BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 080677-EI FLORIDA POWER & LIGHT COMPANY

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

FPL WITNESS KIM OUSDAHL

EXHIBIT KO-8:

FPL'S 2009 DISMANTLEMENT STUDY

VOLUME 2 OF 2

DOCUMENT NUMBER-DATE

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FPSC-COMMISSION CLERK

Putnam Plant

The Putnam Plant is located on a 59-acre site in Putnam County approximately three miles southeast of Palatka, Florida. Putnam Units No. 1 and 2 are virtually identical in design. Units No. 1 and 2 are combined cycle units that operate on natural gas with #2 light oil as alternative fuel. Both units are also capable of operating on #6 heavy oil. The two units have a combined maximum generator nameplate rating of 580 megawatts. Units No. 1 and 2 went into commercial operation during 1978 and 1977 respectively. This dismantlement study uses the following estimated retirement dates for these units:

<u>Unit</u>	<u>Year</u>
Common	2020
Unit 1	2020
Unit 2	2020

The dismantlement of the plants is assumed to require 2 years beginning five years after these dates.

Units No.1 and 2 each consist of essentially two complete Westinghouse Electric Corporation gas turbine generators, each coupled to one electrical generator on the intake side of the respective gas turbine, and one Heat Recovery Steam Generator (HRSG) on the exhaust side of the respective gas turbine. Each gas turbine drives an electrical generator while the exhaust heat from the gas turbine boils water in the HRSG. The superheated steam produced from both HRSGs enters a common steam line and drives one additional steam turbine, which is coupled to an electric generator. The exhaust steam is condensed and the water piped back to the HRSGs for re-use.

Florida Power & Light Company last requested and received approval for dismantlement accruals for the Putnam plant in Docket No. 070378-EI, Order No. PSC-08-0095-PAA-EI, issued on February 14, 2008. The current accruals became effective as of January 1, 2007.

PUTNAM SUMMARY OF DISMANTLEMENT COSTS

FEDO		Removal	Disposal	Salvage	Total
Account	Description		(B)	(C)	(D)=(A+B+C)
Account	Putnam Common		(0/	(0)	
	Production Plant				
341	Structures and Improvements	857,953	1,062,532	105,068	1,815,417
342	Fuel Holders	455,852	431,449	289,571	597,731
343	Prime Movers	144,450	14,316	47,354	111,411
344	Generator Units	0	0	0	0
345	Accessory Electrical Equipment	873,466	69,518	714,898	228,086
346	Miscellaneous Equipment	10,465	0	4,020	6,445
	Subtotal	2,342,187	1,577,815	1,160,912	2,759,090
	Other Sile Contes				
	Site Management Expenses	564 984			564 984
	Asheetos Abstement Coste	15 000			15 000
	Other Site Contamination & Special Waste	1,194,650			1,194,650
	Intake & Discharge Backfill	44.128			44,128
	Grading & Seeding	2,295,202			2,295,202
	Subtotal	4,113,964	0	0	4,113,964
	Total	6,456,151	1,577,815	1,160,912	6,873,054
	Contingency - 16%	1,032,984	252,450		1,285,434
	Total Putnam Common	7,489,135	1,830,265	1,160,912	8,158,488
	Unusable M&S Inventory	1,031,901		103,190	928,711
		8,521,036	1,830,265	1,264,102	9,087,199
	. . .				· ·
244	Putnam Units 1 & 2	403 71 E	440 450	ee eeo	942 190
341	Structures and improvements	493,713	410,100	00,002	043,109
343	Prime Movers	816 768	37 844	484 919	370 293
344	Generator Units	803.020	247 470	1 009 288	41 202
345	Accessory Electrical Equipment	000,020	247,410	1,000,200	. 0
346	Miscellaneous Equipment	0	0	0 0	0
	Subtotal	2,113,502	701,470	1,560,288	1,254,684
	Contingency - 16%	338,160	112,235		450,396
	Total Putnam Units 1 & 2	2,451,663	813,705	1,560,288	1,705,080
	Total Dismantlement Costs	10,972,699	2,643,970	2,824,390	10,792,280

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PUTNAM DISMANTLEMENT COST FOR INFLATION PROJECTION

		Material &			
	Labor	Equipment	Burial	Salvage	Total
Description	(A)	(B)	(C)	(D)	(A) + (B) + (C) - (D
Putnam Common	4,493,481	4,027,555	1,830,265	1,264,102	9,087,199
Putnam Units 1 & 2	1,470,998	980,665	813,705	1,560,288	1,705,080
Total	5,964,479	5,008,220	2,643,970	2,824,390	10,792,260

Labor is 60% of Removal Cost from Summary of Dismantlement Costs. Material & Equipment is 40% of Removal Cost from Summary of Dismantlement Costs. Burial is 100% of Disposal Cost from Summary of Dismantlement Costs.

Salvage is 100% of Salvage from Summary of Dismantlement Costs.

PUTNAM DISMANTLEMENT ASSUMPTIONS

FPL will provide management personnel for the dismantlement effort.

FPL will prepare the request for proposal package and solicit bids for the dismantlement effort.

FPL will provide site security during the dismantlement.

FPL will hire a demolition contractor to perform the actual dismantling work. This contractor will have the salvage rights to all plant equipment and structural material.

The land will be made available for future use.

All dismantling work will be done in accordance with OSHA regulations.

The fuel oil storage tanks will be cleaned and their contents disposed of according to the requirements of current regulations.

The following items will be removed:

- a. All structures, equipment, and concrete pads, pedestals, foundations, etc;
- b. All underground gas, oil, sewer and water piping and electrical conduits;
- c. All hazardous and contaminated materials, e.g., acid filled lead batteries, oil tank residue.

Discussions with FPL's Power Generation Division (PGD) indicate that the return of the site to a green field condition entails removal of all structures above the wood pilings and steel-encased concrete pilings. The removal of the pilings would be unfeasible and, therefore, will remain in place.

Scrap will be unprepared, i.e., cut only to the extent required to load the pieces on scrap dealers' trailers. Trucking costs for removal are paid by the scrap dealer and are reflected in the salvage value paid.

The estimate does not reflect land value or its resale.

The productivity factors employed are assumed valid for purposes of this study.

A contingency of 16% has been applied to the total removal and disposal costs. This contingency percentage covers costs associated with delays occurring after dismantlement begins, due to such causes as equipment failure and weather delays.

The costs of such overhead items as project management, site security, etc., have been estimated by FPL's Construction and Corporate Services Department. These costs are listed on the cost summary pages for each site's dismantlement study.

All materials and equipment are assumed to be either fully salvageable or to be disposed of completely. The availability of powerful cutting shears makes possible the cutting of even the heaviest steel to a size that permits salvage as scrap. Any unusable materials and supplies inventory will be sold as scrap. Estimated balances of such inventory (with related salvage value) have been included on the cost summary pages for each site's dismantlement study.

A 30% swell factor is used to compute the disposal cost per cubic yard of concrete. One cubic yard of concrete becomes 1.3 cubic yards of concrete rubble after demolition.

PUTNAM DISMANTLEMENT ASSUMPTIONS (continued)

The switchyard and ancillary equipment (FERC account 353) will remain in place with the exception of the main power transformers, oil circuit breakers, superstructures, and foundations associated with the tie-in of plant generated power in the switchyard. However the dismantlement cost of substation equipment is not included in this study, so as to avoid the possibility of duplicating the recovery of costs already included in the net salvage factor of the substation accounts' depreciation rates.

An expandable grout will be used to dismantle the turbine pedestals. The chimneys will be control-blasted.

It is assumed that dismantlement activity at Putnam will begin five years after end of service. The economic recovery dates used for that assumption are as follows:

<u>Unit</u>	Economic Recovery Date
Common	2020
Unit 1	2020
Unit 2	2020

Putnam plant has very little asbestos. FPL's Environmental Department recently completed a survey of asbestos at our production plants. It was determined that a minimal amount of asbestos insulation is in use at Putnam. It is estimated that the cost of abating this small quantity of asbestos is \$15,000.

DISMANTLING ACTIVITIES: OIL & GAS AND OTHER PRODUCTION PLANTS

- Remove loose equipment, furniture, and spare parts.
- Drain liquids, drum-up, and dispose of drums.
- Remove hazardous materials; i.e., leads (alkaline), acids, solvents, lubricants, oils, chemicals, and gasses.
- Strip all insulation and covering, package and remove to acceptable landfill.
- Collapse circulating water lines and backfill trenches.
- Remove main steam, hot and cold piping, downcomers, valves, and supports, purnps, motors, generator auxiliary equipment, feedwater heaters, soot blowers, and condensers.
- Remove intake and discharge structures, equipment pumps, piping and valves.
- Remove systems that must be completed prior to the start of the boiler removal including lube oil pumps, all piping, instrument and electrical systems.
- Remove forced drafts and induced draft ductwork, air heaters and fans.
- Remove hoppers, burners, upper and lower headers, manways, and waterwalls.
- Remove heavy steel structures and above ground steel precut key members, lower and cut at ground level.
- Disassemble crane, boiler feed pumps, and turbine generator.
- Separate scrap metals, and remove to scrap yard.
- Remove and dispose of miscellaneous rubble.
- Remove turbine pedestal, foundation, and heavy concrete structures and building, stack foundations, equipment foundations, substructures, support buildings and stacks. Remove to landfill.
- Cut off piles and remove pile caps. Remove concrete encased duct banks and underground piping.
- Remove septic tank and backfill.
- Remove underground storage tanks.
- Test and remove contaminated soil/bases all areas.
- Install environmental monitoring equipment, for example, at wells.
- Remove or improve remaining site facilities such as buildings, fences, parking areas in accordance with local code and regulations.
- Install/modify existing site storm water runoff system.

DISMANTLING ACTIVITIES: OIL & GAS AND OTHER PRODUCTION PLANTS (Continued)

- Remove gas supply metering site, valve stations, underground distribution system.
- Remove solid and liquid wastes from waste treatment processing areas landfilled material, precipitated material in ponds and tanks, contaminated resins and reactants.
- Remove marine facilities such as fuel unloading docks, equipment, bridges, and dams.
- Cut and remove fuel oil tanks, piping, valves, and supports.
- Remove top soil/gravel, backfill, and remove barrier wall foundation.
- Backfill, site grading, seeding and mulching.

DEVELOPMENT OF COST FACTORS

Cost factors have been developed to compute the net salvage value of the demolition of the Putnam Plant. The net salvage value of the demolition is the net of: the removal and disposal cost and the salvage value of equipment and steel not disposed of. These factors provide a unit cost or value for removal, disposal and salvage of a given unit of measure of the component materials of which a power plant is constructed. The assumption is that the cost or value per unit of a given component can be multiplied by the quantity of that component in the plant to calculate a total cost or value for removal, disposal, or salvage of that component.

REMOVAL COST FACTORS

The removal cost factors developed for this study have two elements: a burdened labor rate and productivity factor. The burdened labor rate multiplied by the productivity factor yields the removal cost factor. The labor rates used in this study are from R.S. Means Construction Data. The crew rate per man-hour is for a crew consisting of six journeymen laborers, one outside foreman and one heavy equipment operator - a typical crew for demolition work. The rate includes the cost per man-hour of a crane, an excavator, and a front end loader. The equipment cost is also from R.S. Means, and both equipment and labor are adjusted by the appropriate R.S. Means City Cost Index. (Means provides national average rates for labor and equipment which are then adjusted by City Cost Indexes to arrive at the appropriate rate for a given region.) The productivity factors employed, e.g., the number of man-hours required to remove a given unit of measure of concrete, were developed by an engineering consulting firm. These factors are assumed valid for purposes of this study.

Labor Rate

Labor rates are for non-union crews and the per crew hour rate is based on a forty hour week.

