000 - - - - - - - - - -	\$ - \$ - \$ - \$ - \$ - \$ 178.000 \$ 92.000 \$ 381.000 \$ 381.000 \$ 313.000 \$ 44.550.000	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	187,000 1,974,000 2,435,000 289,000 178,000 92,000 381,000 313,000 44,550,000	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Limestone Area	\$ \$ 5 \$ \$ 5 \$ \$ \$ 5 \$ \$ 5 \$ \$ \$ \$	89,000 535,000 502,000 1,164,000 138,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 5 565.000 5 548.000 \$ 1.271.000 \$ 151.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	*****	B54,000 - - - - - - - -	\$ - \$ - \$ - \$ - \$ - \$ 178.000 \$ 92.000 \$ 381.000 \$ 313.000 \$ 313.000 \$ 44,550.000 \$ 153.000	.	187,000 1,974,000 1,050,000 2,435,000 289,000 178,000 92,000 381,000 313,000 44,550,000	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Limestone Area Closure of Stormwater and Wastewater Ponds	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	89,000 535,000 502,000 1,164,000 138,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 5 565.000 5 548.000 5 1.271.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	****	864,000 - - - - - - - - - - - - -	\$ - \$ - \$ - \$ - \$ - \$ - \$ 178.000 \$ 92.000 \$ 381.000 \$ 313.000 \$ 313.000 \$ 44,550.000 \$ 153.000 \$ 721.000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	187,000 1,074,000 2,435,000 289,000 178,000 92,000 381,000 313,000 44,550,000 153,000 721,000	୬୬୬୫୫୬ ଜନନାମ ୧୫୬୫	
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Linmestone Area Closure of Stormwater and Wastewater Ponds Closure of Other Ponds	\$ \$? ? \$ S \$ S \$ S 5 5 5	89,000 535,000 502,000 1,164,000 138,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 \$ 565.000 \$ 1.271.000 \$ 1.51.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	****	854,000 - - - - - - - - - - - - - - - - - -	\$ - \$ - \$ - \$ - \$ 178.000 \$ 92.000 \$ 381.000 \$ 381.000 \$ 344.550.000 \$ 444.550.000 \$ 153.000 \$ 721.000 \$ 2.047.000	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	187,000 1,974,000 2,435,000 283,000 178,000 92,000 381,000 313,000 41,555,000 153,000 721,000 2,047,000	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Limestone Area Closure of Stormwater and Wastewater Ponds Closure of Other Ponds Groundwater Monitoring Installation	\$ \$ 5 \$ \$ \$ 5 \$ \$ \$ \$ 5 5 5 5 5 5 5 5 5 5	89,000 535,000 502,000 1,164,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 5 565.000 5 548.000 5 1.271.000 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	*****	854.000 - - - - - - - - - - - - - - -	\$ - \$ - \$ - \$ - \$ - \$ - \$ 178.000 \$ 92.000 \$ 381.000 \$ 313.000 \$ 313.0000 \$ 313.0000 \$ 313.0000 \$ 313.0000 \$ 313.0000 \$ 313.00000 \$ 313.00	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	187,000 1,974,000 2,435,000 289,000 178,000 381,000 313,000 44,550,000 153,000 721,000 2,047,000 388,000	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Ash Landfill Closure of Ash Landfill Closure of Stormwater and Wastewater Ponds Closure of Other Ponds Groundwater Monitoring Installation Onsite Concrete Curshing & Disposal	\$ \$ 5 5 6 5 5 5 5 5 5 5 5 5 5	89,000 535,000 502,000 1,164,000 138,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 5 565.000 5 548.000 5 1.271.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	*************		\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	187,000 1,974,000 2,435,000 289,000 178,000 92,000 381,000 313,000 44,550,000 153,000 721,000 2,047,000 388,000	************	
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Storage Tank Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Ash Landfill Closure of Stormwater and Wastewater Ponds Closure of Stormwater and Wastewater Ponds Closure of Other Ponds Groundwater Monitoring Installation On-site Concrete Crushing & Disposal Seeding and Grading	\$\$?\$\$ \$\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	89,000 535,000 502,000 1,164,000 138,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 5 636.000 5 748.000 \$ 1.271.000 \$ 151.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	************	854,000 - - - - - - - - - - - - - - - - - -	\$ - \$ - \$ - \$ - \$ - \$ 178.000 \$ 92.000 \$ 381.000 \$ 313.000 \$ 44.550.000 \$ 153.000 \$ 153.000 \$ 721.000 \$ 721.000 \$ 2.047.000 \$ 3.000 \$ 3.0000 \$ 3.0000 \$ 3.0000 \$ 3.0000 \$ 3.0000 \$ 3.0000 \$ 3.0000 \$ 3.0000 \$ 3.0000 \$ 3.00000 \$ 3.00000 \$ 3.000000000000000000000000000000000000	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	187,000 1,974,000 2,435,000 288,000 178,000 381,000 313,000 44,550,000 153,000 7,21,000 2,047,000 380,000 105,000 9,50,000	**************	
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Limestone Area Closure of Stormwater and Wastewater Ponds Closure of Stormwater and Wastewater Ponds Closure of Other Ponds Groundwater Monitoring Installation On-site Concrete Crushing & Disposal Seeding and Grading	\$ \$? ? ? \$ \$ \$ \$ \$ 5 5 5 5 5 5 5 5	89,000 535,000 502,000 1,164,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 5 565.000 5 548.000 5 1.271.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	***********	854,000 - - - - - - - - - - - - - - - - - -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	******************	187,000 1,974,000 2,435,000 289,000 178,000 92,000 381,000 313,000 44,550,000 153,000 721,000 2,047,000 388,000 105,000 956,000 6,000	*******************	
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Ash Landfill Closure of Ash Landfill Closure of Stormwater and Wastewater Ponds Closure of Other Ponds Groundwater Monitoring Installation On-site Concrete Crushing & Disposal Seeding and Grading Debris	\$ \$ 5 \$ \$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	89,000 535,000 502,000 1,164,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 5 565.000 5 48.000 \$ 1.271.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	************	- B34,000 - - - - - - - - - - - - - - - - - -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	******************	187,000 1,974,000 2,435,000 2,435,000 92,000 3,81,000 3,81,000 4,4,550,000 1,53,000 7,21,000 2,047,000 3,88,000 1,05,000 9,55,000 6,000	******	
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Storage Tank Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Ash Landfill Closure of Stormwater and Wastewater Ponds Closure of Other Ponds Groundwater Monitoring Installation On-site Concrete Crushing & Disposal Seeding and Grading Debris Scrap	\$\$\$\$\$\$ \$\$\$\$\$\$ \$ \$ \$ \$ \$ \$ \$\$ \$\$\$ \$ \$ \$ \$	89,000 535,000 1,164,000 138,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 5 636.000 5 748.000 \$ 1.271.000 \$ 151.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	************************	B54,000	\$ - \$ - \$ - \$ - \$ - \$ 178.000 \$ 92.000 \$ 381.000 \$ 313.000 \$ 313.000 \$ 44.550.000 \$ 153.000 \$ 153.000 \$ 721.000 \$ 2.047.000 \$ 2.047.000 \$ 388.000 \$ - \$ 5 \$ 5 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -		187,000 1,974,000 1,950,000 2,435,000 289,000 178,000 92,000 381,000 313,000 153,000 721,000 2,047,000 388,000 105,000 959,000 6,000	******	
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Common Roads Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Ash Landfill Closure of Stormwater and Wastewater Ponds Closure of Other Ponds Groundwater Monitoring Installation On-site Concrete Crushing & Disposal Seeding and Grading Debhis Scrap Subtotal	\$ \$? \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	89,000 535,000 1,164,000 138,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 \$ 545.000 \$ 548.000 \$ 1.271.000 \$ 151.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -		854,000	\$ - \$ - \$ - \$ - \$ 178.000 \$ 92.000 \$ 381.000 \$ 313.000 \$ 44.550.000 \$ 44.550.000 \$ 453.000 \$ 721.000 \$ 721.000 \$ 721.000 \$ 388.000 \$ - \$ 59.000 \$ - \$ 959.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$	187,000 1,974,000 1,950,000 2,435,000 289,000 173,000 92,000 331,000 313,000 724,000 2,047,000 338,000 105,000 956,000 55,828,000	\$	(496,000) (496,000)
Common Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Ash Landfill Closure of Stormwater and Wastewater Ponds Closure of Stormwater and Wastewater Ponds Closure of Other Ponds Groundwater Monitoring Installation On-site Concrete Crushing & Disposal Seeding and Grading Debris Scrap Subtotal	\$ \$? \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	89,000 535,000 502,000 1,164,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 \$ 545.000 \$ 548.000 \$ 1.271.000 \$ 1.271.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	B54,000	\$ \$ \$ \$ \$ 178.000 \$ 92.000 \$ 381.000 \$ 313.000 \$ 44.550.000 \$ 153.000 \$ 153.000 \$ 153.000 \$ 2.047.000 \$ 2.047.000 \$ 388.000 \$ \$ -59.000 \$ \$ \$ \$ \$ 49,782,000 \$ 49,782,000	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	187,000 1,974,000 1,950,000 2,435,000 289,000 178,000 92,000 381,000 313,000 721,000 2,047,000 3,000 105,000 959,000 6,000 92,708,000	୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬	
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Plant Washdown & Materials Disposal Closure of Limes Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Ash Landfill Closure of Ash Landfill Closure of Stormwater and Wastewater Ponds Closure of Other Ponds Groundwater Monitoring Installation On-site Concrete Crushing & Disposal Seeding and Grading Debris Scrap Subtotal St. Johns River Power Plant Subtotal TOTAL COST (CREDIT)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	89,000 535,000 502,000 1,164,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 5 565.000 5 48.000 5 1.271.000 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	\$	854,000 - - - - - - - - - - - - - - - - - -	\$ - \$ - \$ - \$ - \$ 178.000 \$ 92.000 \$ 381.000 \$ 381.000 \$ 313.000 \$ 44.550.000 \$ 153.000 \$ 721.000 \$ 2.047.000 \$ 2.047.000 \$ 388.000 \$ - \$ - \$ - \$ 49,782,000 \$ 49,782,000	**************************************	187,000 1,974,000 1,950,000 2,435,000 228,000 328,000 331,000 44,550,000 721,000 2,047,000 388,000 105,000 958,000 958,000 92,708,000 92,708,000	••••••••••••••••••••••••••••••••••••••	(496,000) (11,470,000) (11,470,000)
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of OiLine Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Ash Landfill Closure of Stormwater and Wastewater Ponds Closure of Other Ponds Groundwater Monitoring Installation On-site Concrete Crushing & Disposal Seeding and Grading Debris Scrap Subtotal St. Johns River Power Plant Subtotal TOTAL COST (CREDIT) PROJECT INDIRECTS (5%)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	89,000 535,000 502,000 1,164,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 5 565.000 5 548.000 5 1.271.000 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	8 8 8 8 9 8 9 8 9 8 9 8 9 9 9 9 9 9 9 9	854,000 - - - - - - - - - - - - - - - - - -	\$ - \$ - \$ - \$ - \$ - \$ 178.000 \$ 92.000 \$ 381.000 \$ 313.000 \$ 44,550.000 \$ 153.000 \$ 721.000 \$ 721.000 \$ 721.000 \$ 2,047,000 \$ 388.000 \$ - \$ 959.000 \$ - \$ - \$ 959.000 \$ - \$ - \$ 959.000 \$ - \$ - \$ - \$ 959.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	0000000000000000000 S S S	187,000 1,974,000 1,950,000 2,435,000 92,000 331,000 313,000 44,550,000 2,047,000 2,047,000 2,047,000 388,000 105,000 958,000 55,828,000 92,708,000 4,635,000	୬୬୬ ୬ ୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬ ୫ 💲	(496,000) (496,000) (11,470,000) (11,470,000)
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Ash Landfill Closure of Stormwater and Wastewater Ponds Closure of Other Ponds Groundwater Monitoring Installation On-site Concrete Crushing & Disposal Seeding and Grading Debris Scrap Subtotal St. Johns River Power Plant Subtotal TOTAL COST (CREDIT) PROJECT INDIRECTS (5%) CONTINGENGY (20%)	\$ \$? \$ \$ S \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	89,000 535,000 502,000 1,164,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 \$ 545.000 \$ 548.000 \$ 1.271.000 \$ 1.271.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	99999999999999999999999999999999999999	B54,000	\$ - \$ - \$ - \$ - \$ 178.000 \$ 92.000 \$ 381.000 \$ 313.000 \$ 44.550.000 \$ 153.000 \$ 153.000 \$ 453.000 \$ 2,047.000 \$ 2,047.000 \$ 388.000 \$ - \$ 59.000 \$ - \$ - \$ - \$ 49,782,000 \$ 49,782,000		187,000 1,974,000 1,950,000 2,435,000 289,000 178,000 92,000 381,000 313,000 724,000 2,047,000 2,047,000 3,88,000 105,000 959,000 55,828,000 92,708,000 18,542,000	୬୬୬୫୬ ଜଣ୍ଡ ଜୁନ	(496,000) (496,000) (11,470,000) (11,470,000)
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Ash Landfill Closure of Ash Landfill Closure of Ash Landfill Closure of Other Ponds Closure of Other Ponds Closure of Other Ponds Closure of Other Ponds Seeding and Grading Debris Scrap Subtotal St. Johns River Power Plant Subtotal TOTAL COST (CREDIT) PROJECT INDIRECTS (5%) CONTINGENGY (20%)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	89,000 535,000 502,000 1,164,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 5 548.000 5 48.000 5 1.271.000 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	854,000 - - - - - - - - - - - - - - - - - -	\$ - \$ - \$ - \$ - \$ 178.000 \$ 92.000 \$ 381.000 \$ 381.000 \$ 313.000 \$ 44.550.000 \$ 153.000 \$ 721.000 \$ 2.047.000 \$ 2.047.000 \$ 388.000 \$ - \$ - \$ - \$ - \$ 49,782,000 }	00000000000000000000000000000000000000	187,000 1,974,000 1,950,000 2,435,000 228,000 328,000 331,000 44,550,000 721,000 2,047,000 388,000 105,000 958,000 958,000 958,000 92,708,000 92,708,000 18,542,000 115,885,000	୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬ ୫ ୫	(496,000) (496,000) (11,470,000) (11,470,000)
Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal ¹ Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning Plant Washdown & Materials Disposal Closure of Ash Landfill Closure of Ash Landfill Closure of Stormwater and Wastewater Ponds Closure of Stormwater and Wastewater Ponds Closure of Other Ponds Groundwater Monitoring Installation On-site Concrete Crushing & Disposal Seeding and Grading Debris Scrap Subtotal St. Johns River Power Plant Subtotal TOTAL COST (CREDIT) PROJECT INDIRECTS (5%) CONTINGENGY (20%) TOTAL PROJECT COST (CREDIT)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	89,000 535,000 502,000 1,164,000 - - - - - - - - - - - - - - - - - -	\$ 98.000 5 565.000 5 548.000 5 1.271.000 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	88999999999999999999999	854,000 - - - - - - - - - - - - - - - - - -	\$ - \$ - \$ - \$ - \$ - \$ 178.000 \$ 178.000 \$ 381.000 \$ 313.000 \$ 313.000 \$ 313.000 \$ 153.000 \$ 721.000 \$ 721.000 \$ 721.000 \$ 721.000 \$ 388.000 \$ 72.000 \$ 388.000 \$ - \$ 959.000 \$ - \$ - \$ - \$ 959.000 \$ - \$ - \$ - \$ 959.000 \$ - \$ - \$ - \$ - \$ 959.000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -		187,000 1,974,000 1,950,000 2,435,000 289,000 178,000 331,000 313,000 44,550,000 2,047,000 2,047,000 2,047,000 388,000 155,828,000 955,828,000 92,708,000 18,542,000 115,885,000 104,415,000	୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬୬ ୫ ୫	(496,000) (496,000) (11,470,000) (11,470,000)