Labor	\$38.56	X	6	=	\$231.34
Foreman	\$48.95	Х	1	=	\$48.95
Heavy Equipment Operator	\$46.65	Х	1	=	\$46.65
Total Cost per hour of 8 man crew					\$326.94
Cost per man hour		\$326.94	1	8 =	\$40.87

Equipment Rate

The equipment rate is based on the following equipment:

	Crane/Excavator Front End Loader Cutting Equipment Total per month					34,370.00 6,824.90
	41,426.65	1	176	hours per month	ו =	235.38
Cost per man hour Plus: amount for small tools Fotal Cost per man hour				\$235.38	/ 8 =	\$29.42

Equipment & Labor Summary

Labor Equipment Total	\$40.87 30.42 \$71.29
Rounded	\$71.00
For Concrete demolition add \$5.00 per hour additional equipment charge.	\$76.00

The Removal Cost Factor is the product of the productivity factor for removal of a particular component multiplied by the total burdened hourly labor rate. The removal cost factors for all materials to be removed from FPL's sites are as follows:

Components	Hourly Rate	Productivity Factor	Removal Factor
Extra Heavy Steel (1)	\$71.00	2.50 MH / Ton	\$177.50 / Ton
Heavy Steel (2)	\$71.00	3.30 MH / Ton	\$234.30 / Ton
General Steel	\$71.00	4.40 MH / Ton	\$312.40 / Ton
Light Steel	\$71.00	7.10 MH / Ton	\$504.10 / Ton
Concrete	\$76.00	0.48 MH / CY	\$36.48 / CY
Reinforced Concrete	\$76.00	1.20 MH / CY	\$91.20 / CY
Copper-Elect. Cable &			
Generator Leads &	\$71.00	12.00 MH / Ton	\$852.00 / Ton
Copper - Generator	\$71.00	9.80 MH / Ton	\$695.80 / Ton
Copper - Transformer	\$71.00	7.40 MH / Ton	\$525.40 / Ton
General Insulation	\$71.00	1.00 MH / CY	\$71.00 / CY
Inground Pipe-Metal(3)	\$71.00	6.00 MH / Ton	\$426.00 / Ton
Concrete Pipe	\$76.00	4.60 MH / Ton	\$349.60 / CY

(1) Includes turbine generator.

(2) Includes parts of the steam generator, pipe larger than 8 inches.

(3) Includes cost to backfill the trenches.

DISPOSAL COST FACTORS

Three cost factors were developed to compute the cost of disposal of non-hazardous wastes at the Putnam County Landfill located at 140 County Landfill Road in Palatka, Florida. Concrete and calcium silicated insulation are all non-hazardous wastes. The tipping fee of \$42/ton was obtained from the Putnam County Landfill and dumpster charge of \$295/ haul (including driver) for a 20 cubic yard and \$325/haul for a 30 cubic yard dumpster.

Cost factors were also developed to compute the cost of removal and disposal of oil tanks, including the cost of related soil remediation. Such costs are computed for each tank in FPL's system, and are located appropriately in the detailed spreadsheet.

<u>Putnam Plant</u>

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<u>Concrete</u>

One cubic yard of concrete in place weighs 3,950 pounds. One cubic yard becomes 1.3 cubic yards after demolition. Each load will contain 15.38 cubic yards (20 cu. yds./1.3) of in place concrete. 15.38 cubic yards weighs 61,000 pounds or 30.50 tons.

Dumpster Charge	\$295.00	/haul	Х	1 haul		\$295.00
Tipping Fees	\$42.00	/ ton	Х	30.5 tons	=	1,281.00
Total Cost per round Trip						\$1,576.00
Cost per Cubic Yard	\$1,576.00	/ 15.38	3 cubic yards =			\$102.47
Plus 10% contractor profit						10.25
Total Cost per Cubic Yard						\$112.72
Rounded Cost per Cubic Yard						\$113.00

Insulation - Calcium Silicate (Non-Hazardous)

A trailer with a 30 cubic yard capacity is used for insulation as well as for concrete. For purposes of this computation the dumpster is assumed to be 90% full (although the tipping fee is based on the assumption of 100% full truck - i.e., the weight to volume conversion uses 30 cubic yards - the full volume of the dumpster). A cubic yard of calcium silicate insulation weighs 121.5 pounds or .060750 tons. 30 cubic yards times .060750 tons/cubic yard = 1.82 tons.

Dumpster Charge Tipping Fees	\$325.00 \$42.00	/haul / ton	x x	1 1.82	haul tons	=	325.00 76.44
Total Cost per round Trip							401.44
Cost per Cubic Yard Plus 10% contractor profit	\$401.44	/ 27 cu	bic yards =	•			\$14.87 1.49
Total Cost per Cubic Yard						····	\$16.35
Rounded Cost per Cubic Yard						<u></u>	\$16.00

SALVAGE VALUE FACTORS

The salvage value factors, presented in dollars per ton, were provided by scrap metals dealers. The list covers all salvageable materials recovered from FPL sites.

Iron & Steel	\$120 / ton
Stainless Steel	\$2,000 / ton
Aluminum (Sheet Metal)	\$1,340 / ton
Wire & Cable:	
- Insulated Copper	\$2,100 / ton
- Insulated Aluminum	\$1,020 / ton
Copper	\$5,000 / ton
Nickel Alloys	
- 70/30 Cupro-Nickel	\$4,000 / ton
- 80/20 Cupro-Nickel	\$6,000 / ton
- Monel	\$10,000 / ton
Admiralty Brass	\$3,600 / ton
Aluminum Brass	\$2,800 / t on
Titanium	\$4,000 / ton

OTHER SITE COSTS

Site Management Expenses

Site management expenses refer to FPL's management costs and contractors' expenses associated with the dismantlement project. The cost factors provided by FPL's Power Generation Division (PGD) and updated by Construction Estimating are: FPL expenses of \$21,134 per month, both office and site, and contractor's expenses of \$25,948 per month for site indirect costs. These expenses are to be incurred over the 12 month dismantlement period for the Putnam Plant. FPL's management costs include administration, engineering, permit costs and various other costs. Contractors' expenses include field management, supervison, security, etc..

Site Management Expenses per month	\$47,082
Number of months	12.00
Total Site Management Expenses	\$564,984

Intake & Discharge Backfill

FPL's PGD developed this cost factor on the basis of a typical such structure for FPL's production plants. The assumption is that a volume of 1,600 cubic yards for the intake and 1,120 cubic yards for the discharge will need to be filled. Construction Estimating has updated the costs. The charge for the Intake is \$44,128; the cost for the discharge is \$35,115. Putnam has 1 Intake and no Discharge:

	Cost/Struct	Quantity	Totals
Intake	\$44,128	1	\$44,128
Discharge	\$35,115	0_	\$0
			\$44,128

Grading and Seeding

This cost refers to the restoration of the dismantled area to a green field area. The land is filled with sand, spread with topsoil and then seeded. The cost factor provided by PGD and updated by Construction Estimating is \$63,579 per acre. The acreage was determined for each site by reviewing engineering drawings to determine the areas requiring this effort. Assumptions underlying this factor include 2,000 cubic yards per acre to be backfilled and 968 cubic yards per acre of topsoil to be spread and seeded.

Putnam Acreage to be graded and seeded	36.10
Cost Factor	\$63,579
Total Grading and Seeding Expense	\$2,295,202

Other Site Contamination & Special Waste

Florida Power & Light's Environmental Department has provided the following information about certain environmental related costs at the company's generating stations. At Putnam, the following cost estimates have been identified:

<u>Description</u>	Amount
Asbestos	\$15,000
Lead in paint	15,300
Special Waste	1,200
Tanks/Washwater	13,150
Soil/Other Contamination	1,165,000
Total	\$1,209,650

Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Saivage Value
PUTNAM COMMON										
FERC Account 341										
Structures & Improvements										
Concrete Pavement	CY	1	4,475.00	4,475.00	36.48	163,248	113.00	505,675	0.00	0
Fire Water Piping	TN	1	92.00	92.00	312.40	28,741	0.00	Û	120.00	11,040
Fire Water Tank (100,000 gl)	TN	1	32.43	32.43	312.40	10,131	0.00	0	120.00	3,892
Fire Water Pumps	TN	1	2.00	2.00	312.40	625	0.00	0	120.00	240
Highway Crossing	CY	1	1,774.00	1,774.00	91.20	161,789	113.00	200,462	0.00	0
Barge Unloading Facility - Concrete	ĊY	1	725.00	725.00	91.20	66,120	113.00	81,925	0.00	0
Barge Unloading Facility - Steel	TN	1	12.70	12.70	234.30	2,976	0.00	0	120.00	1,524
HVAC Ventilating Fan	TN	1	1.00	1.00	312.40	312	0.00	0	120.00	120
Concrete Enclosure	CY	1	50.00	50,00	36.48	1,824	113.00	5,650	0.00	0
Subtotal						435,766		793,712		16,816
Circulating and Service Water System	.							4 855		
Water Pre-treatment Equipment Foundation	CY	1	17.30	17.30	91.20	1,578	113.00	1,955	0.00	0
Water Pre-treatment Equipment	TN	1	20.00	20.00	312.40	6,248	0.00	0	120.00	2,400
Water Storage Tank	TN	1	32.43	32.43	312.40	10,131	0.00	0	120.00	3,892
Intake Structure - Concrete	CY	1	310.00	310.00	91.20	28,272	113.00	35,030	0.00	0
Traveling Water Screens	TN	1	14.00	14.00	312.40	4,374	0.00	0	120.00	1,680
Screen Wash Pumps	TN	2	2.00	4.00	312.40	1,250	0.00	0	120.00	480
Station Bridge Crane	TN	1	75.00	75.00	234.30	17,573	0.00	0	120.00	9,000
Station Bridge Crane - Structural Steel	TN	1	227.00	227.00	234.30	53,186	0.00	0	120.00	27,240
Cooling Tower	CY	1	1,746.84	1,746.84	91.20	159,312	113.00	197,393	0.00	
Structural Steel	TN	1	12.00	12.00	234.30	2,812	0.00	U	120.00	1,440
Chlorination System	TN	2	6.00	12.00	312.40	3,749	0.00	U	120.00	1,440
Potable Water Piping	IN	1	17.86	17.86	312.40	5,579	0.00	0	120,00	2,143
Potable Water Equipment	TN	1	9.25	9.25	312.40	2,890	0.00	U	120.00	1,110
Demineralizer Pumps	IN	4	1.00	4.00	312.40	1,250	0.00	0	120.00	400
Waste Water Piping	IN	1	120.87	120.87	312.40	37,760	0.00	0	120.00	14,504
Waste Water Piping Supports	IN	1	9.70	9.70	312.40	3,030	0.00	U 00.045	120.00	1,104
Waste Water Foundations	CY	1	255.00	255.00	91.20	23,256	113.00	28,815	00.0	0
Waste Water Pumps	TN	20	0.25	5.00	312.40	1,562	0.00	U	120.00	500
Oily Water Separator Tanks (2,500 gl & 125,0	TN	1	43.43	43.43	312.40	13,568	0.00	0	120.00	5,212
Subtotal						377,377		263,193		72,765
Fuel Oil Processing				1			445.55		0.00	
Concrete Foundations	CY	1	49.80	49.80	91.20	4,542	113.00	5,627	0.00	U 15 (00
Steel Supports	TN	1	128.90	128.90	312.40	40,268	0.00	0	120.00	15,468
Subtotal						44,810		5,62/		15,468
Total Account 341						857,953		1,062,532	:	105,068
FERC Account 342 Fuel Holders Fuel Oil Equipment										
Blowdown and Waste Water Tanks - 125.000	TN	3	421.48	1,264.44	n/a	102,270	n/a	0	120.00	151,733
SE Fuel Oil Tank - 125,000 bbl	ŤN	1	104.00	104.00	n/a	34,090	n/a	0	120.00	12,480
Fuel Oil Storage Tank - 25,000 bbl	TN	1	103.77	103.77	n/a	34,090	n/a	0	120.00	12,452