¹ As provided by FPL's from estimates prepared by their Environmental Group based on areas of known soil contamination that will require remediation at the time of project dismantlement.

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Table A-10 Sanford Energy Center Decommissioning Cost Summary

				Material and								
		Labor		Equipment		Disposal	1	Environmental		Total Cost		Salvage
Sanford Energy Center												
Unit 4												
GTs and HRSGs	S	2,739,000	s	2,992,000	\$	-	s	-	S	5.731.000	\$	-
Steam Turbine & Pedestal	5	925,000	s	1.010.000	\$		s	-	S	1,935,000	\$	-
SCR	s	97,000	s	106.000	\$		s	-	S	203.000	\$	-
GSU & Electrical	\$	154,000	\$	168,000	S	-	s	-	s	322,000	S	
Stack	\$	116.000	\$	127,000	s	-	s		s	243,00D	s	-
Cooling Tower	S	18.000	s	20.000	s	-	s	-	S	38.000	\$	-
On-site Concrete Crushing & Disposal	S	-	s	-	\$	180,000	S	-	S	180.000	\$	-
Scrap	\$	-	ŝ	-	\$	-	s	-	s	-	\$	(4.248.000)
Subtotal	\$	4,049,000	\$	4,423,000	\$	180,000	\$	-	\$	8,652,000	\$	(4,248,000)
11-11-5												
OTe and HBSCe	~	0.700.000	-	0.000.000			•			E 734 000	¢	
Gis and HRSGS	\$	2,739,000	2	2,992,000	3		ф Ф	-	ð	0,731,000	÷.	-
Steam Turbine & Pedestal	\$	914,000	5	999,000	3	-	\$	-	5	1,913,000	\$	-
SCR	\$	97,000	5	106,000	5	-	\$	-	5	203,000	\$	
GSU & Electrical	\$	149,000	s	163,000	S	-	\$	-	Ş	312,000	\$	-
Stack	\$	116,000	5	127,000	S	-	\$	-	Ş	243,000	\$	-
Cooling Tower	\$	18,000	\$	20,000	\$	-	\$	-	\$	38,000	\$	
On-site Concrete Crushing & Disposal	\$	-	S	-	\$	180,000	\$	~	\$	180,000	\$	-
Scrap	\$	-	\$	-	\$	-	\$	-	\$	-	5	(4,235,000)
Subtotal	\$	4,033,000	\$	4,407,000	\$	180,000	\$		\$	8,620,000	\$	(4,235,000)
Common												
Asbestos Removal ¹	s		s		s		s	50.000	s	50.000	\$	
Switchvard and Substation	ŝ	25.000	ŝ	27.000	ŝ		s		ŝ	52 000	ŝ	
Cooling Water Intakes and Circulating Water Pumps	ŝ	34,000	ŝ	37,000	ŝ		ŝ		ŝ	71.000	ŝ	
Roads	Ψ ς	422,000	š	461.000	ŝ	463.000	ŝ		ŝ	1 346 000	ŝ	
	ç	164,000	ŝ	179.000	ŝ	400,000	ŝ	_	ŝ	343 000	ŝ	
Fuel Oil Sterege Tenke	÷	330,000	e e	250,000	č		¢		ě	698.000	¢ 2	-
All Other Teaks	9	329,000	3 c	10,000	9		с Э	-	0	64,000	÷	
Centemineted Seil Removel	э с	43,000	э с	49,000	ۍ د	-	e e	167.000	0	167.000	÷	
	ф ф	-	э с	-	°	-	ŝ	2 666 000	о с	7 566 000	¢.	-
Fuel Oil Storage Tank Cleaning	3	-	2	-	9	-	ڊ د	2,500,000	о с	2,300,000	¢.	-
Fuel Oil Line Flushing/Cleaning	, j	-	3	-	ۍ د	-	, a	262,000	о с	262.000	¢ ¢	-
Setting Pond Closure	Ş	-	3	-	2	-	è.	244,000	2	244,000	ф ф	-
Un-site Concrete Crusning & Disposal	\$	~	<u></u> з	-	3	26,000	ð,	-	3	26,000	ð,	-
Seeding and Grading	\$	-	>	-	2	-	2	351,000	Ş	351,000	5	(075,000)
Scrap		-	\$		- 0		3	-	3	-	3	(375,000)
Subtotal	\$	1,019,000	\$	1,112,000	\$	489,000	\$	3,660,000	\$	6,280,000	\$	(375,000)
		0 404 000		0.040.000	-	840.000		2 660 000		22 662 000		(9 959 000)
Santord Energy Center Subtotal	12	9,101,000	\$	9,942,000	\$	849,000	\$	3,660,000	\$	23,052,000	<u>ې</u>	(8,858,000)
TOTAL COST (CREDIT)									\$	23,552,000	\$	(8,858,000)
PROJECT INDIRECTS (5%)									\$	1,178,000		
CONTINCENCY (20%)									÷	4 710 000		
									÷	4,710,000		
SITE INVENTORY COST (CREDIT) ²									\$	1,859,119	\$	(185,912)
TOTAL PROJECT COST (CREDIT)									\$	31,299,119	\$	(9,043,912)
TOTAL NET PROJECT COST (CREDIT)									\$	22,255,207		

¹ Asbestos removal estimates were provided by FPL and were not independently reviewed by BMcD.
 ² Site inventory costs and recoverable scrap of inventory estimates (10%) were provided by FPL and were not independently reviewed by BMcD.

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Table A-11 Scherer Power Plant Decommissioning Cost Summary

				Material and								
		Labor		Equipment		Disposal	(Environmental		Total Cost		Salvage
Scherer Power Plant												-
Unit 4												
Boiler	\$	4.520.000	\$	5,984,000	5		S		s	10.504.000	S	-
Steam Turbine & Building	\$	1.564.000	\$	2.071,000	s	-	s	-	s	3,635,000	\$	-
Precipitator	s	503.000	ŝ	666 000	ŝ	-	s	-	s	1 169 000	s	-
SCR/FGD	s	1 590 000	ŝ	2 106 000	ŝ		s	-	ŝ	3,696,000	ŝ	
Barbouse	ŝ	339.000	ę	449.000	é		¢		ŝ	792.000	ę	
- Stacke	- -	174.000	ل د	443,000	e e		φ	-	3	100,000	ې د	-
Cooling Towers & Basin	5	210.000	ų c	231,000	4 4	•	с С	-	5	400,000	à	-
Country Towers & Basin	3	210.000	\$ \$	276,000	с Ф		с С	-	э С	466,000	3	-
On site Constate Stucking & Dispesal	3	97.000	\$	75,000	¢.	-	3	-	2	132,000	3	-
Debie	3	-	э 2	-	2	802,000	3		5	802,000	5	-
Depris	5	-	5	-	Ş	37.000	5	-	S	37,000	S	-
Scrap	-		5	-	5		\$		5		\$	(7,274,000)
Subtotal	\$	8,957,000	\$	11,860,000	\$	839,000	\$	-	\$	21,656,000	\$	(7,274,000)
Handling												
Demolition	•	4 004 000	~	4 330 300	~		~		~	0.000.000	•	
	3	1,004,000	5	1,329.000	\$	-	\$	-	5	2,333,000	\$	-
Limestone Handling Facilities	5	212,000	\$	280.000	\$		\$	-	S	492,000	\$	-
On-site Concrete Crushing & Disposal	\$	-	S	-	S	33,000	\$	-	Ş	33,000	\$	
Scrap	\$	-	\$		\$	-	S	-	S	-	\$	(897,000)
Subtotal	\$	1,216,000	\$	1,609,000	\$	33,000	\$		\$	2,858,000	\$	(897,000)
Common												
Common1												
Asbestos Removal	S	-	Ş	-	S	-	\$	14,571,000	\$	14,571.000	\$	-
Cooling Water Intakes and Circulating Water Pumps	\$	173,000	S	229,000	\$	-	\$	-	\$	402,000	\$	-
Roads	\$	1,133,000	S	1,500,000	\$	1.506.000	\$	-	S	4,139,000	\$	-
All BOP Buildings	\$	1,069,000	S	1,415,000	\$	-	\$	-	S	2,484,000	\$	-
Fuel Oil Storage Tanks	\$	163,000	S	216,000	\$	-	Ş	-	S	379,000	\$	
All Other Tanks	\$	153,000	\$	202.000	S	-	S	-	S	355,000	\$	-
Contaminated Soil Removal	S		S	-	\$		S	16.000	5	16.000	\$	
Fuel Oil Storage Tank Cleaning	ŝ	-	\$		s		s	119.000	ŝ	119 000	ŝ	-
Fuel Oil Line Flushing/Cleaning	s	-	s		s	_	ŝ	1 200 000	ŝ	1 200 000	ŝ	
Plant Washdown & Materials Disposal (Unit 4)	Š		ŝ		ŝ	_	ŝ	248,000	ŝ	248.000	ŝ	
Closure of Ash Ponds and Landfills	¢		ŝ	_	ŝ	_	ŝ	107 992 000	ŝ	107 997 000	ŝ	
Closure of Other Ponds	ŝ		ç		e e		é	2 514 000	e	2 614 000	φ ¢	-
Limestone Area Closure	e e		ۍ د	-	3	-	ę.	2,514,000	9	2.014.000	φ.	-
Croundwater Monitoring Installation	ې د	-	\$	-	5	-	ф С	107,000	5	107.000	5	*
On site Conserve Crushing & Dispessel	Ş	-	2	-	5	-	\$	1,823,000	2	1.823,000	⇒	-
Statistic concrete Grushing & Disposal	2	~	2	-	2	172.000	э -		5	172,000	\$	-
Seeding and Grading	\$	-	5	-	\$	-	\$	2,097,000	S	2,097,000	\$	-
Debns	\$	-	\$	-	S	7,000	Ş	-	s	7,000	\$	-
Scrap	5	-	\$	-	Ş	-	\$	-	Ş	-	S	(1,458,000)
Subtotal	\$	2,691,000	\$	3,562,000	\$	1,685,000	\$	130,747,000	\$	138,685,000	\$	(1,458,000)
Scherer Power Plant Subtotal	\$	12,864,000	\$	17,031,000	\$	2,557,000	\$	130,747,000	\$	163,199,000	\$	(9,629,000)
									¢	163 199 000	e	(9 629 000)
									*	105,155,000		(3,023,000)
PROJECT INDIRECTS (5%)									\$	8,160,000		
CONTINGENGY (20%)									\$	32,640,000		
TOTAL PROJECT COST (CREDIT)									\$	203,999,000	\$	(9,629,000)
TOTAL NET PROJECT COST (CREDIT)									\$	194,370,000		

¹ Asbestos removal estimates were provided by FPL and were not independently reviewed by BMcD.

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Table A-12 Space Coast Next Generation Solar Energy Center Decommissioning Cost Summary

			N	Material and								
		Labor		Equipment		Disposal	E	nvironmental		Total Cost		Salvage
Space Coast Next Generation Solar Energy Center												
Unit 1												
Demolition	\$	226.000	\$	338,000	\$	-	\$	-	\$	564,000	\$	-
Collector System	\$	18,000	\$	26,000	\$	-	\$	-	\$	44,000	5	-
Project Buildings	\$	2,000	\$	4,000	\$	-	\$	-	\$	6,000	\$	-
Hazardous Material Disposal	5	-	\$	-	S	157,000	\$	-	S	157, 0 00	s	-
On-site Concrete Crushing & Disposal	S	-	\$	-	\$	10,000	5		s	10,000	\$	-
Site Restoration	S	-	\$	-	\$	-	\$	120.000	\$	120,000	\$	-
Debris	5	-	\$	-	\$	19,000	S	-	\$	19,000	\$	
Scrap	S		s	-	s	-	\$	-	\$	-	\$	(410,000)
Subtotal	\$	246,000	\$	368,000	\$	186,000	\$	120,000	\$	920,000	\$	(410,000)
Space Coast Next Generation Solar Energy Center Subtotal	5	246,000	\$	368,000	\$	186,000	\$	120,000	\$	920,000	\$	(410,000)
TOTAL COST (CREDIT)									\$	920,000	\$	(410,000)
PROJECT INDIRECTS (5%)									\$	46,000		
CONTINGENGY (20%)									\$	184,000		
TOTAL PROJECT COST (CREDIT)									\$	1,150,000	\$	(410,000)
TOTAL NET PROJECT COST (CREDIT)									\$	740,000		

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Table A-13 Turkey Point Power Plant Decommissioning Cost Summary