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		Number	Units		Removal		Disposal		Salvage	
		of	of Measure	Total	Cost per	Total	Cost per	Total	Value	Total
Removal, Disposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	unit of	Disposal	per Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Fuel Oil Storage Tank - 100,000 bbl	TN	1	337.18	337,18	n/a	0	n/a	0	120.00	40,462
Cleaning Fuel Oil Storage Tanks					n/a	0	n/a	225,000	0.00	0.
Remove Sand Base - Fuel Oil Storage Tanks					n/a	0	n/a	141,110	0.00	0
Concrete	CY	1	519.90	519.90	91.20	47,415	113.00	58,749	0.00	o
Jib Crane	TN	1	3.00	3.00	234.30	703	0.00	0	120.00	360
Fuel Oil Piping	TN	1	148.90	148.90	312.40	46,516	0.00	0	120.00	17,868
Insulation for Fuel Oil Piping (15,447 If)	CY	1	411.92	411.92	71.00	29,246	16.00	6,591	0.00	0
Fuel Oil Pump	TN	1	1.25	1.25	312.40	391	0.00	0	120.00	150
Fuet Transfer Pumps	TN	2	1.25	2.50	312.40	781	0.00	o	120.00	300
Fuel Treatment Equipment	TN	1	137.50	137.50	312.40	42,955	0.00	o	120.00	16,500
Fire Foam Protection System Piping	TN	1	31.77	31.77	312.40	9,925	0.00	0	120.00	3.812
Pipe Supports	TN	1	27,70	27.70	312,40	8,653	0.00	ō	120.00	3.324
Heat Exchangers	TN	4	0.77	3.08	312.40	962	0.00	a	120.00	370
Vanadium Tank (90.000 gl)	TN	1	29.10	29.10	312 40	9 091	0.00	ő	120.00	3 /92
Subtotal					-12.10	367.088	0.00	431 449	120.00	263 303
						001,000		614,104		200,000
Boiler Equipment										
Auxiliary Steam Boiler Fourinment	TN	1	80.00	80.00	234 30	19 744	0.00	<u> </u>	100.00	0.000
Subtotal	114	•	00.00	00.00	234.30	10,744	0.00		120,00	9,600
						18,744		U		9,600
Miscellaneous Steel & Equipment	TN	1	138.90	138.90	504.10	70,019	0.00	0	120.00	16,668
Total Account 342						455 852		421 440		280 574
						400,002		401,448		209,571
FERC Account 343										
Prime Movers										
Cooling Water Pumps	TN	2	2.00	4 00	312.40	4 250	0.00		100.00	400
Feedwater Treatment Equipment Equindation	CY		112.00	112.00	01.20	1,200	112.00	40.050	120,00	480
Brine System			2.00	2 00	312.40	825	113.00	12,000	430.00	0
Chemical Feed System	TM		2.00	5.00	312.40	020	0.00		120.00	240
Paul Mater Bumps	TN	2	5.00	12.00	312.40	1,002	0.00	U	120.00	600
Dining	TN	3	4.00	12.00	312.40	3,749	0.00	U I	120.00	1,440
Pine Supporte	111		331,30	331.30	312.40	103,523	0.00	0	120.00	39,766
Pipe Josephers (0.000 /0	IN	1	20.50	20.50	312.40	6,404	0.00	0	120.00	2,460
Pipe Insulation (8,088 if)	CY	1	103.72	103.72	71.00	7,364	16.00	1,660	0.00	0
Fan Blower	TN	1	1.00	1.00	312.40	312	0.00	0	120.00	120
Subtotal						135,003		14,316		45,106
Miscellaneous Steel & Equipment	TN	1	18.74	18.74	504.10	9,447	0.00	0	120.00	2,249
Total Account 343						144,450		14,316		47,354
FERU ACCOUNT 345										
Accessory Electrical Equipment										
Foundations & Structures										
Manholes	CY	1	272.20	272.20	91.20	24,825	113.00	30,759	0.00	0
Steel Structures & Supports	ΤN	1	36.90	36.90	234.30	8,646	0.00	0	120.00	4.428
Equipment Foundations - Concrete	CY	1	240.00	240.00	91.20	21,888	113.00	27.120	0.00	
Subtotal						55.358		57.879		4 428
										1,120
Power and Conversion Equipment										
Main Power Transformer	TN	4	116.50	932.00	504.10	469,821	0.00	0	120.00	111,840

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		Number	Units of Measure	Total	Removal	Tatat	Disposal	7-4-1	Salvage	T -4-1
Removal, Disposal & Salvane	Unit of	Compos	UI Measure	i Inite of	Unit of	Personal	Cost per	i otal Diananal	Value	lotar
Cost Worksheet	Measure	nenfs	Component	Measuro	Measure	Removal		Disposal	per Unit of	Salvage
Auxiliary Power Transformer	TN	2	19.00	76.00	504.10	38 312			Measure 120.00	value 0.120
Heat Recovery Steam Generator Transforme	TN	4	4 00	32.00	504.10	30,312 16 131	0.00	0	120.00	9,120
Motor Control Center Transformers	TN	16	2.00	R4 00	504.10	32 262	0.00	0	120.00	3,040
Transformer Copper	TN	10	2.00	41.60	525.40	21 857	0.00	ő	5 000 00	200,000
Storage Battery Systems	TN	3	3.75	11 25	504.10	5 671	0.00	0	120.00	200,000
Emergency Diesel Generator	TN	1	8.00	8.00	504 10	4 033	0.00	ő	120.00	060
Subtotal						588.087	0.00		120.00	342 700
						000,001		Ŭ		342,180
Conduit, Insulators and Conductors					1			ĺ		
Underground Conduit	TN	1	15.40	15,40	504.10	7.783	0.00	Ó	120.00	1 848
Concrete	CY	1	103.00	103.00	91.20	9,394	113.00	11.639	0.00	1,040
Control Wiring	TN	1	110.41	110.41	852.00	94,069	0.00	0	2,100,00	231 861
Power Wiring	TN	1	45.75	45.75	852.00	38 979	0.00	ň	2 100 00	96 075
Exposed Conduit	TN	1	38,10	38.10	504.10	19,206	0.00	ő	120.00	4 572
Cable Trays	TN	1	18,17	18.17	504.10	9,159	0.00	ő	120.00	2 180
Lighting Cable	TN	1	2.96	2.96	852.00	2.522	0.00	ň	2 100 00	6 216
Miscellaneous Cable	TN	1	7.00	7.00	852.00	5,964	0.00	ň	2 100 00	14 700
Subtotal						187.057		11.639	2,,,,,,,,,	357 452
						,				007,102
Switching, Control and Protection Equipment										
Switchgear - 4,160v Metalclad	TN	1	40.00	40.00	504.10	20,164	0.00	0	120.00	4.800
Disconnect Switches	TN	11	2.35	25,85	504.10	13,031	0.00	0	120.00	3,102
Lightning and Surge Protection	TN	6	0.25	1.50	504.10	756	0.00	ol	120.00	180
Station Grounding System	TN	1	10.68	10.68	504.10	5,384	0.00	0	120.00	1,282
Potential Transformers	TN	12	0.60	7.20	504.10	3,630	0.00	0	120.00	864
Subtotal						42,964		0		10,228
Total Account 345						873,466		69,518		714,898
						1				
EEBC Account 346										
Miscellareous Power Clant Equipment										
Compressed Air System	TN	4	22.50	22 50	242.40	40.405	• • •			
Total Account 346	114		33.00	33.50	312,40	10,465	0.00		120.00	4,020
						10,465		0		4,020
TOTAL PUTNAM COMMON			•			2 342 187		1 577 915		1 180 010
						2,042,101		1,017,010		1,160,912
PUTNAM UNITS 1 & 2										
FERC Account 341						1				
Other Buildings										
Concrete	CY	1	442.80	442.80	91.20	40.383	113.00	50.036	0.00	n
Structural Steel	TN	1	6.10	6.10	234.30	1,429	0.00	0	120.00	732
Steam Turbine Enclosure	TN	1	33.00	66.00	312.40	20,618	0.00	0	120.00	7 920
Steam Turbine Enclosure - Mechanical Skid	TN	1	13.17	26.34	234.30	6,171	0.00	ő	120.00	3 161
Steam Turbine Enclosure - General Auxiliary	TN	1	11.54	23.08	234.30	5.408	0.00	ň	120.00	2 770
Gas Turbine Enclosure	TN	2	39.00	156.00	312.40	48,734	0.00	ñ	120.00	18 720
Gas Turbine Enclosure - Mechanical Skid	TN	2	11.03	44.12	234.30	10,337	0.00	0	120.00	5 294
Gas Turbine Enclosure - General Auxiliary Sk	TN	2	11.54	46.16	234.30	10,815	0.00	0	120.00	5 539
Heat Recovery Steam Generator Enclosure	TN	2	33.00	132.00	312.40	41,237	0.00	0	120.00	15.840
HRSG Enclosure - Auxiliary Skid	TN	2	13.97	55.88	234.30	13,093	0.00	0	120.00	6,706

Removal, Disposal & Salvage	Unit of	Number of Compo-	Units of Measure per	Total Units of	Removal Cost per Unit of	Total Removal	Disposal Cost per unit of	Total Disposal	Salvage Value per Unit of	Total Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Enclosure Foundations	CY	1	3,240.00	3,240.00	91.20	295,488	113.00	366,120	0.00	0
Subtotal				1		493,715		416,158		66,682
Total Account 341						493,715		416,156	-	66,682
FERC Account 343										
Prime Movers)						
Gas Turbine	TN	2	131.00	524.00	177.50	93,010	0.00	0	120.00	62,880
Gas Turbine - Starting Package	ŤN	2	16.00	64.00	234.30	14,995	0.00	0	120.00	7,680
Heat Recovery Steam Generator	TN	2	735.00	2,940.00	177.50	521,850	0.00	0	120.00	352,800
Heat Recovery Steam Generator - Aux. Pack	TN	2	40.25	161.00	234.30	37,722	0.00	0	120,00	19,320
High Pressure Steam Drum	TN	2	24.00	96.00	234.30	22,493	0.00	0	120.00	11,520
Boiler Blowdown Tank	TN	2	1.10	4.40	312.40	1,375	0.00	0	120.00	528
Boller Feed Pumps (including motors)	TN	2	7.53	30,12	312.40	9,409	0.00	0	120.00	3,614
Concrete	CY	1	100.90	100.90	91.20	9,202	113.00	11,402	0.00	0
Condensate Storage Tank - 150,000 gi	IN	1	41.25	82.50	312.40	25,773	0.00	0	120.00	9,900
Condensate Storage Lank Foundation	CY	1	105.00	210.00	91.20	19,152	113.00	23,730	0.00	0
Condensate Pumps and Motors	TN	2	3.49	13.96	312.40	4,361	0.00	0	120.00	1,675
Condensate Pump Foundations	CY	2	B.UU 2.40	24.00	91.20	2,189	113.00	2,712	0.00	0
Stacks	IN	4	3.43	27.44	312.40	8,5/2	0.00		120.00	3,293
Subtoral						770,104		37,844		473,210
Miscellaneous Steel & Equipment	TN	1	92.57	92.57	504.10	46,665	0.00	0	120.00	11,108
Total Account 343						816,768		37,844	-	484,319
FERC Account 344										
Generator Units										
Steam Turbine Generator Unit	TN	2	302.00	604.00	177.50	107,210	0.00	0	120.00	72,480
Steam Turbine Generator Unit - Mech. Aux. F	TN	2	45.25	90.50	234.30	21,204	0.00	0	120.00	10,860
Reinforced Concrete Pedestal	CY	2	990.00	1,980.00	91.20	180,576	113.00	223,740	0.00	0
Turbine Copper	TN	2	35.00	70.00	695.80	48,706	0.00	0	5,000.00	350,000
Gas Turbine Generator	TN	2	155.50	622.00	177.50	110,405	0.00	0	120.00	74,640
Gas Turbine Generator - Mech. Aux. Package	TN	2	50.07	200,28	234.30	46,926	0.00	0	120.00	24,034
Heat Exchangers	TN	2	6.00	24.00	312.40	7,498	0.00	0	120.00	2,880
Stack	TN	4	-9.80	78.40	312.40	24,492	0,00	0	120.00	9,408
Piping	TN	1	8.42	8.42	312.40	2,630	0.00	0	120.00	1,010
Pipe Racks and Supports Subtotal	TN	1	72.30	72.30	312.40	22,587	0.00	223 740	120.00 -	8,676 553,988
						012,200		220,1-10		000,000
Condensers and Auxiliaries	-					10 700				
	IN	1	26.78	53.56	312.40	16,732	0.00	0	120.00	6,427
Main Condenser	IN	1	122.73	245.46	234.30	57,511	0.00	0	120.00	29,455
Condenser Mad	CY	2	105.00	210.00	91.20	19,152	113.00	23,730	0.00	0
Condenser - Aluminum-Brass Tubes	IN	1	/1.27	142.54	504.10	71,854	0.00	0	2,800.00	399,112
Auxiliary Circulating water Pumps		3	3.30	10.08	312.40	3,149	0.00	0	120.00	1,210
Circulating water Pumps	IN	2	14.45	57.80	312.40	18,057	0.00	0	120.00	6,936
Condensate Pumps	TN	1	3,13	6.26	312.40	1,956	0.00	0	120.00	751
Piping (4,15/ If)	IN	1	21.57	21.57	312.40	6,738	0.00	0	120.00	2,588
Air Ejectors	IN	2	1.23	4.92	312.40	1,537	0.00	0	120.00	590
ribooing and Phming Electors		1	1.23	2.46	a 312.40	769	0.00	0.1	120.00	295