			Material an	d							
Turkey Point Power Plant		Labor	Equipmen	t	Disposal	E	Invironmental		Total Cost		Salvage
Unit 1											
Boiler	s	5,038,000	\$ 4,695.	000	s -	s	_	s	9,733,000	\$	-
Steam Turbine & Building	s	801,000	\$ 774	000	\$ -	\$	-	s	1,575,000	5	-
Stack	S	1,324,000	\$ 1,278,	000	\$-	\$	-	S	2.602.000	Ş	-
GSU & Foundation	S	33.000	\$ 32,	000	\$-	\$	-	S	65,000	\$	-
On-site Concrete Crushing & Disposal	\$	-	\$	-	\$ 228.00	3	-	S	228,000	s	-
Debris	\$	-	\$	-	\$ 38.00	3	-	S	38,000	s	-
Scrap	\$	-	5	-	s -	\$	-	S	-	\$	(3,488,000)
Subtotal	\$	7,196,000	\$ 6,779,	000	\$ 266,00	0\$	-	\$	14,241,000	\$	(3,488,000)
Unit 2											
Boiler	\$	5,038,000	\$ 4,695.	000	S -	\$	-	\$	9,733,000	\$	-
Steam Turbine & Building	\$	801,000	5 774	000	s -	\$	-	S	1,575,000	\$	-
Stack	\$	1,324,000	\$ 1,278.	000	S -	\$	-	S	2,602,000	\$	-
GSU & Foundation	\$	33,000	\$ 32.	000	S –	\$	-	\$	65,000	\$	
On-site Concrete Crushing & Disposal	\$	-	\$	-	S 228,00	3 \$	-	\$	228,000	\$	
Debris	\$	-	5		\$ 38,00) \$	-	\$	38,000	\$	-
Scrap	\$	-	\$	-	s -	S	-	S	-	\$	(3,488,000)
Subtotal	\$	7,196,000	\$ 6,779,	000	\$ 266,00	0\$	•	\$	14,241,000	\$	(3,488,000)
Unit 5											
GTs and HRSGs	S	4,490,000	\$ 4.906.	000	\$-	\$		s	9.396.000	\$	
Steam Turbine & Pedestal	S	896,000	\$ 979.	000	\$ -	s	-	S	1,875,000	s	-
SCR	s	194,000	S 212.	000	s -	S	-	s	406,000	\$	-
GSU & Electrical	S	137.000	\$ 150.	000	\$ -	s	-	s	287.000	\$	
Stack	s	116,000	\$ 127	000	s -	s	-	S	243,000	S	-
Cooling Tower and Basin	S	123.000	\$ 134.	000	\$ -	s	-	s	257.000	\$	-
On-site Concrete Crushing & Disposal	S	-	\$	-	\$ 168,00	D \$	-	S	168,000	\$	-
Scrap	\$	-	\$	-	ş -	\$	-	S	-	s	(6,130.000)
Subtotal	\$	5,956,000	\$ 6,508,	000	\$ 168,00	0\$	-	\$	12,632,000	\$	(6,130,000)
Common											
Ashestos Removal ¹	8	-	\$		s -	S	859.000	S	859 000	s	-
Cooling Water Intakes and Circulating Water Pumps	š	61,000	\$ 67	000	s .	ŝ		š	128 000	ŝ	-
Cooling Water Discharge Canal	ŝ	65,000	\$ 71	000	s .	ŝ		ŝ	136,000	ŝ	-
Roads	š	410.000	\$ 448	000	s 450.00i	3 5		š	1.308.000	s	-
All BOP Buildings	s	381.000	\$ 417	000	s -		-	ŝ	798 000	s	-
Fuel Oil Storage Tanks	ŝ	611.000	\$ 668.	000	s -	ŝ	-	s	1.279.000	s	
All Other Tanks	ŝ	76.000	\$ 83	000	s -	S	-	s	159 000	5	-
Contaminated Soil Removal	s	-	s	-	s -	s	228.000	ŝ	228.000	s	-
Fuel Oil Storage Tank Cleaning	S	-	\$	-	s .	s	2 151 000	s	2.151.000	s	-
Fuel Oil Line Flushing/Cleaning	s	-	\$	-	s -	s	60.000	ŝ	60.000	s	
On-site Concrete Crushing & Disposal	S	-	s	-	s 93.000	S		s	93,000	s	
Seeding and Grading	\$	-	s	-	S -	S	293,000	S	293,000	S	-
Debris	s		\$	-	\$ 2,000) S	-	s	2,000	5	-
Scrap	Ş	-	S	-	s -	\$	-	\$	-	\$	(312,000)
Subtotal	\$	1,604,000	\$ 1,754,	000	\$ 545,000	0\$	3,591,000	\$	7,494,000	\$	(312,000)
Turkey Point Subtotal	\$	21,952,000	\$ 21,820,	000	\$ 1,245,00	D \$	3,591,000	\$	48,608,000	\$	(13,418,000)
TOTAL COST (CREDIT)								\$	48,608,000	\$	(13,418,000)
PROJECT INDIRECTS (5%)							-	\$	2.430.000		
								e	9 722 000		
								•	3,722,000		
SITE INVENTORY COST (CREDIT)"								\$	2,591,729	\$	(259,173)
TOTAL PROJECT COST (CREDIT)								\$	63,351,729	\$	(13,677,173)
TOTAL NET PROJECT COST (CREDIT)								\$	49,674,556		

¹ Asbestos removal estimates were provided by FPL and were not independently reviewed by BMcD.
 ² Site inventory costs and recoverable scrap of inventory estimates (10%) were provided by FPL and were not independently reviewed by BMcD.

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Table A-14 West County Energy Center Decommissioning Cost Summary

		1	Material and		Disease	F			Total Cost		Palvana
West County Energy Center		Labor	Equipment		Disposal	Env	vironmentai		l otal Cost		Salvaye
Unit 1											
GTs and HRSGs	5	2.625.000	\$ 2,869,000	\$	•	S	-	S	5,494.000	5	-
Steam Turbine & Pedestal	5	990,000	\$ 1,082.000	\$	-	5	-	2	2,072,000	5	~
SCR CSU & Electrical	3 °	93,000	\$ 101.000 ¢ 360.000	ۍ د	-	3	-	3 c	194,000	3 4	-
GSD & Electrical	3	256,000	s 200.000	9 0	-	2 6	-	3	198,000	e e	
Cooling Tower and Basin	2 C	302,000	\$ 103,000 \$ 329,000	e e	-	3	-	3	631,000	ş	-
On-site Concrete Crushing & Disposal	5		S 323.000	¢	242.000	e e		s	242,000	5	-
Scran	s		s -	ŝ	-	s	-	s	-	ŝ	(5.047.000)
Subtotal	\$	4,343,000	\$ 4,744,000	\$	242,000	\$	-	\$	9,329,000	\$	(5,047,000)
Linit 2											
GTs and HRSGs	s	2.625.000	\$ 2.869.000	s	**	S	-	S	5,494,000	\$	-
Steam Turbine & Pedestal	\$	990,000	\$ 1.082.000	ş	-	5	-	S	2,072,000	\$	
SCR	\$	93,000	\$ 101,000	S	-	\$	-	S	194,000	\$	
GSU & Electrical	\$	238,000	\$ 260.000	s		\$	-	s	498,000	\$	-
Stack	\$	95,000	\$ 103.000	s	-	\$	-	s	198,000	\$	-
Cooling Tower and Basin	\$	302,000	\$ 329.000	s	-	\$	-	S	631,000	\$	-
On-site Concrete Crushing & Disposal	\$	-	s -	s	242,000	\$	-	S	242,000	\$	-
Scrap	\$		\$ -	\$	-	S	-	S	-	\$	(5,060,000)
Subtotal	\$	4,343,000	\$ 4,744,000	\$	242,000	\$	•	\$	9,329,000	\$	(5,060,000)
Unit 3											
GTs and HRSGs	5	2.625.000	\$ 2,869,000	\$	-	\$	-	S	5,494,000	\$	-
Steam Turbine & Pedestal	5	990,000	\$ 1.082.000	\$		\$	-	S	2,072,000	\$	-
SCR	s	93,000	\$ 101.000	\$	-	S	-	S	194,000	\$	
GSU & Electrical	s	238,000	\$ 260,000	s	-	5	-	S	498,000	s	-
Stack	\$	95,000	\$ 103,000	\$	-	S	-	S	198,000	\$	-
Cooling Tower and Basin	s	302,000	\$ 329,000	\$	-	S	-	\$	631,000	S	-
On-site Concrete Crushing & Disposal	\$	-	s -	\$	242,000	S	-	\$	242,000	s	-
• • •	<i>c</i>	_	s -	\$	-	\$	-	S	-	\$	(5.073,000)
Scrap	Φ.										
Scrap Subtotal	\$	4,343,000	\$ 4,744,000	\$	242,000	\$	-	\$	9,329,000	\$	(5,073,000)
Scrap Subtotal Common	\$	4,343,000	\$ 4,744,000	\$	242,000	\$	-	\$	9,329,000	\$	(5,073,000)
Scrap Subtotal Common Cooling Water Intakes and Circulating Water Pumps	\$	4,343,000 89,000	\$ 4,744,000 \$ 98.000	\$ S	242,000	\$ 5		\$ S	9,329,000 187,000	\$	(5,073,000)
Scrap Subtotal Common Cooling Water Intakes and Circulating Water Pumps Roads	÷ ج چ	4,343,000 89,000 535,000	\$ 4,744,000 \$ 98.000 \$ 585.000	\$ S S	242,000 - 587,000	\$ 5	-	\$ S S	9,329,000 187,000 1,707,000	\$ \$	(5,073,000)
Scrap Subtotal Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings	۹ \$ 9 9 9	4,343,000 89,000 535,000 502,000	\$ 4,744,000 \$ 98.000 \$ 585.000 \$ 548.000	\$ S S S	242,000 - 587,000	\$ 5 5		\$ S S S S	9,329,000 187,000 1,707,000 1,050,000	\$ \$ \$ \$	(5,073,000)
Scrap Subtotal Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks	9 5 99 99 99	4,343,000 89,000 535,000 502,000 1,164,000	\$ 4,744,000 \$ 98,000 \$ 585,000 \$ 548,000 \$ 1.271,000	\$ ഗഗഗ	242,000 587,000	\$ 55 55 55	-	\$ \$ \$ \$ \$	9,329,000 187,000 1,707,000 1,050,000 2,435,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	(5,073,000)) - - - -
Scrap Subtotal Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks	9 5 9 9 9 9	4,343,000 89,000 535,000 502,000 1,164,000 138,000	\$ 4,744,000 \$ 98.000 \$ 585.000 \$ 548.000 \$ 1.271.000 \$ 151.000	\$ ഗഗഗം ഗ	242,000 - 587,000 - -	\$ හොගහ හොග		\$ \$	9,329,000 187,000 1,707,000 1,050,000 2,435,000 289,000	\$ 	(5,073,000)) - - - - - - -
Scrap Subtotal Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal	ት \$ 9 ዓ ዓ ዓ ዓ ዓ ዓ	4,343,000 89,000 535,000 502,000 1,164,000 138,000 -	\$ 4,744,000 \$ 98,000 \$ 585,000 \$ 548,000 \$ 1.271,000 \$ 151,000 \$ -	\$ ഗഗഗഗ	242,000 - 587,000 - - -	\$ 55555 5555 5555 5555 5555 5555 5555	253,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	9,329,000 1,707,000 1,050,000 2,435,000 289,000 253,000	\$ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	(5,073,000)) - - - - - - - -
Scrap Subtotal Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal Fuel Oil Storage Tank Cleaning	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	4,343,000 89,000 535,000 502,000 1,164,000 138,000	\$ 4,744,000 \$ 98.000 \$ 585.000 \$ 548.000 \$ 1.271.000 \$ 151.000 \$ - \$ -	\$ ഗഗങ്ങങ	242,000 587,000 - - -	\$ 5000000000000000000000000000000000000	253.000 2,835,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	9,329,000 1,707,000 1,050,000 2,435,000 289,000 253,000 2,835,000	\$ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	(5,073,000)) - - - - - - - -
Scrap Subtotal Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning	ን <mark>\$</mark> \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	4,343,000 89,000 535,000 502,000 1,164,000 138,000 - -	\$ 4,744,000 \$ 98.000 \$ 585.000 \$ 548.000 \$ 1.271.000 \$ 151.000 \$ - \$ - \$ - \$ -	\$ ഗഗങ്ങങ്ങം ഗഗ	242,000 587,000 - - - -	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	253,000 2,835,000 1,688,000	\$ \$	9,329,000 187,000 1,050,000 2,435,000 253,000 2,635,000 1,688,000	\$	(5,073,000)) - - - - - - - - - - -
Scrap Subtotal Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Chter Tanks Contaminated Soil Removal Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning On-site Concrete Crushing & Disposal	ន ទ ទ ទ ទ ទ ទ ទ ទ ទ ទ ទ ទ ទ	4,343,000 89,000 535,000 502,000 1,164,000 138,000 - - -	\$ 4,744,000 \$ 98,000 \$ 585,000 \$ 548,000 \$ 1.271,000 \$ 151,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ ഗഗനനം തന്നെ ഗഗ	242,000 - 587,000 - - - - - 158,000	\$ % % % % % % % % % % % % % % % % % % %	253 000 2,835,000 1,688,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	9,329,000 187,000 1,707,000 2,435,000 253,000 2,635,000 1,688,000 156,000	\$	(5,073,000)) - - - - - - - - - - - - - - - - -
Scrap Subtotal Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal Fuel Oil Storage Tank Cleaning Fuel Oil Storage Tank Cleaning On-site Concrete Crushing & Disposal Seeding and Grading	ን <mark>\$</mark> የ የ የ የ የ የ የ የ የ የ የ የ	4,343,000 89,000 535,000 502,000 1,164,000 1,38,000 - - - - -	\$ 4,744,000 \$ 98,000 \$ 585,000 \$ 548,000 \$ 1.271,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ ഗഗശശശംഗഗഗഗ	242,000 587,000 - - - 158,000	\$ % % % % % % % % % % % % % % % % % % %	- 253 000 2,835,000 1,688,000 - 699,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	9,329,000 1,707,000 1,050,000 2,435,000 2,835,000 2,835,000 1,688,000 1,568,000 1,56,000 1,55,000	\$	(5,073,000)) - - - - - - - - - - - - - - - - -
Scrap Subtotal Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal Fuel Oil Storage Tank Cleaning Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning On-site Concrete Crushing & Disposal Seeding and Grading Debris	ን \$ ያ <mark>ያ ያ ያ ያ ያ ያ ያ ያ ያ ያ ያ ያ ያ ያ ያ ያ ያ ያ </mark>	4,343,000 89,000 535,000 502,000 1,164,000 1,38,000 - - - - -	\$ 4,744,000 \$ 98,000 \$ 585,000 \$ 585,000 \$ 1.271,000 \$ 1.271,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 	242,000 	\$ % % % % % % % % % % % % % % % % % % %	- - - - 253 000 2,835 000 1,688,000 - -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	9,329,000 1,707,000 1,050,000 2,435,000 253,000 2,835,000 1,688,000 1,688,000 1,689,000 6,99,000 1,000	• • • • • • • • • • • • • •	(5,073,000) - - - - - - - - - - - - - - - - - -
Scrap Subtotal Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal Fuel Oil Storage Tank Cleaning Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning On-site Concrete Crushing & Disposal Seeding and Grading Debris Scrap	> \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	4,343,000 89,000 535,000 502,000 1,164,000 138,000 - - - - - -	\$ 4,744,000 \$ 98,000 \$ 585,000 \$ 548,000 \$ 1.271,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 		\$ ឆេកភននេទទេទេទេទ	- 253,000 2,835,000 1,688,000 - 699,000 -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	9,329,000 1,707,000 1,050,000 2,435,000 2,635,000 1,688,000 1,688,000 1,688,000 1,680,000 1,000	5	(5,073,000)) - - - - - - - - - - - - - - - - -
Scrap Subtotal Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning On-site Concrete Crushing & Disposal Seeding and Grading Debris Scrap Subtotal	२	4,343,000 89,000 535,000 502,000 1,164,000 138,000 - - - - - - - - - - - - -	\$ 4,744,000 \$ 98,000 \$ 585,000 \$ 1,271,000 \$ 1,271,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 000000000000000000000000000000000000	242,000 587,000 - - - 158,000 1,000 744,000	\$ % % % % % % % % % % % % % % % % % % %	- 253 000 2,835,000 1,688,000 - 699,000 - 5,475,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	9,329,000 1,707,000 1,050,000 2,435,000 253,000 1,683,000 1,683,000 1,683,000 1,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	(5,073,000)
Scrap Subtotal Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal Fuel Oil Storage Tank Cleaning Fuel Oil Storage Tank Cleaning Fuel Oil Storage Tank Cleaning On-site Concrete Crushing & Disposal Seeding and Grading Debris Scrap Subtotal	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	4,343,000 89,000 535,000 502,000 1,164,000 138,000 - - - - - - - - - - - - -	\$ 4,744,000 \$ 98,000 \$ 585,000 \$ 548,000 \$ 1.271,000 \$ 151,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 0 0 9 9 9 9 9 0 0 0 0 9 \$	242,000 	\$ % % % % % % % % % % % % % % % % % % %	- 253 000 2,835 000 1,688.000 - 699,000 - 5,475,000	\$ ଚନ୍ଦ୍ଦ ୫ ୫ ୫ ୫ ୫ ୫ ୫ ୫ ୫ ୫ ୫ ୫ ୫ ୫ ୫ ୫ ୫ ୫	9,329,000 1,707,000 1,050,000 2,435,000 253,000 2,635,000 1,688,000 1,688,000 1,680,000 1,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	(5,073,000)
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Scrap Subtotal Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal Fuel Oil Storage Tank Cleaning On-site Concrete Crushing & Disposal Seeding and Grading Debris Scrap Subtotal West County Energy Center Subtotal TOTAL COST (CREDIT) PROJECT INDIRECTS (5%) CONTINGENGY (20%) SITE INVENTORY COST (CREDIT) ¹	ू \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	4,343,000 89,000 535,000 502,000 1,164,000 138,000 - - - 2,428,000 15,457,000	\$ 4,744,000 \$ 98,000 \$ 585,000 \$ 1.271,000 \$ 1.271,000 \$ 1.271,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	242,000 587,000 - - - 156,000 1,000 744,000	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	- 253 000 2.835 000 1,688,000 - 699,000 - 5,475,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	9,329,000 187,000 1,707,000 2,435,000 2,53,000 2,53,000 1,588,000 156,000 1,588,000 156,000 39,287,000 39,287,000 1,964,000 7,857,000 4,725,211	\$ \$ \$ \$ \$ \$ \$ \$ \$	(5,073,000) - - - - - - - - - - - - -
Scrap Subtotal Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Other Tanks Contaminated Soil Removal Fuel Oil Storage Tank Cleaning On-site Concrete Crushing & Disposal Seeding and Grading Debris Scrap Subtotal West County Energy Center Subtotal TOTAL COST (CREDIT) PROJECT INDIRECTS (5%) CONTINGENGY (20%) SITE INVENTORY COST (CREDIT) ¹	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	4,343,000 89,000 535,000 502,000 1,164,000 138,000 - - - - - - - - - - - - -	\$ 4,744,000 \$ 98,000 \$ 585,000 \$ 1.271,000 \$ 151,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	242,000 	\$ 5 5 5 5 5 5 5 5 5 5 5 5 \$	- 253,000 2,835,000 1,688,000 - - 5,475,000 5,475,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	9,329,000 187,000 1,707,000 2,435,000 2,835,000 2,835,000 1,688,000 1,688,000 1,688,000 1,000 1,000 1,000 39,287,000 1,964,000 7,857,000 4,725,211 53,222,221	\$ \$ \$ \$ \$ \$ \$ \$ \$	(5,073,000)) - - - - - - - - - - - - - - - - -
Scrap Subtotal Common Cooling Water Intakes and Circulating Water Pumps Roads All BOP Buildings Fuel Oil Storage Tanks All Cther Tanks Contaminated Soil Removal Fuel Oil Storage Tank Cleaning Fuel Oil Line Flushing/Cleaning On-site Concrete Crushing & Disposal Seeding and Grading Debris Scrap Subtotal West County Energy Center Subtotal TOTAL COST (CREDIT) PROJECT INDIRECTS (5%) CONTINGENGY (20%) SITE INVENTORY COST (CREDIT)	े \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	4,343,000 89,000 535,000 502,000 1,164,000 - - - - 2,428,000 15,457,000	\$ 4,744,000 \$ 98,000 \$ 585,000 \$ 1,271,000 \$ 1,271,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 000000000000000000000000000000000000	242,000 	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 \$	- 253,000 2,835,000 1,688,000 - 699,000 - 5,475,000	\$ 000000000000000000000000000000000000	9,329,000 187,000 1,707,000 2,435,000 253,000 253,000 1,688,000 1,688,000 1,688,000 1,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,287,000 39,29,29 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,00 30,0	\$ \$ \$ \$ \$ \$ \$ \$	(5,073,000) (5,073,000) (504,000) (504,000) (15,684,000) (15,684,000) (472,521) (16,156,521)