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Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Subtotal						197,455		23,730		447,365
Miscellaneous Steel & Equipment	TN	1	66.12	66.12	504.10	33,331	0.00	O	120.00	7,934
Total Account 344						803,020		247,470		1,009,288
TOTAL PUTNAM UNITS 1 & 2						2,113,502		701,470		1,560,288
TOTAL PUTNAM COMMON, UNITS 1 & 2						4,455,689		2,279,285		2,721,200

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<u>Riviera Plant</u>

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<u>Riviera Plant</u>

The Riviera Plant is located on a 21.7-acre oceanfront site at Riviera Beach, which is approximately 10 miles north of the city of West Palm Beach, Florida. The site consists of two generating units, a switchyard, and all related facilities for a commercial generating station. The original Ebasco Service design for Units No. 3 & 4 was for natural gas or oil-fired operation. The plant has a once-through cooling system using the Atlantic Ocean for both intake and discharge. The two units have a combined maximum generator nameplate rating of 621 megawatts. Units No. 3 and 4 went into commercial operation during 1962 and 1963 respectively. For purposes of this dismantlement study, the estimated retirement dates for these units are as follows:

<u>Unit</u>	<u>Year</u>
Unit 3	2011
Unit 4	2011
Common	2011

The dismantlement of the plants is assumed begin immediately upon their removal from service to accommodate the modernization schedule.

Units No. 3 and 4 essentially consist of one complete General Electric Company condensing steam turbine coupled to a hydrogen-cooled electric generator. Each unit has a Foster Wheeler Corporation outdoor, front-fired, natural circulation, waterwall, radiant-convection, reheat type steam generator. Although normally fueled by natural gas, the units can alternatively be operated by #6 heavy oil. Fuel, oil or gas, is provided primarily through separate pipelines from the Port of Palm Beach, but can also be fed from barges or ships via the ocean. Control of emissions is through mechanical collectors and through controlled sulfur content of the fuel.

Florida Power & Light Company last requested and received approval for dismantlement accruals for the Riviera plant in Docket No. 070378-EI, Order No. PSC-08-0095-PAA-EI, issued on February 14, 2008. The current accruals became effective as of January 1, 2007.

RIVIERA SUMMARY OF DISMANTLEMENT COSTS

		Removal	Disposal	Salvage	
FERC		Cost	Cost	Value	Total
Account	Description	(A)	(B)	(C)	(D)=(A + B • C)
	Production Plant		<u> </u>	·····	
	Riviera Common				
311	Structures and Improvements	951,681	2,437,640	318,514	3,070,808
312	Boiler Plant Equipment	13,318	13,260	1,474	25,104
314	Turbogenerator Units	0	0	0	0
315	Accessory Electrical Equipment	15,486	0	74,500	(59,014)
316	Miscellaneous Equipment	1,637	0	732	905
	Subtotal	982,122	2,450,900	395,219	3,037,803
	Other City Contra				
	Site Management Expense	584 084			564 094
	Stocke Disposal & Special Masta	439 700			304,804
	Inteke & Discharge Rackfill	123 371			438,700
	Gradina & Seedina	1 551 328			1 551 338
	Subtotal	2 679 383	0	0	2 679 383
		2,010,000	•		2,013,000
	Total	3,661,505	2,450,900	395,219	5.717.186
	Contingency - 16%	585,841	392,144		977,985
	Total Riviera Common	4,247,346	2,843,044	395,219	6,695,171
	Unusable M&S Inventory	1,474,833		147,483	1,327,350
		5,722,179	2,843,044	542,703	8,022,520
944	Riviera Units 3 & 4				
311	Structures and Improvements	1,959,520	1,184,964	91,807	3,052,677
214	Turbosoperator Linita	3,343,260	330,007	1,391,850	2,490,045
315	Accessory Electrical Equipment	1,304,143	314,373	1,962,/52	(84,234)
316	Miscellaneous Equipment	320,749	51,124	//0,/03	(300,201)
510	Subtotal	7 997 701	1 033 669	4 2 22 162	5 109 207
	Contingency - 16%	1 183 632	1,555,005	4,223,102	5,108,207
	Total Rivera Units 3 & 4	8 581 333	2 243 055	4 223 162	6 601 226
		0,001,000	2,270,000	7,220,102	0,001,220
	Total Dismantlement Costs	14,303,512	5,086,099	4,765,865	14,623,746
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RIVIERA

DISMANTI	EMENT	COST FOR	INFLATION	PROJECTION
DISMANIL	EMENI	CUSIFUR		FIVOREALIAU

Description	Labor (A)	Material & Equipment (B)	Burial (C)	Salvage (D)	Total (A) + (B) + (C) - (D)
Riviera Common	2,548,407	3,173,771	2,843,044	542,703	8,022,520
Riviera Units 3 & 4	5,148,800	3,432,533	2,243,055	4,223,162	6,601,226
Total	7,697,207	6,606,305	5,086,099	4,765,865	14,623,746
			· - ·		

Labor is 60% of Removal Cost from Summary of Dismantlement Costs. Material & Equipment is 40% of Removal Cost from Summary of Dismantlement Costs. Burial is 100% of Disposal Cost from Summary of Dismantlement Costs. Salvage is 100% of Salvage from Summary of Dismantlement Costs.

RIVIERA DISMANTLEMENT ASSUMPTIONS

FPL will provide management personnel for the dismantlement effort.

FPL will prepare the request for proposal package and solicit bids for the dismantlement effort.

FPL will provide site security during the dismantlement.

FPL will hire a demolition contractor to perform the actual dismantling work. This contractor will have the salvage rights to all plant equipment and structural material.

The land will be made available for future use.

All dismantling work will be done in accordance with OSHA regulations.

The fuel oil storage tanks will be cleaned and their contents disposed of according to the requirements of current regulations.

The following items will be removed:

- a. All structures, equipment, and concrete pads, pedestals, foundations, etc;
- b. All underground gas, oil, sewer and water piping and electrical conduits;
- c. All hazardous and contaminated materials, e.g., acid filled lead batteries, oil tank residue.

Discussions with FPL's Power Generation Division (PGD) indicate that the return of the site to a green field condition entails removal of all structures above the wood pilings and steel-encased concrete pilings. The removal of the pilings would be unfeasible and, therefore, will remain in place.

Only the first 100 feet of each 2,330 foot run of 90 inch sub-aqueous concrete discharge piping will be collapsed and backfilled, because collapsing and backfilling the remainder would disturb the underwater environment of Lake Worth.

Scrap will be unprepared, i.e., cut only to the extent required to load the pieces on scrap dealers' trailers. Trucking costs for removal are paid by the scrap dealer and are reflected in the salvage value paid.

The estimate does not reflect land value or its resale.

The productivity factors employed are assumed valid for purposes of this study.

A contingency of 16% has been applied to the total removal and disposal costs. This contingency percentage covers costs associated with delays occurring after dismantlement begins due to such causes as equipment failure and weather delays.

The costs of such overhead items as project management, site security, etc., have been estimated by FPL's Construction and Corporate Services Department. These costs are listed on the cost summary pages for each site's dismantlement study.

All materials and equipment are assumed to be either fully salvageable or to be disposed of completely. The availability of powerful cutting shears makes possible the cutting of even the heaviest steel to a size that permits salvage as scrap. Any unusable materials and supplies inventory will be sold as scrap. Estimated balances of such inventory (with related salvage value) have been included on the cost summary pages for each site's dismantlement study.

A 30% swell factor is used to compute the disposal cost per cubic yard of concrete. One cubic yard of concrete becomes 1.3 cubic yards of concrete rubble after demolition.

RIVIERA DISMANTLEMENT ASSUMPTIONS (continued)

The switchyard and ancillary equipment (FERC account 353) will remain in place with the exception of the main power transformers, oil circuit breakers, superstructures, and foundations associated with the tie-in of plant generated power in the switchyard. However the dismantlement cost of substation equipment is not included in this study, so as to avoid duplicating the recovery of costs already included in the net salvage factors of the substation plant accounts' depreciation rates.

An expandable grout will be used to dismantle the turbine pedestals. The chimneys will be control-blasted.

The dismantlement of the plants is assumed begin immediately upon their removal from service to accommodate the modernization schedule. The economic recovery dates used for this assumption are as follows:

<u>Units</u>	Economic Recovery Dates
Unit 3	2011
Unit 4	2011
Common	2011

Though some asbestos abatement activity has occurred at Riviera, some amounts of asbestos remain and can be expected to require abatement at final dismantlement. FPL's asbestos abatement contractor, Environmental Services, Inc. has estimated the cost of asbestos removal and disposal at \$1,350 per cubic yard. FPL's environmental department recently completed a survey of asbestos quantities at our fossil sites, which estimated the cost to abate the remaining asbestos at Riviera at \$1,136,520.

DISMANTLING ACTIVITIES: OIL & GAS AND OTHER PRODUCTION PLANTS

- Remove loose equipment, furniture, and spare parts.
- Drain liquids, drum-up, and dispose of drums.
- Remove hazardous materials; i.e., leads (alkaline), acids, solvents, lubricants, oils, chemicals, and gasses.
- Strip all insulation and covering, package and remove to acceptable landfill.
- Collapse circulating water lines and backfill trenches.
- Remove main steam, hot and cold piping, downcomers, valves, and supports, pumps, motors, generator auxiliary equipment, feedwater heaters, soot blowers, and condensers.
- Remove intake and discharge structures, equipment pumps, piping and valves.
- Remove systems that must be completed prior to the start of the boiler removal including lube oil pumps, all piping, instrument and electrical systems.
- Remove forced drafts and induced draft ductwork, air heaters and fans.
- Remove hoppers, burners, upper and lower headers, manways, and waterwalls.
- Remove heavy steel structures and above ground steel precut key members, lower and cut at ground level.
- Disassemble crane, boiler feed pumps, and turbine generator.
- Separate scrap metals, and remove to scrap yard.
- Remove and dispose of miscellaneous rubble.
- Remove turbine pedestal, foundation, and heavy concrete structures and building, stack foundations, equipment foundations, substructures, support buildings and stacks. Remove to landfill.
- Cut off piles and remove pile caps. Remove concrete encased duct banks and underground piping.
- Remove septic tank and backfill.
- Remove underground storage tanks.
- Test and remove contaminated soil/bases all areas.
- Install environmental monitoring equipment, for example, at wells.
- Remove or improve remaining site facilities such as buildings, fences, parking areas in accordance with local code and regulations.
- Install/modify existing site storm water runoff system.