•

¹ Site inventory costs and recoverable scrap of inventory estimates (10%) were provided by FPL and were not independently reviewed by BMcD.

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8,569,000 \$

5,517,000

\$

\$

(3,052,000)

Table A-15 Babcock Ranch Solar Energy Center Decommissioning Cost Summary

			N	laterial and								
		Labor	1	Equipment		Disposal	E	Environmental		Total Cost		Salvage
Babcock Ranch Solar Energy Center						4						
Unit 1												
Demolition	\$	1.681.000	\$	2,521.000	\$	-	S		\$	4,202.000	\$	-
Collector System	s	131,000	\$	197,000	S	-	\$		\$	328,000	s	-
Project Buildings	s	18,000	\$	27.000	S		\$	-	S	45,000	\$	-
Hazardous Material Disposal	\$	-	\$	-	\$	1.171,000	5	-	\$	1,171,000	\$	-
On-site Concrete Crushing & Disposal	\$	-	Ş.		\$	75,000	\$	-	S	75,000	5	-
Site Restoration	5	-	\$	-	\$	-	\$	894,000	S	894,000	5	-
Debris	5	-	\$	-	\$	140,000	s	-	S	140,000	\$	-
Scrap	\$	-	\$		Ş	-	Ş	-	\$	-	\$	(3,052,000)
Subtotal	\$	1,830,000	\$	2,745,000	\$	1,386,000	\$	894,000	\$	6,855,000	\$	(3,052,000)
Babcock Ranch Solar Energy Center Subtotal	\$	1,830,000	\$	2,745,000	\$	1,386,000	\$	894,000	\$	6,855,000	\$	(3,052,000)
TOTAL COST (CREDIT)									\$	6,855,000	\$	(3,052,000)
PROJECT INDIREGTs (5%)									\$	343,000		
CONTINGENGY (20%)									\$	1,371,000		

CONTINGENGY (20%)

TOTAL PROJECT COST (CREDIT)

TOTAL NET PROJECT COST (CREDIT)

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Table A-16 Citrus Solar Energy Center Decommissioning Cost Summary

			M	laterial and								
		Labor	E	Equipment		Disposal	E	nvironmental		Total Cost		Salvage
Citrus Solar Energy Center												
Unit 1	_						_		_			
Demolition	5	1.681.000	\$	2,521,000	\$	-	S	-	S	4,202.000	\$	-
Collector System	S	131.000	\$	197,000	\$	-	S	-	S	328,000	\$	•
Project Buildings	\$	18,000	s	27,000	\$	-	S	-	S	45,000	S	-
Hazardous Material Disposal	\$	-	\$	-	S	1.171,000	\$	-	S	1,171,000	\$	-
On-site Concrete Crushing & Disposal	5	-	\$	-	S	75.000	\$	-	s	75,000	s	-
Site Restoration	S	-	\$	-	\$		s	894,000	S	894,000	s	-
Debris	S	-	\$	-	\$	140.000	\$	-	S	140,000	\$	-
Scrap	\$	-	\$	-	\$	-	\$		s	-	\$	(3,052,000)
Subtotal	\$	1,830,000	\$	2,745,000	\$	1,386,000	\$	894,000	\$	6,855,000	\$	(3,052,000)
Citrus Salar Energy Contar Subtatal		1 830 000		2 745 000	e.	1 386 000		894 000	~	6 855 000		(3.052.000)
Citrus Solar Energy Center Subiolar		1,000,000	-	2,740,000		1,300,000		034,000	*	0,000,000	-	(0,002,000)
TOTAL COST (CREDIT)									\$	6,855,000	\$	(3,052,000)
PROJECT INDIREGTs (5%)									\$	343,000		
CONTINGENGY (20%)									\$	1,371,000		
TOTAL PROJECT COST (CREDIT)									\$	8,569,000	\$	(3,052,000)
TOTAL NET PROJECT COST (CREDIT)									\$	5,517,000		

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Table A-17 Manatee Solar Energy Center Decommissioning Cost Summary

			M	laterial and							
		Labor	E	Equipment	Disposal	1	Environmental		Total Cost		Salvage
Manatee Solar Energy Center											
Unit 1											
Demolition	S	1,681,000	\$	2,521,000	\$ -	Ş	-	S	4,202,000	\$	-
Collector Sytem	s	131,000	\$	197,000	\$ -	\$	-	s	328.000	\$	-
Project Buildings	\$	18.000	S	27,000	\$ -	5	-	S	45,000	\$	-
Hazardous Material Disposal	s	-	\$	-	\$ 1,171,000	\$	-	S	1,171,000	\$	-
On-site Concrete Crushing & Disposal	\$	~	\$	-	\$ 75,000	\$	-	S	75,000	\$	-
Site Restoration	s	-	\$	-	\$ -	\$	894,000	S	894,000	S	
Debris	s	-	\$	-	\$ 140,000	s	-	S	140,000	S	-
Scrap	\$		S	-	\$ -	Ş		\$	-	\$	(3,052,000)
Subtotal	\$	1,830,000	\$	2,745,000	\$ 1,386,000	\$	894,000	\$	6,855,000	\$	(3,052,000)
Manatee Solar Energy Center Subtotal	\$	1,830,000	\$	2,745,000	\$ 1,386,000	\$	894,000	\$	6,855,000	\$	(3,052,000)
TOTAL COST (CREDIT)								\$	6,855,000	\$	(3,052,000)
PROJECT INDIREGTs (5%)								\$	343,000		

CONTINGENGY (20%)

TOTAL PROJECT COST (CREDIT)

TOTAL NET PROJECT COST (CREDIT)

\$ 5,85,000 \$ (3,052,000) \$ 343,000 \$ 1,371,000 \$ 8,569,000 \$ (3,052,000) \$ 5,517,000

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Table A-18 Okeechobee Clean Energy Center Decommissioning Cost Summary

		labor	N	Material and Equipment		Disposal		Environmental		Total Cost		Salvana
Dkeechobee Clean Energy Center		Labor		-quipment		ызроза						Janage
Unit 1												
GTs and HRSGs	\$	2,682,000	\$	2.930.000	\$		S	-	s	5,612, 00 0	\$	-
Steam Turbine & Pedestal	S	1,045,000	s	1,142.000	S	-	s		\$	2,187.000	\$	
SCR	5	98,000	\$	107,000	\$	-	s		\$	205.000	\$	~
GSU & Electrical	\$	238.000	\$	260,000	\$	-	S	-	\$	498,000	5	-
Stack	\$	95.000	S	104,000	\$		Ş		\$	199,000	\$	-
Cooling Tower and Basin	\$	311,000	s	340,000	\$		S		S	651,000	\$	-
On-site Concrete Crushing & Disposal	S	-	\$	-	Ş	247,000	\$	-	S	247,000	\$	-
Scrap	\$	-	\$	-	s	-	\$	-	S	-	Ş	(5,252,000)
Subtotal	\$	4,469,000	\$	4,883,000	\$	247,000	\$	•	\$	9,599,000	\$	(5,252,000)
Common												
Cooling Water Intakes and Circulating Water Pumps	\$	41.000	s	45.000	s	-	\$	-	s	86,000	S	
Roads	\$	161.000	s	175 000	s	176 000	ŝ	<u>.</u>	s	512,000	ŝ	
All BOP Buildings	ŝ	501.000	s	548.000	s		ŝ	-	S	1.049.000	ŝ	
Fuel Oil Storage Tanks	\$	174,000	\$	190,000	S	-	s		S	364.000	\$	
All Other Tanks	\$	107.000	ŝ	117.000	s	-	ŝ		S	224.000	\$	-
Contaminated Soil Removal	ŝ	-	s		s	-	ŝ	134.000	s	134.000	ŝ	
Fuel Oil Storage Tank Cleaning	ŝ	-	s	-	s	-	ŝ	1.498.000	s	1.498.000	s	
Fuel Oil Line Flushing/Cleaning	\$	-	\$		S	-	s	154.000	s	154.000	\$	-
On-site Concrete Crushing & Disposal	\$	-	s		s	52 000	ŝ		s	52,000	\$	-
Seeding and Grading	ŝ	-	s		s	-	ŝ	210 000	s	210 000	\$	
Debris	ŝ	· .	ŝ	-	s.	1 000	ŝ		s	1.000	ŝ	-
Scrap	s	-	\$		s		ŝ	-	ŝ	-	ŝ	(308.000)
Subtotal	\$	984,000	\$	1,075,000	\$	229,000	\$	1,996,000	\$	4,284,000	\$	(308,000)
Ockeechobee Clean Energy Center Subtotal	\$	5,453,000	\$	5,958,000	\$	476,000	\$	1,996,000	\$	13,883,000	\$	(5,560,000)
TOTAL COST (CREDIT)									\$	13,883,000	\$	(5,560,000)
PROJECT INDIRECTS (5%)									\$	694,000		
CONTINGENGY (20%)									\$	2,777,000		
				,								