DISMANTLING ACTIVITIES: OIL & GAS AND OTHER PRODUCTION PLANTS (Continued)

- Remove gas supply metering site, valve stations, underground distribution system.
- Remove solid and liquid wastes from waste treatment processing areas landfilled material, precipitated material in ponds and tanks, contaminated resins and reactants.
- Remove marine facilities such as fuel unloading docks, equipment, bridges, and dams.
- Cut and remove fuel oil tanks, piping, valves, and supports.
- Remove top soil/gravel, backfill, and remove barrier wall foundation.
- Backfill, site grading, seeding and mulching.

DEVELOPMENT OF COST FACTORS

Cost factors have been developed to compute the net salvage value of the demolition of the Riviera Plant. The net salvage value of the demolition is the net of: the removal and disposal cost and the salvage value of equipment and steel not disposed of. These factors provide a unit cost or value for removal, disposal and salvage of a given unit of measure of the component materials of which a power plant is constructed. The assumption is that the cost or value per unit of a given component can be multiplied by the quantity of that component in the plant to calculate a total cost or value for removal, disposal, or salvage of that component.

REMOVAL COST FACTORS

The removal cost factors developed for this study have two elements: a burdened labor rate and productivity factor. The burdened labor rate multiplied by the productivity factor yields the removal cost factor. The labor rates used in this study are from R.S. Means Construction Data. The crew rate per man-hour is for a crew consisting of six journeymen laborers, one outside foreman and one heavy equipment operator - a typical crew for demolition work. The rate includes the cost per man-hour of a crane, an excavator, and a front end loader. The equipment cost is also from R.S. Means, and both equipment and labor are adjusted by the appropriate R.S. Means City Cost Index. (Means provides national average rates for labor and equipment which are then adjusted by City Cost Indexes to arrive at the appropriate rate for a given region.) The productivity factors employed, e.g., the number of man-hours required to remove a given unit of measure of concrete, were developed by an engineering consulting firm. These factors are assumed valid for purposes of this study.

Labor Rate

Labor rates are for non-union crews and the per crew hour rate is based on a forty hour week.

Labor		\$33.14	Х	6	·	=	\$198.86
Foreman		\$42.08	Х	1		=	42.08
Heavy Equipment Operator			х	1		=	40.10
Total Cost per hour of 8 man crew							\$281.03
Cost per man hour			\$281.03	1	8 :	=	\$35.13
Equipment Rate							
The equipment rate is based on the following	equipment:						
Crane/Excavator							27,874.28
Front End Loader							6,234.15
Cutting Equipment							231.75
Total per month							\$34,340.18
34,340.18 /	176		hours per	mor	nth =		195.11
Cost per man hour			\$195.11	1	8 :	=	\$24.39
Plus: amount for small tools							1.07
Total Cost per man hour							\$25.46

Equipment & Labor Summary

Labor Equipment Total	\$35.13 25.46 \$60.58
Rounded	\$61.00
For Concrete demolition add \$5.00 per hour additional equipment charge.	\$66.00

The Removal Cost Factor is the product of the productivity factor for removal of a particular component multiplied by the total burdened hourly labor rate. The removal cost factors for all materials to be removed from FPL's sites are as follows:

Components	<u>Hourly Rate</u>	Productivity Factor	Removal Factor
Extra Heavy Steel (1)	\$61.00	2.50 MH / Ton	\$152.50 / Ton
Heavy Steel (2)	\$61.00	3.30 MH / Ton	\$201.30 / Ton
General Steel	\$61.00	4.40 MH / Ton	\$268.40 / Ton
Light Steel	\$61.00	7.10 MH / Ton	\$433.10 / Ton
Concrete	\$66.00	0.48 MH / CY	\$31.68 / CY
Reinforced Concrete	\$66.00	1.20 MH / CY	\$79.20 / CY
Copper-Elect. Cable &			
Generator Leads &	\$61.00	12.00 MH / Ton	\$732.00 / Ton
Copper - Generator	\$61.00	9.80 MH / Ton	\$597.80 / Ton
Copper - Transformer	\$61.00	7.40 MH / Ton	\$451.40 / Ton
General Insulation	\$61.00	1.00 MH / CY	\$61.00 / CY
Inground Pipe-Metal(3)	\$61.00	6.00 MH / Ton	\$366.00 / Ton
Concrete Pipe	\$66.00	4.60 MH / Ton	\$303.60 / CY

(1) Includes turbine generator.

(2) Includes parts of the steam generator, pipe larger than 8 inches.

(3) Includes cost to backfill the trenches.

DISPOSAL COST FACTORS

Three cost factors were developed to compute the cost of disposal of non-hazardous wastes at the Solid Waste Authority of PBC located at 6554 North Jog Road in West Palm Beach, Florida. Concrete and calcium silicated insulation are all non-hazardous wastes. The tipping fee of \$28/ton was obtained from the Palm Beach County Landfill. The dumpster charges, obtained from Southern Waste Systems, are \$375 per haul for 20 cubic yard and \$475 per haul for a 30 cubic yard dumpster.

Cost factors were also developed to compute the cost of removal and disposal of oil tanks, including the cost of related soil remediation. Such costs are computed for each tank in FPL's system, and are located appropriately in the detailed spreadsheet.

Concrete

One cubic yard of concrete in place weighs 3,950 pounds. One cubic yard becomes 1.3 cubic yards after demolition. Each load will contain 15.38 cubic yards (20 cu. yds./1.3) of in place concrete. 15.38 cubic yards weighs 61,000 pounds or 30.50 tons.

Dumpster Charge		\$375.00	/haul	Х	1 haul	=	375.00
Tipping Fees	1	\$28.00	/ ton	Х	30.5 tons	=	854.00
Total Cost per round Trip						-	1,229.00
Cost per Cubic Yard		\$1,229.00	/ 15.3	3 cubic y	ards =		\$79.91
Plus 10% contractor profit						_	7.99
Total Cost per Cubic Yard							\$87.90
						•	
Rounded Cost per Cubic Yard							\$88.00

Insulation

For purposes of this computation the dumpster is assumed to be 90% full (although the tipping fee is based on the assumption of 100% full truck - i.e., the weight to volume conversion uses 30 cubic yards - the full volume of the dumpster). A cubic yard of insulation weighs 121.5 pounds or .060750 tons. 30 cubic yards times .060750 tons/cubic yard = 1.82 tons.

Calcium Silicate Insulation						
Dumpster Charge	\$475.00	/haul	Х	1 haul		\$475.00
Tipping Fees	\$28.00	/ ton	Х	1.82 tons	=	50.96
Total Cost per round Trip					•	\$525.96
Cost per Cubic Yard	\$525.96	/ 27 cul	bic yards =			\$19.48
Plus 10% contractor profit						1.95
Total Cost per Cubic Yard					-	\$21.43
Rounded Cost per Cubic Yard					-	\$21.00

SALVAGE VALUE FACTORS

The salvage value factors, presented in dollars per ton, were provided by scrap metals dealers. The list covers all salvageable materials recovered from FPL sites.

Iron & Steel	\$120 / ton
Stainless Steel	\$2,000 / ton
Aluminum (Sheet Metal)	\$1,340 / ton
Wire & Cable:	
- Insulated Copper	\$2,100 / ton
- Insulated Aluminum	\$1,020 / ton
Copper	\$5,000 / ton
Nickel Alloys	
- 70/30 Cupro-Nickel	\$4,000 / ton
- 80/20 Cupro-Nickel	\$6,000 / ton
- Monel	\$10,000 / ton
Admiralty Brass	\$3,600 / ton
Aluminum Brass	\$2,800 / ton
Titanium	\$4,000 / ton

OTHER SITE COSTS

Site Management Expenses

Site management expenses refer to FPL's management costs and contractors' expenses associated with the dismantlement project. The cost factors provided by FPL's Power Generation Division (PGD) and updated by Construction Estimating are: FPL expenses of \$21,134 per month, both office and site, and contractor's expenses of \$25,948 per month for site indirect costs. These expenses are to be incurred over the 18 month dismantlement period for the Sanford Plant. FPL's management costs include administration, engineering, permit costs and various other costs. Contractors' expenses include field management, supervison, security, etc..

Site Management Expenses per month	\$47,082
Number of months	12.00
Total Site Management Expenses	\$564,984

Intake & Discharge Backfill

FPL's PGD developed this cost factor on the basis of a typical such structure for FPL's production plants. The assumption is that a volume of 1,600 cubic yards for the intake and 1,120 cubic yards for the discharge will need to be filled. Construction Estimating has updated the costs. The charge for the intake is \$44,128; the cost for the discharge is \$35,115. Riviera has 2 Intakes and 1 Discharge:

	<u>Cost/Unit</u>	<u>Quantity</u>	
Intakes	\$44,128	2	\$88,256
Discharges:	\$35, 115	1	\$35,115
Total Cost:		-	\$123,371

Grading and Seeding

This cost refers to the restoration of the dismantled area to a green field area. The land is filled with sand, spread with topsoil and then seeded. The cost factor provided by PGD and updated by Construction Estimating is \$63,579 per acre. The acreage was determined for each site by reviewing engineering drawings to determine the areas requiring this effort. Assumptions underlying this factor include 2,000 cubic yards per acre to be backfilled and 968 cubic yards per acre of topsoil to be spread and seeded.

Riviera Acreage to be graded and seeded Cost Factor Total Grading and Seeding Expense

24.4	
\$63,579	
\$1,551,328	

Other Site Contamination & Special Waste

Florida Power & Light's Environmental Department has provided the following information about certain environmental related costs at the company's generating stations. At Riviera, the following cost estimates have been identified:

<u>Description</u>	Amount
Asbestos [see Units 3 & 4 detail]	\$1,136,520
Lead in paint	15,300
Basins Clean Out/Material	75,000
Special Waste	122,500
Tanks/Washwater	56,250
Soil/Other Contamination	170,650
Total	\$1,576,220

RIVIERA	DISMANTL	EMENT	STUDY
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Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost Per Item	Disposal Cost per Unit of Measure	Dispo s al Portion per Item	Salvage Value per Unit of Measure	Realizable Salvage Value per Item
RIVIERA COMMON										
FERC Account 311						Ì				
Improvements to Site										_
Concrete - Roads	CY	1	1,030.58	1,030.58	31.68	32,649	88.00	90,691	0.00	U
Concrete - Yard Paving	GY	1	494.67	494.67	31.68	15,671	88.00	43,531	0.00	0.070
Potable & Sanit Water Lines-Cast Iron	TN	1	18.93	18.93	366.00	6,928	0.00	0	120.00	2,272
Fire Protection System	TN	1	2.88	2.88	433.10	1,247	0.00	0	120.00	340
Sewer System - Cast Iron	IN	1	1.69	1.69	366.00	619	0.00	U	120.00	203
Sewer System - Concrete	IN	1	191.72	191.72	303.60	58,206	0.00	0	0.00	
Manholes & Catch Basins	CY	1	38.31	38.31	79.20	3,034	88.00	3,3/1	0.00	2 820
Subtotal						118,355		137,593		2,620
Condensing and Service Water System										
Water Treatment Equipment	TN	1	45.00	45.00	268.40	12,078	0.00	0	120.00	5,400
Water Treatment Area Slab	CY	1	271.00	271.00	79.20	21,463	88.00	23,848	0.00	0
Elevated Water Tank - 75,000 gi	TN	1	128.61	128.61	268.40	34,519	0.00	0	120.00	15,433
Service Water Supply Sys - Cast Iron	TN	1	85.08	85.08	366.00	31,139	0.00	0	120.00	10,210
Disch Piping-90" Concrete Pipe(200 ft)	TN	1	274.00	274.00	303.60	83,186	0.00	0	0.00	0
Subtotal						182,386		23,848		31,043
Station Structures										
Administration Bldg - Struct Steel	TN	1	380.00	380.00	201.30	76,494	0.00	0	120.00	45,600
Administration Building - Concrete	CY	1	3,676.00	3,676.00	79.20	291,139	88.00	323,488	0.00	0
Station Crane	ΤN	1	96.75	96.75	201.30	19,476	0.00	0	120.00	11,610
Elevator	TN	1	37.60	37.60	201.30	7,569	0.00	0	120.00	4,512
Subtotal						394,678		323,488		61,722
Fuel & Ash Structures										
Fuel Oil Storage Tank - 268,000 bbl	TN	1	925.00	925.00	n/a	51,136	0.00	0	120.00	111,000
Fuel Oil Storage Tank - 130,000 bbl	TN	1	424.89	424.89	n/a	34,090	0.00	0	120.00	50,987
Fuel Oil Storage Tank - 55,000 bbl	TN	2	230.00	460.00	n/a	68,180	0.00	0	120.00	55,200
Fuel Oil Storage Tank - 110,000 bbl-Fnd:	CY	1	400.00	400.00	n/a	n/a	n/a	95,645	0.00	0
Cleaning Fuel Oil Storage Tanks	BL,	1			n/a	n/a	n/a	1,500,000	0.00	0
Sand Base-Fuel Oil Storage Tanks	CY	1	-		n/a	n/a	n/a	254,590	0.00	U
Pump Slab & Foundations	CY	1	165.50	165.50	79.20	13,108	88.00	14,564	0.00	0
Fuel Oil Suction Heaters	TN	3	2.35	7.05	268.40	1,892	0.00	0	120.00	846
Chemical Storage Tanks	TN	1	7.80	7.80	268,40	2,094	0.00	0	120.00	936
Subtotal						170,499		1,864,799		218,969
Other Buildings										
Concrete	CY	1	999.00	999.00	79.20	79,121	88.00	87,912	0.00	0
Structural Steel	TN	1	33.00	33.00	201.30	6,643	0.00	0	120.00	3,960
Subtotal						85,764		87,912		3,960
Total Account 311						951,681		2,437,640		318,514

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Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost Per Item	Disposal Cost per Unit of Measure	Disposal Portion per ltem	Salvage Value per Unit of Measure	Realizable Salvage Value per Item
FERC Account 312					[
Boiler Plant Equipment										
Fuel Oil & Gas Equipment										
Metering Tank Foundation	CY	1	95.00	95.00	n/a	n/a	n/a	0	0.00	0
Fuel Oil Metering Tank - 5,000 bbl	TN	1	28.00	28.00	n/a	0	n/a	0	0.00	0
Cleaning Fuel Oil Storage Tanks	EA	1	1.00	1.00	n/a	n/a	n/a	0	0.00	0
Sand Base-Fuel Oil Storage Tanks	EA	1	1.00	1.00	n/a	n/a	n/a	0	0.00	0
Light Oil Tank	TN	1	12.28	12.28	n/a	6,818	n/a	0	120.00	1,474
Light Oil Foundation	CY	1	95.00	95.00	n/a	0	n/a	7,518	0.00	0
Cleaning of Light Oil Tank	BL	1	1.00	1.00	n/a	6,500	n/a	5,742	0.00	0
Total Account 312						13,318		13,260		1,474
FERC Account 315										
Accessory Electrical Equipment										
Power and Conversion Equipment										
Startup Transformer	TN	1	37.25	37.25	201.30	7,498	0.00	0	0.00	0
Transformer Copper	TN	1	14.90	14.90	451.40	6,726	0.00	0	5,000.00	74,500
Storage Battery Equipment	ΤN	1	4.70	4.70	268.40	1,261	0.00	0	0.00	0
Total Account 315						15,486				74,500
FERC Account 316									1	
Miscellaneous Power Plant Equipment										
Compressed Air System	TN	1	6.10	6.10	268.40	1,637	0.00	0	120.00	732
Total Account 316						1,637		0		732
TOTAL RIVIERA COMMON						982,122		2,450,900		395,219
RIVIERA UNITS 3 & 4										
FERC Account 311									1	
Condensing and Service Water System										
Intake Cooling Water Pumps	TN	2	1.15	4.60	268.40	1,235	0.00	0	120.00	552
Intake Structure - Concrete	CY	1	918.00	1,836.00	79.20	145,411	88.00	161,568	0.00	. 0
Intake Structure - Steel	TN	1	18.00	36.00	201.30	7,247	0.00	0	120.00	4,320
Traveling Water Screens	TN	2	13.28	53.12	201.30	10,693	0.00	0	120.00	6,374
Trash Rake	TN	1	0.55	1.10	433.10	476	0.00	0	120.00	132
Screen Wash Pumps	TN	1	0.52	1.04	433.10	450	0.00	0	120.00	125
Intake Conduit - 60" Concrete Pipe	CY	1	394.33	788.66	303.60	239,437	0.00	0	0.00	0
Concrete	CY	1	801.00	1,602.00	79.20	126,878	88.00	140,976	0.00	0
Discharge Conduit - 90" Concrete Pipe	CY	1	1,170.66	2,341.32	303.60	710,825	0.00	0	0.00	0
Concrete	CY	1	1,494.00	2,988.00	79.20	236,650	88.00	262,944	0.00	C
Seal Well Concrete Structure	CY	1	210.00	420.00	79.20	33,264	88.00	36,960	0.00	
Subtotal						1,512,566		602,448		11,503

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Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost Per item	Disposal Cost per Unit of Measure	Disposal Portion per Item	Salvage Value per Unit of Measure	Realizable Salvage Value per Item
Station Structures										
Concrete Pedestal Mat	CY	1	703.50	1,407.00	79.20	111,434	88.00	123,816	0.00	0
Structural Steel	ΤN	1	289.00	578.00	201.30	116,351	0.00	0	120.00	69,360
Miscellaneous Steel & Handrails	ΤN	1	39.50	79.00	268,40	21,204	0.00	0	120.00	9,480
Floors - Concrete	CY	1	1,175.25	2,350.50	31.68	74,464	88.00	206,844	0.00	0
Footings, Piers & Grade Beams	CY	1	1,120.00	2,240.00	31.68	70,963	88.00	197,120	0.00	0
Concrete Floodwall	CY	1	311.00	622.00	79.20	49,262	88.00	54,736	0.00	0
Misc. Cranes & Hoists	ΤN	1	6.10	12.20	268.40	3,274	0.00	0	120.00	1,464
Subtotal						446,953		582,516		80,304
Total Account 311						1,959,520		1,184,964		91,807
FERC Account 312										
Boiler Plant Equipment										
Fuel Qil & Gas Equipment										
Burner Pumps	TN	6	0.83	9.96	433.10	4,314	0,00	0	120.00	1,195
Fuel Oil Piping	TN	1	20.56	41.12	268.40	11,037	0.00	. 0	120.00	4,934
Forced Draft Fan Foundations	CY	1	138.75	277.50	79.20	21,978	88,00	24,420	0.00	0
Forced Draft Fans	TN	2	26.80	107.20	268.40	28,772	0.00	0	120.00	12,864
Forced Draft Fan Air Ducts	TN	1	40.00	80.00	268.40	21,472	0.00	0	120.00	9,600
Insulation for FD Fan Air Ducts	CY	1	8.00	16.00	61.00	976	21.00	336	0.00	0
Insulation for FD Fan Air Ducts	CY	1	48.27	36.54	61.00	2,229	21.00	767	0.00	
Sustotal						90,778		20,023		20,394
Boiler Equipment					ļ					
Boiler Frame	TN	1	950.00	1,900.00	201.30	382,470	0.00	0	120.00	228,000
Platforms, Grating & Handrails	TN	1	410.50	821.00	268.40	220,356	0.00	0	120.00	98,520
Boiler - including:	TN	1	3,188.18	6,376.36	201.30	1,283,561	0.00	0	120.00	765,163
Drum, Waterwall, Downcomers & Tubes										
Piping, Valves & Silencers					ł					
Radiant & Convection Superheaters										•
Reheater, Economizer & Sootblowers										
Air Preheaters					Ę					
Boiler Insulation	CY	1	281.00	562.00	1,250.00	702,500	100.00	56,200	0.00	0
Boiler Insulation	CY	1	40.00	80.00	61.00	4,880	21.00	1,660	0.00	0
Instrument Air Compressors	TN	1	2.00	4.00	268.40	1,074	0.00	0	120.00	480
Subtotal						2,594,841		57,880		1,092,163
Boiler Plant Auxiliaries										
Feedwater Heater #1	TN	1	51.20	102.40	268.40	27,484	0.00	0	120.00	12,288
Feedwater Heater #2	TN	1	32.85	65.70	268.40	17,634	0.00	0	120.00	7,884
Feedwater Heater #3	TN	1	10.85	21.70	268.40	5,824	0.00	0	120.00	2,604
Feedwater Heater #4	TN	1	12.70	25.40	268.40	6,817	0.00	0	120.00	3,048
Feedwater Heater #5	TN	1	13.05	26.10	268.40	7,005	0.00	0	120.00	3,132
Feedwater Heater #6	TN	1	12.80	25.60	268.40	6,871	0.00	0	120.00	3,072
Deaerator	TN	1	73.78	147.56	201.30	29,704	0.00	0	120.00	17,707
Boiler Feed Pumps (including motors)	TN	3	36.50	219.00	201.30	44,085	0.00	0	120.00	26,280
Concrete	CY	1	84.50	169.00	31.68	5,354	88.00	14,872	0.00	0
Condensate Storage Tank - 100,000 gl	TN	1	18.50	37.00	201.30	7,448	0.00	0	120.00	4,440
Condensate Storage Tank Foundation	CY	1	44.00	88.00	79.20	6,970	88.00	7,744	0.00	0
Heater Drain Pump	TN	1	0.83	1.66	433.10	719	0.00	0	120.00	199