TOTAL PROJECT COST (CREDIT)

TOTAL NET PROJECT COST (CREDIT)

17,354,000 \$ (5,560,000) 11,794,000

\$

\$

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APPENDIX B - PLANT AERIALS

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CREATE AMAZING.



Burns & McDonnell World Headquarters 9400 Ward Parkway Kansas City, MO 64114 O 816-333-9400 F 816-333-3690 www.burnsmcd.com

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Section 9

Dismantlement Cost Analysis for Cedar Bay Prepared by NorthStar Demolition & Remediation, LP

Cedar Bay:

Purpose and timing

On January 16, 2015, a walk down was conducted to determine a budgetary value to remove the assets from the site.

Attendees

Cedar Bay Generating Co LP site representatives – Operated by Cogentrix Tracy Paterson II Plant GM Mark R. Chaffee Chief Civil Structural Engineer Steven J. Busbin Engineering Manager

FPL Randal Voyles – FPL capital projects GM

Cedar Bay – Plant description

The Site is an existing coal fired power station producing a nominal 290 GMW and a net 260MW at maximum capability. This consists of 3 equal sized pyroflow circulating boiler firing a low surfer coal using limestone to capture the free sulfur materials. Prior to this decade was potentially a technology that could relatively environmentally friendly. Through a header system a consensual steam turbine produces the electrical power to the grid via step up transformers.

At a very high level the infrastructure in support of this is consists of the following:

Coal system

- Rail delivery system including diesel powered locomotive
- Coal Car dumping station
- Coal storage yard
- Coal crushing
- Tripper conveyor
- Paper refuge blending and drying area to
- Other coal handling equipment conveyors, silos, gravimetric feeders, structures

Lime stone system

- Truck unloading
- Blowers
- Silo bughouses
- Williams heated Pulverizes
- Screw conveyors
- Distribution systems into the boiler

Boilers

- 3 pyroflow natural circulation boilers
- Cyclone separators
- Waterwalls, convection section, sonic soot removal system, Omega tubes
- Primary Fans
- Secondary air Fans
- ID fans
- Blowers

Ash capture removal and system

- Water cooled rotary screw conveyors
- Drag chains
- Baghouses
- Pneumatic fly ash conveyance system
- Stack

Power generation equipment

- Boiler Water treatment systems
- Clarifier
- Chlorinators
- Demonetization
- Cation and anion resin beds
- Feed pumps
- Low, medium and high feedwater heaters
- Steam condensers
- Condensate pumps

Steam Turbine/Generator

- Hydrogen cooled Generator
- Hydrogen recovery, cooling, and storage systems
- Oil lubrication
- Step up transformers
- Aux transformers
- Power distribution
- Motor Control cantors
- Transformers
- Cabling. Electrical manholes and safety systems
- Grounding
- Lightning protection
- Transmission lines (short~ ½ mile)



The Plant is very well operated and maintained resulting in a high level capacity factor/availability for circulating fluid bed boiler of this vintage. This will support the potential to reduce the cost of dismantlement of the facilities.

Basis of Estimate: Current Day Feb 2015

Exclusions: No foundation removal No hazardous waste removal No Asbestos No lead Paint No Mercury devices

No PCP equipment

No removal of Major removal of coal, ash limestone, water, chemicals

Included:

All equipment, structures, hardware, lubrication oils, pumps, motors, skids, pipe, conduit, cabling as listed above. Fill in the coal unloading pit, removal of the residual layer of coal in the coal yard. Title would be transferred for everything at the site unless specifically excluded.

Execution strategy:

Market and Sell all equipment on the site to the extent possible first as systems and secondary at the component level. Followed by dismantlement activities using conventional methods. The ability to minimize the final cost of this effort is highly dependent upon the need of other similar power producers and the timing of their need, the value of the materials that can be scrapped, and the distance to the end users. We would actively auction or Bid the entire site as an EPC approach to support us in this effort. This has demonstrated to provide us with the lower risk and highest market value. Our experience stems from Cape, Rivera, port everglades, cutler, Sanford, and numerous ancillary supporting systems in the NEE portfolio.

Schedule:

Recommended this effort take 24-30 months from notice to proceed to complete. Although this can be substantially shorter; time has shown that the longer durations typically result in a lower end cost. This works in two ways, it allows us to locate viable buyers in need, or time the salvage market to recover the highest salvage value attainable.

Budgetary cost:

The recommended cost of this effort is:

- **P90 cost of \$4.5M** this is considered to be conservative due to the current timing the plant will continue to operate for several more years, cost of escalation of the resource pool, volatility of the salvage market, and the potential for whole sailing the equipment on the international market. There is of course equal potential for upside or down side. Dependent upon the level of upside there is potential that the marketability of the plant would result in a null cost or even some moneys being returned.
- **P50 cost of \$1.0M** with a range of \$0 to a cost of \$2.0M

As an example the following salvage markets have trended downward since peaking in 2008-2010 time period. The majority of the savings values are in the steel, cooper, Stainless areas. Scrap Steel has somewhat returned to the higher level due to the reduction in inventory and the same trend is expected yet has not materialized yet for the other metals. Additionally, since this is a budgetary effort and not a great deal of effort was put forth to estimate the amount of materials the resulting weights may increase providing further savings.



Trend Charts for Metals Markets

SteelBenchmarkerTM CRC Price

USA, China, Western Europe and World Export (WSD's PriceTrack data, Jan. 2000 - March 2006; SteelBenchmarker data begins April 2006)



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Appendix supporting information: Appendix A Budgetary Vendor information

Appendix B Pictures

Appendix C Plant documentation





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Docket No. 160021-EI FPL 2016 Dismantlement Study









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Docket No. 160021-EI FPL 2016 Dismantlement Study Exhibit KF-4, Page 99 of 127











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Docket No. 160021-EI FPL 2016 Dismantlement Study Exhibit KF-4, Page 101 of 127

February 12, 2015

Florida Power & Light PGD Technical Services 700 Universe Blvd. Juno Beach, FL 33408

Mr. Randal Voyles Technical Services Manager

Re: Budget Estimate for Cedar Bay Plant NorthStar Proposal No. 15-02-09

Dear Mr. Voyles,

NorthStar Demolition and Remediation LP is pleased to provide this budget estimate for the demolition of the Cedar Bay facility. The budget estimate was developed based on information gathered during a site inspection and drawings provided by the facility. This budget estimate includes the removal of the coal powered steam generator structure with 3 individual boiler units, one chimney stack, turbine generator building and condensers, all above ground structures listed on the Overall Site Plan (15637-1STU-S1000), such as transformers, cooling tower, fly and bed ash silos, cured pellet storage, coal storage, crushing and conveyance, limestone storage, pulverizing and conveyance, circulating water structure, misc. tanks and systems for water, fuel, acid and caustics, water treatment building, coal unloading structure, storage area runoff and yard area runoff ponds, misc. outbuildings, etc. All work will be to top of foundation or slab at or near grade.

Additionally, as this plant has only recently shut down and the equipment had been maintained to the highest level of quality, there are many items that potentially have a much greater value as a reusable asset rather than being sold as scrap. Because of the state of these materials, NorthStar feels that it would be of benefit to both FPL and NorthStar if we could partner in the marketing and sales of as much of this equipment as possible as this could increase our asset recovery well above \$5.5 million.

In order to maximize FPL's return on its capital investment, we feel that additional marketing time is required to explore the international market on a piece by piece basis. NorthStar has relationships with many end user buyers and brokers that could be used for the liquidation of miscellaneous pieces and parts for this plant. They specialize in this type of equipment and have a vast client basis worldwide. Based on the extremely clean condition of the plant, we feel that this relationship would best serve FPL if we could spend time immediately marketing the equipment while it is still in place. This would allow us time to bring in our out-of-country clients to view and make "firm" offers on this equipment.