		Number of	Units of Measure	Total	Removal Cost per	Total Removal	Disposal Cost per	Disposal	Salvage Value per	Realizable Salvage
Removal, Disposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Cost	Unit of	Portion	Unit of	Value per
Cost Worksheet	Measure	nents	Component	Measure	Measure	Per item	Measure	per Item	Measure	item
Condensate Recovery Tank - 2,600 gl	TN	1	5.60	11.20	268.40	3,006	0.00	0	120.00	1,344
Chemical Feed System	TN	1	5.00	10,00	268.40	2,684	0.00	0	120.00	1,200
Cooling Water Pump	TN	2	1.15	4.60	268.40	1,235	0.00	0	120.00	552
Cooling Water Heat Exchanger	TN	3	7.35	44.10	268.40	11,836	0.00	0	120.00	5,292
Cooling Water Surge Tank - 4,500 gl	TN	1	1.79	3.58	268.40	961	0.00	0	120.00	430
Subtotal						185,637		22,616		89,472
_								1		
Boiler Plant Piping		_						_	400.00	94.000
Piping, Valves and Fittings	TN	1	350.00	700.00	268.40	187,880	0.00	0	120.00	04,000
Pipe Insulation	CY	1	50.00	100.00	61.00	6,100	21.00	2,100	0.00	0
Pipe Insulation	CY	1	350.00	269.23	61.00	16,423	21.00	5,654	0.00	0
Subtotal						210,403		7,754		64,000
					1					
Induced Draft Equipment	01/		000 00	4 000 00	70.00	407 040	88.00	440 000	0.00	0
Stacks		1	553.00	1,326.00	79.20	105,019	88,00	10,000	120.00	16 800
Breeching	IN	1	70.00	140.00	200.40	37,578	0.00	400.036	120.00	10,000
Stack Foundation	CY TH	1	573.50	1,147.00	79.20	90,842	00.00	100,930	100.00	32 556
Ducts & Dust Collectors	IN:	. 1	135.65	2/1.30	268.40	72,817	0.00	0	120.00	41 136
Induced Draft Fans	IN ON	2	23.20	92.80	201.30	18,681	0,00	5 710	120.00	11,130
Fan Foundations	CY	2	14.80	59,20	/9.20	4,689	88.00	0,210	0.00	60.402
Subiotal					{	329,024		222,034		00,432.
Miscellaneous Steel & Equipment	TN	1	309.41	309.41	433.10	134,005	0.00	0	120.00	37,129
Total Account 312						3.545.288		336.607		1,391,850
					1	_, ,				
FERC Account 314										
Turbo-Generator Units										-
Pedestal Concrete	CY	1	1,413,50	2,827.00	79.20	223,898	88.00	248,776	0.00	0
Inserts & Anchor Bolts	TN	1	9.01	18.02	433.10	7,804	0.00	0	120.00	2,162
Turbo-Generator Unit	TN	1	852.00	1,704.00	152.50	259,860	0.00	0	120.00	204,480
Turbine Copper	TN	1	75.00	150.00	597.80	89,670	0.00	0	5,000.00	- 750,000
Turbine Piping	TN	1	220.00	440.00	268.40	118,096	0.00	0	120.00	52,800
Turbine Insulation - Asbestos	CY	1	140.00	280.00	1,250.00	350,000	100.00	28,000	0.00	0
Turbine Insulation	CY	1	630.00	1,260.00	61.00	76,860	21.00	26,460	0.00	0
Subtotał						1,126,189		303,236		1,009,442
Condensers and Auxiliaries										
Condenser Shell	TN	1	425.00	850.00	201.30	171,105	0.00	0	120.00	102,000
Condenser - Aluminum-Brass Tubes	TN	1	141.50	283.00	433.10	122,567	0,00	0	2,800.00	792,400
Circulating Water Pumps	TN	2	58.40	233.60	201.30	47,024	0.00	0	120.00	28,032
Butterfly Valves	TN	4	6.40	51.20	268,40	13,742	0.00	0	120.00	6,144
Condensate Pumps	TN	2	6.50	26.00	268.40	6,978	0.00	0	120.00	3,120

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RIVIERA DISMANTLEMENT STUDY

Removal, Disposal & Salvage	Unit of	Number of Compo-	Units of Measure per	Total Units of	Removai Cost per Unit of	Total Removal Cost	Disposal Cost per Unit of	Disposal Portion	Salvage Value per Unit of	Realizable Salvage Value per
Cost Worksheet	Measure	nents	Component	Measure	Measure	Per Item	Measure	per Item	Measure	ltern
Concrete	CY	1	6.50	13.00	31.68	412	88.00	1,144	0.00	0
Lube Oil Purif Sys-6,500 gl Tank	TN	1	6,99	13,98	n/a	5,000	0.00	0	120.00	1,678
L.O. Tank - Cleaning		1	n/a	n/a	n/a	0	n/a	4,480	n/a	0
L.O. Tank -		1	n/a	n/a	n/a	0	n/a	5,513	n/a	0
Steam Jet Air Ejector	TN	1	2.50	5.00	268.40	1,342	0.00	0	120.00	600
Subtotal						368,170		11,137		933,974
Miscellaneous Steel & Equipment	TN	1	161.13	161.13	433.10	69,785	0.00	0	120.00	19,336
Total Account 314						1,564,145		314,373		1,982,752
FERC Account 315										
Accessory Electrical Equipment										
Foundations & Structures					1					
Steel Structures & Supports	TN	1	2.00	4,00	268.40	1,074	0.00	0	120.00	480
Equipment Foundations - Concrete	CY	1	94.00	188.00	79.20	14,890	88.00	16,544	0.00	0
Switchgear Foundations - Concrete	CY	1	109.00	218.00	79.20	17,266	88.00	19,184	0.00	0
Manholes and Handholes	CY	1	27.50	55.00	79.20	4,356	88.00	4,840	0.00	0
Subtotai						37,585		40,568		480
Power and Conversion Equipment					ļ					
Aux Power Transformer	TN	1	37.25	74.50	201.30	14,997	0.00	0	120.00	8,940
Transformer Copper	TN	1	16.72	16.72	451.40	7,549	0.00	0	5,000.00	83,620
Station Service Transformers	TN	2	4.35	17.40	268.40	4,670	0.00	0	120.00	2,088
Lighting Transformers	ΤN	8	0.21	3,36	433.10	1,455	0.00	0	120.00	403
Subtotal						28,671		0		95,051
Conduit Insulators and Conductors										
Concrete - UG Duct	CY	1	324.75	649.50	79.20	51,440	88.00	57,156	0.00	D
Conductors - Generator Leads	TN	1	18.00	36.00	732.00	26,352	0.00	0	5,000.00	180,000
Power Wiring	TN	1	46.48	92.96	732.00	68,047	0.00	0	2,100.00	195,216
Control Wiring	TN	1	56.43	112.86	732.00	82,614	0.00	0	2,100.00	237,006
Cable Trays	ŢN	1	7.00	14.00	433.10	6,063	0.00	0	120.00	1,680
Subtotal						234,516		57,156	1	613,902
Switching, Control and Protective Equip										
Switchgear - 4,160v Metalclad	TN	1	40.00	80.00	201.30	16,104	0.00	0	120.00	9,600
Switchgear - 480v Metalclad	TN	1	18.00	36.00	201.30	7.247	0.00	0	120.00	4,320
Station Grounding System	TN	1	10.68	10.68	433.10	4,626	0.00	0	5,000.00	53,400
Subtotal						27,976				67,320
Total Account 315						328,749		97,724		776,753
TOTAL RIVIERA UNITS 3 & 4						7,397,701		1,933,668		4,223,162
TOTAL RIVIERA COMMON, UNITS 3 & 4						8,379,823		4,384.568		4,618,381

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Sanford Plant

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Sanford Plant

The Sanford Plant is located on 1,718 acres. 1,100 acres of this is dedicated to Units 4 and 5 cooling water supply. The site borders St Johns River and is located in the city of Debary, Florida in Volusia County. At this site there were three oil/gas fired units, Units No. 3, 4, and 5 in which Units 4 and 5 have been converted to combined cycle operation with Unit 3 remaining in its original operating configuration.

Unit 3 was designed by Ebasco Services as oil/gas-fired operation. Unit No. 3 went into commercial operation in 1959 with approximately 160 megawatts of output. Unit 3 will continue to operate in its present configuration.

The original Mid Valley design for Units No. 4 and 5 were for oil-fired operation, with provisions for future conversion to natural gas. Units No. 4 and 5 went into commercial operation in the years 1972 and 1973 respectively with generating capacity of approximately 800 megawatts. Units 4 and 5 were converted to natural fuel gas capability in 1991 and 1993 respectively. Upon completion of the re-powering project of Units 4 and 5, the site will consist of a eight natural gas fired combustion turbines and two steam turbines running in the combined cycle mode.

Unit 4 is a 4 on 1 combined cycle unit consisting of 4 GE 7FA combustion turbines, 4 Foster Wheeler Heat Recovery Steam Generators (HRSG), and one Westinghouse steam turbine. The Unit 4 combined cycle unit went into commercial operation in 2003.

Unit 5 is a 4 on 1 combined cycle unit consisting of 4 GE 7FA combustion turbines, 4 Foster Wheeler Heat Recovery Steam Generators (HRSG), and one Westinghouse steam turbine. Unit 5 combustion turbines went into commercial operation May 2002. The Unit 5 steam turbine went into commercial operation June of 2003.

The generation output of Unit 4 and 5 combined cycle units is 2,064 megawatts, more than double the original output.

The economic recovery date of Unit 4 is 2028. The economic recovery date of Unit 5 is 2027. The dismantlement of the plants is assumed to require 2 years beginning in 2032 for Unit 5 and 2033 for Unit 4. The gas turbines' economic recovery date is 2020. Their dismantlement is assumed to occur over a two year period beginning in 2025.

Regarding the re-powering effort, all equipment related to the old steam supply systems for the original Units 4 and 5 are being dismantled and those items have been removed from the dismantlement study. A listing of the newly installed equipment, along with its weights and additional volumes of concrete has been obtained from the contractor and included in the study.

Florida Power & Light Company last requested and received approval for dismantlement accruals for the Fort Myers plant in Docket No. 070378-EI, Order No. PSC-08-0095-PAA-EI, issued on February 14, 2008. The current accruals became effective as of January 1, 2007.

SANFORD SUMMARY OF DISMANTLEMENT COSTS

FERC	Description	Removal Cost	Disposal Cost	Salvage Value	Total (D)=(A + D = O)
Account	Sastard Common	(A)	(B)	(0)	(U)=(A + B - C)
	Sanford Common				
	Production Plant				
311	Structures and Improvements	1.045.386	387.670	212,464	1.220.593
312	Boiler Plant Equipment	0	0	0	0
314	Turbogenerator Units	0	0	Ō	0
315	Accessory Electrical Equipment	0	0	0	0
316	Miscellaneous Equipment	2,060	721	546	2,235
	Subtotal	1,047,446	388,391	213,010	1,222,828
	Other Site Costs:				
	Site Management Expense	847,476			847,476
	Other Site Contamination & Special Waste	765,271			765,271
	Intake & Discharge Backfill	158,486			158,486
	Grading & Seeding	2,899,202			2,899,202
	Subtoal	4,670,435	U	0	4,670,435
	Total	5 717 994	200 204	010 010	E 900 060
	Contingency - 16%	0,717,001	500,391	213,010	5,693,203
	Total Sanford Common	6 632 742	450 534	213.010	6 870 267
	Total Galiford Common	0,002,142	-00,00-	210,010	0,070,207
	Unusable M&S Inventory	3.342.226		334 223	3 008 003
		9.974,968	450,534	547.232	9,878,270
		-,	••	·	-,,
	Sanford Unit 3				
311	Structures and Improvements	934,775	670,408	92,166	1,513,018
312	Boiler Plant Equipment	2,203,308	569,030	511,537	2,260,801
314	Turbogenerator Units	750,254	142,411	588,073	304,592
315	Accessory Electrical Equipment	206,769	21,836	381,002	(152,396)
316	Miscellaneous Equipment	3,502	1,133	960	3,675
	Subtotal	4,098,610	1,404,819	1,573,738	3,929,690
	Contingency - 16%	655,778	224,771		880,549
	Total Sanford Unit 3	4,754,387	1,629,590	1,573,738	4,810,239
	P				
244	Santord Units 4 & 5	0 047 455	4 340 997	454 757	2 0 40 005
341	Structures and Improvements	2,247,100	1,849,837	154,/5/	3,942,235
243	Prime Movem	140,240	100,184	23,334	201,100
344	Turboseperator Lipite	1 701 570	2,943,011	4,170,201	8,003,000
345	Accessory Electrical Equipment	2 397 112	538.600	1 203 759	477,000
346	Miscellaneous Equipment	0	000,000	1,200,700	1,102,042
	Subtotal	17.480.281	6 138 579	7 522 882	16 095 978
	Contingency - 16%	2.796.845	982.173	r,	3,779,018
	Total Sanford Units 4 & 5	20,277,128	7,120,751	7.522.882	19.874.995
				,,,	
	Total Dismantlement Costs	35,006,482	9,200,875	9,643,852	34,563,505

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SANFORD DISMANTLEMENT COST FOR INFLATION PROJECTION

Description	Labor (A)	Material & Equipment (B)	Burial (C)	Salvage (D)	Total (A) + (B) + (C) - (D)
Sanford Common	3,979,645	5,995,323	450,534	547,232	9,878,270
Sanford Unit 3	2,852,632	1,901,755	1,629,590	1,573,738	4,810,239
Sanford Units 4 & 5	12,166,276	8,110,850	7,120,751	7,522,882	19,874,995
Total	18,998,553	16,007,928	9,200,875	9,643,852	34,563,505

Labor is 60% of Removal Cost from Summary of Dismantlement Costs. Material & Equipment is 40% of Removal Cost from Summary of Dismantlement Costs. Burial is 100% of Disposal Cost from Summary of Dismantlement Costs. Salvage is 100% of Salvage from Summary of Dismantlement Costs.