The assumptions made in the development of this estimate include the following;

- Work will be performed 5 days per week 10 hours per day
- The work can be completed within 12-14 months.
- FP&L will make all utility disconnects and relocations.
- All line break and hazardous material removal including universal wastes will be performed by FPL.
- Assumed no lead abatement besides employee protection during torch activities.
- Excludes any damage to existing concrete slabs and foundations to remain.
- Excludes any ash, coal, limestone and process waste cleanup and disposal.
- Asbestos is excluded from the pricing

Budget Estimate of Cost

Project Overhead	\$650,000
Stack and Concrete Silos	\$590,000
Boiler and ancillary structures	\$3,250,000
Misc Buildings, cooling tower	\$870,000
Water Treatment/Condensers	\$650,000
Turbine	\$350,000
Total Cost	\$6,360,000
Scrap Recovery Credit	(\$2,237,750)
Net Cost to FPL	\$4,122,250

Budget Estimate for Salvage Recovery

Steel Scrap	11000	Gross Tons	\$140/ton	\$1,540,000
Sales	Pumps/valves/motors			\$300,000
Copper	140,000	Pounds	\$1.95/lb.	\$273,000
Stainless Tubes	115,000	Pounds	\$0.65/lb.	\$74,750
Misc.				\$50,000
			Total Scrap	\$2,237,750

Thank you for the opportunity to provide you with this budget estimate. Please feel free to call with any questions. Chris Schillesci 985-705-2641

Regards,

all-

Chris Schillesci Sr. Project Manager NorthStar Demolition and Remediation LP



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SHEET 2 OF 9 See sheet 3 for general notes.	14775 OLD ST. AUGUSTING BOAD JACKSONNELE, R. 32258 (804) 542-8550 CENTROL & AUGUSTORY R. 18 5034	

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A PORTION OF WEBB PLACE. SUBDIVISION OF THE JOHN BROWARD GRANT. SECTION 46, TOWNSHIP 1 SOUTH, RANGE 27 EAST, DUVAL COUNTY, FLORIDA, AS DEPICTED IN PLAT BOOK 1, PAGES 7 AND 8, OF THE FORMER PUBLIC RECORDS OF SAID COUNTY. ALSO BEING A PORTION OF THOSE LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 6222, PAGE 504, TOGETHER WITH A PORTION OF THOSE LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 7101, PAGE 1756, OF THE CURRENT PUBLIC RECORDS OF SAID COUNTY.

EASEMENT DESCRIPTIONS (per Title Commitment) (continued):

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Figure 32 SIDE ELEVATION DRAWING OF YOUR PLANT

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Е- КС00478

TOSHIBA

INSTRUCTION MANUAL

DESIGN DATA AND CONSTRUCTION

FOR 343,000^{kVA} GENERATOR

TOSHIBA CORPORATION

K F 2011

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1.1.2	Design Data		3	
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1.2.1	Generator Structure		5	
1.2.2	Attachment Drawings	_	32	

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1.1 GENERAL DESCRIPTION

1.1.1 General

This instruction manual gives overall design data and descriptions of 343,000kVA generator and its auxiliary units installed at AES CEDAR BAY COGEN.PLANT

The electrical power output capability of a single generator is 291,550kW at a power factor of 0.85 lagging. The generator which is located in the power house at EL 132'-0", is mechanically driven by its associated steam turbine, electrically excited by the static thyristor rectifier excitation system and internally cooled by hydrogen gas and stator cooling water.

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1.1.2 Design Data

a. Туре

> Three phase synchronous generator totally enclosed, direct coupled to steam turbine.

Cooling System ь.

> Stator winding : Direct water cooled Stator core : Hydrogen cooled Rotor winding : Direct hydrogen cooled

c. Rating

Rating	Continuous
Nominal rated capacity at 45Psi g hydrogen pressure	343 MVA
Power factor	0.85 (lagging)
Rated hydrogen pressure	45Psi g
Number of phases	3
Number of poles	2
Frequency	60 Hz
Rates speed	360 Irpm
Terminal voltage	20 kV
Short circuit ratio at rated MVA	Not less than 0.58 (343 MVA base)
Insulation Class-Stator	Class P
-Rotor	Class F
Excitation	Static excitation s

system with thyristor

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đ.	Cooling Gas	2
	Cooling gas flow rate through gen	erator : 1059 ^{Cf} /s(at 45psi g)
	Cooling gas inlet temperature	: 115 ° F
	Cooling gas outlet temperature	: 151°F
e.	Water flow through stator winding	: 174 g/min
f.	Hydrogen Gas cooler	
	Quantity	: 4 units/one generator
	Cooling water flow rate per unit	: 343 g/min
	Total cooling water flow	: 1372 g/min
	Cooling water inlet temperature	: 97 °F
	Cooling water outlet temperature	: 1106 °F
	Head loss	: Approx. 10.8 ft Aq
	Cooling water quality	: Fresh water

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TOSHIBA

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E-KS100195

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INSTRUCTION MANUAL

GENERAL DESCRIPTION

TOSHIBA CORPORATION

K F 2011

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E-KS100195-a

General Description

This turbine is a tandem-compound reheat unit with double-flow , low pressure stages. The design incorporates features which have proved their reliability and efficiency in a large number of units operting at comparable conditions.

This turbine has an opposed-flow, high-pressure reheat section and double-flow, low-pressure section. The high-pressure steam initially enters the turbine near the middle of the high pressure span and flows through the high-pressure stages toward the turbine end of the unit. The steam leaves the high-pressure section and returns to the reheat section of the boiler. The reheated steam returns to the turbine through the combined reheat valves, and again enters the turbine near the middle. of the high-pressure span. The steam then flows toward the generator through the reheat stages. After passing through the reheat stages, the steam enters the single crossover pipe from which steam enters the doubleflow section. After passing through the low-pressure stages, the steam is exhaused downward into the condenser.

The exhaust hood is keyed to the foundation plates around its side of the hood to prevent axial movement.

The turbine expands axially from this point. The front standard is free to slide axially on its foundation plate, but the standard and hood are guided to prevent transverse movement.

All of the shells and hood are provided with bolted, horizontal joints for access to the steam path parts for inspection and maintenance. The joints of the shells and hood are accurately machined to give full metalto metal contact and to assure a steam-tight joint.

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E-KS200243 a

TOSHIBA

INSTRUCTION MANUAL

RATING AND DESIGN DATA

TOSHIBA CORPORATION

TOSHIBA

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E-KS200243 a

Rating and Design Data

1. Type of Turbine

2. Rated Output

3. Rated Speed

Ta	ndem	Compound	2	Cylinders
2 1	Flow	Exhaust		
Re	heat	Turbine		
28	5,000) kW		
з,	600 1	rpm		

4. Direction of Rotation

(seeing from turbine end)

Counter-clock-wise

5. Steam Conditions Main Steam Pressure at MSV inlet 1,890 psig Main Steam Temperature at MSV inlet 1000 F Reheat Steam Temperature at CRV inlet 1000 F

6. Exhaust Vacuum

6 7. Number of Extractions

8. Number of Stages HP Turbine IP Turbine LP Turbine Number of Wheels

3" Hg abs.

7 Stages

4 Stages

23

6 Stages x 2 Flows

K F 2006

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Sec. 2

DWG.NO.4KA39752

SHIPPING DIMENSION AND WEIGHT

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FOR

MAJOR ITEMS

<u>For</u>

AES CEDAR BAY INC.

CEDAR BAY COGENERATION

JUN 1992

TOSHIBA CORPORATION

APPROVED BY	CHECKED BY	DRAFTED BY
15/3-/92	15/34-132	12-JUN-'92
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1. SHIPPING DIMENSION AND WEIGHT OF HIP TURBINE ASSEMBLY -- PRELIMINALY P 1

2. SHIPPING DIMENSION AND WEIGHT OF LP OUT CASING UPPER---- LATER

3. SHIPPING DIMENSION AND WEIGHT OF LP OUT CASING LOWER---- LATER

4. SHIPPING DIMENSION AND WEIGHT OF LP INNER CASING UPPER -- LATER

5. SHIPPING DIMENSION AND WEIGHT OF LP INNER CASING LOWER -- LATER

6. SHIPPING DIMENSION AND WEIGHT OF HIP TURBINE ROTOR----- LATER

7. SHIPPING DIMENSION GENERATOR ------ 3KC000781REV. A P 7



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BOKINE	STRE :	STE	EL SKHO		
	DIMENSION		_6800	4430 x 4370 (me)	L.
	WEIGHT		120,000	(KG) APPROX	
	Querry				

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TOSHIBA

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Weight List of Main Parts of Steam Turbine(lbs)

1. HIP Turbine

Outer Casing Upper	60,000
Outer Casing Lower	63,000
HP Inner Casing Upper	10,800
HP Inner Casing Lower	11,000
Rotor(with Blades)	33,800

2. LP Turbine

Outer Casing Upper	33,000
Outer Casing Lower	93,000
Inner Casing Upper	39,000
Inner Casing Lower	39,000
Rotor(with Blades)	78,100
Rotor(with Blades)	78,100

- 3. Cross-over Pipe 16,600
- 4. Front Standard 42,000

5. Main Steam Valves

K F 2006

Main Stop Valve	22,000
Control Valves No.1 No.6	19,000
Combined Reheat Valve(per one set)	33,000

6. Oil Tank with AOP, TOP and EOP Motors

excluding	lube	oil	34,000
including	lube	oil	67,700

7.	Oil	Conditioner	excluding	lube	oil	4,321
			including	lube	oil	8,179

TOSHIBA

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E-KS200244 2 PAGE 1

Weight List of Main Parts of Steam Turbine(lbs)

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Outer Casing Lower	63,000
HP Inner Casing Upper	10,800
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Rotor(with Blades)	33,800

2. LP Turbine

33,000
93,000
39,000
39,000
78,100

- 3. Cross-over Pipe 16,600
- 4. Front Standard 42,000

5. Main Steam Valves

Main Stop Valve	22,000
Control Valves No.1 No.6	19,000
Combined Reheat Valve(per one set)	33,000

6. Oil Tank with AOP, TOP and EOP Motors

excluding lube oil 34,000

67,700

including lube oil

7.	0i1	Conditioner	excluding	lube	oil	4,321
			including	lube	oil	8,179