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SANFORD DISMANTLEMENT ASSUMPTIONS

FPL will provide management personnel for the dismantlement effort.

FPL will prepare the request for proposal package and solicit bids for the dismantlement effort.

FPL will provide site security during the dismantlement.

FPL will hire a demolition contractor to perform the actual dismantling work. This contractor will have the salvage rights to all plant equipment and structural material.

The land will be made available for future use.

All dismantling work will be done in accordance with OSHA regulations.

The fuel oil storage tanks will be cleaned and their contents disposed of according to the requirements of current regulations.

The following items will be removed:

- a. All structures, equipment, and concrete pads, pedestals, foundations, etc.;
- b. All underground gas, oil, sewer and water piping and electrical conduits;
- c. All hazardous and contaminated materials, e.g., acid filled lead batteries, oil tank residue.

Discussions with FPL's Power Generation Division (PGD) indicate that the return of the site to a green field condition entails removal of all structures above the wood pilings and steel-encased concrete pilings. The removal of the pilings would be unfeasible and, therefore, will remain in place.

Only the first 100 feet of each 2,330 foot run of 90 inch sub-aqueous concrete discharge piping will be collapsed and backfilled, because collapsing and backfilling the remainder would disturb the underwater environment of Lake Worth.

Scrap will be unprepared, i.e., cut only to the extent required to load the pieces on scrap dealers' trailers. Trucking costs for removal are paid by the scrap dealer and are reflected in the salvage value paid.

The estimate does not reflect land value or its resale.

The productivity factors employed are assumed valid for purposes of this study.

A contingency of 16% has been applied to the total removal and disposal costs. This contingency percentage covers costs associated with delays occurring after dismantlement begins, due to such causes as equipment failure and weather delays.

The costs of such overhead items as project management, site security, etc., have been estimated by FPL's Construction and Corporate Services Department. These costs are listed on the cost summary pages for each site's dismantlement study.

All materials and equipment are assumed to be either fully salvageable or to be disposed of completely. The availability of powerful cutting shears makes possible the cutting of even the heaviest steel to a size that permits salvage as scrap. Any unusable materials and supplies inventory will be sold as scrap. Estimated balances of such inventory (with related salvage value) have been included on the cost summary pages for each site's dismantlement study.

A 30% swell factor is used to compute the disposal cost per cubic yard of concrete. One cubic yard of concrete becomes 1.3 cubic yards of concrete rubble after demolition.

SANFORD DISMANTLEMENT ASSUMPTIONS (continued)

The switchyard and ancillary equipment (FERC account 353) will remain in place with the exception of the main power transformers, oil circuit breakers, superstructures, and foundations associated with the tie-in of plant generated power in the switchyard. However the dismantlement cost of substation equipment is not included in this study so as to avoid duplicating the recovery of costs already included in the net salvage factors of the substation plant accounts' depreciation rates.

An expandable grout will be used to dismantle the turbine pedestals. The chimneys will be control-blasted.

It is assumed that the cooling reservoir at the Sanford site will not be back-filled. The State of Florida has expressed an interest in using them for water management purposes. Also, some communities have indicated interest in their potential use as a source of water.

It is assumed that dismantlement activity at Sanford will begin five years after end of service. For Units 4, 5 and Common Plant, the end of service dates used for this assumption conform to the economic recovery period ending dates used in the Sanford depreciation study submitted in March, 2005 using actual and estimated plant and reserve data as of December 31, 2005. This study was accepted as part of the stipulation and settlement agreement that resolved the 2005 rate case and was approved by the Florida Public Service Commission in Docket Number 050188-EI, Order Number PSC-05-0902-S-EI on September 14, 2005. The economic recovery dates for the Sanford units are as follows:

Unit	Economic Recovery Date
Unit 3	2020
Unit 4	2028
Unit 5	2027
Common Plant	2028

Substantial asbestos abatement has occurred in connection with the re-powering of Sanford Units 4 and 5. Still, some amounts of asbestos remain and can be expected to require abatement at final dismantlement. FPL's Environmental Department recently completed a survey of asbestos at FPL's production plant sites. It was determined that the cost of abating the remaining asbestos at the Sanford site is \$1,101,767.

DISMANTLING ACTIVITIES: OIL & GAS AND OTHER PRODUCTION PLANTS

- Remove loose equipment, furniture, and spare parts.
- Drain liquids, drum-up, and dispose of drums.
- Remove hazardous materials; i.e., leads (alkaline), acids, solvents, lubricants, oils, chemicals, and gasses.
- Strip all insulation and covering, package and remove to acceptable landfill.
- Collapse circulating water lines and backfill trenches.
- Remove main steam, hot and cold piping, downcomers, valves, and supports, pumps, motors, generator auxiliary equipment, feedwater heaters, soot blowers, and condensers.
- Remove intake and discharge structures, equipment pumps, piping and valves.
- Remove systems that must be completed prior to the start of the boiler removal including lube oil pumps, all piping, instrument and electrical systems.
- Remove forced drafts and induced draft ductwork, air heaters and fans.
- Remove hoppers, burners, upper and lower headers, manways, and waterwalls.
- Remove heavy steel structures and above ground steel precut key members, lower and cut at ground level.
- Disassemble crane, boiler feed pumps, and turbine generator.
- Separate scrap metals, and remove to scrap yard.
- Remove and dispose of miscellaneous rubble.
- Remove turbine pedestal, foundation, and heavy concrete structures and building, stack foundations, equipment foundations, substructures, support buildings and stacks. Remove to landfill.
- Cut off piles and remove pile caps. Remove concrete encased duct banks and underground piping.
- Remove septic tank and backfill.
- Remove underground storage tanks.
- Test and remove contaminated soil/bases all areas.
- Install environmental monitoring equipment, for example, at wells.
- Remove or improve remaining site facilities such as buildings, fences, parking areas in accordance with local code and regulations.
- Install/modify existing site storm water runoff system.

DISMANTLING ACTIVITIES: OIL & GAS AND OTHER PRODUCTION PLANTS (Continued)

- Remove gas supply metering site, valve stations, underground distribution system.
- Remove solid and liquid wastes from waste treatment processing areas landfilled material, precipitated material in ponds and tanks, contaminated resins and reactants.
- Remove marine facilities such as fuel unloading docks, equipment, bridges, and dams.
- Cut and remove fuel oil tanks, piping, valves, and supports.
- Remove top soil/gravel, backfill, and remove barrier wall foundation.
- Backfill, site grading, seeding and mulching.

DEVELOPMENT OF COST FACTORS

Cost factors have been developed to compute the net salvage value of the demolition of the Sanford Plant. The net salvage value of the demolition is the net of: the removal and disposal cost and the salvage value of equipment and steel not disposed of. These factors provide a unit cost or value for removal, disposal and salvage of a given unit of measure of the component materials of which a power plant is constructed. The assumption is that the cost or value per unit of a given component can be multiplied by the quantity of that component in the plant to calculate a total cost or value for removal, disposal, or salvage of that component.

REMOVAL COST FACTORS

The removal cost factors developed for this study have two elements: a burdened labor rate and productivity factor. The burdened labor rate multiplied by the productivity factor yields the removal cost factor. The labor rates used in this study are from R.S. Means Construction Data. The crew rate per man-hour is for a crew consisting of six journeymen laborers, one outside foreman and one heavy equipment operator - a typical crew for demolition work. The rate includes the cost per man-hour of a crane, an excavator, and a front end loader. The equipment cost is also from R.S. Means, and both equipment and labor are adjusted by the appropriate R.S. Means City Cost Index. (Means provides national average rates for labor and equipment which are then adjusted by City Cost Indexes to arrive at the appropriate rate for a given region.) The productivity factors employed, e.g., the number of man-hours required to remove a given unit of measure of concrete, were developed by an engineering consulting firm. These factors are assumed valid for purposes of this study.

Labor Rate

Labor rates are for non-union crews and the per crew hour rate is based on a forty hour week.

Labor	\$38.56	Х	6		=	\$231.34
Foreman	\$48.95	Х	1		Ξ	\$48.95
Heavy Equipment Operator	\$46.65	Χ.	1		=	\$46.65
Total Cost per hour of 8 man crew						\$326.94
Cost per man hour		\$326.94	1	8	=	\$40.87

Equipment Rate

The equipment rate is based on the following equipment:

	Crane/Excavator Front End Loader Cutting Equipment Total per month							34,370.00 6,824.90 231.75 41,426.65
	\$41,427	1	176	hours per mo	onth	=		235.38
Cost per man hour Plus: amount for small tools Total Cost per man hour	3			\$235.38	1	8	2	\$29.42 <u>1.00</u> \$30.42

Equipment & Labor Summary

Labor Equipment Total	\$40.87
Rounded	\$71.00
For Concrete demolition add \$5.00 per hour additional equipment charge.	\$76.00

The Removal Cost Factor is the product of the productivity factor for removal of a particular component multiplied by the total burdened hourly labor rate.

Components	Hourly Rate	Productivity Factor	Removal Factor
Extra Heavy Steel (1)	\$71.00	2.50 MH / Ton	\$177.50 / Ton
Heavy Steel (2)	\$71.00	3.30 MH / Ton	\$234.30 / Ton
General Steel	\$71.00	4.40 MH / Ton	\$312.40 / Ton
Light Steel	\$71.00	7.10 MH / Ton	\$504.10 / Ton
Concrete	\$76.00	0.48 MH / CY	\$36.48 / CY
Reinforced Concrete	\$76.00	1.20 MH / CY	\$91.20 / CY
Copper-Elect. Cable &			
Generator Leads &	\$71.00	12.00 MH / Ton	\$852.00 / Ton
Copper - Generator	\$71.00	9.80 MH / Ton	\$695.80 / Ton
Copper - Transformer	\$71.00	7.40 MH / Ton	\$525.40 / Ton
General Insulation	\$71.00	1.00 MH / CY	\$71.00 / CY
Inground Pipe-Metal(3)	\$71.00	6.00 MH / Ton	\$426.00 / Ton
Concrete Pipe	\$76.00	4.60 MH / Ton	\$349.60 / CY

(1) Includes turbine generator.

(2) Includes parts of the steam generator, pipe larger than 8 inches.

(3) Includes cost to backfill the trenches.

DISPOSAL COST FACTORS

Three cost factors were developed to compute the disposal costs of non-hazardous wastes at the Osceola Road Landfill, in Seminole County. Concrete and calcium silicated insulation are nonhazardous wastes. The tipping fee of \$33.17 per ton was obtained from the landfill. The dumpster charges, \$425.00 per haul for 20 and 30 cubic yard dumpsters, respectively were provided by Waste Management Inc., of Orlando. Cost factors were also developed to compute the cost of disposal of hazardous waste, e.g., soil remediation around the oil tanks. The cost factor for cleaning the oil tanks is included in this group.

Concrete

One cubic yard of concrete in place weighs 3,950 pounds. One cubic yard becomes 1.3 cubic yards after demolition. Each load will contain 15.38 cubic yards (20 cu. yds./1.3) of in place concrete. 15.38 cubic yards weighs 61,000 pounds or 30.50 tons.

Truck Cost	\$425.00	/haul		1	haul	=	425.00
Tipping Fees	\$33.17	/ton	Х	30.5	tons	×	1,011.69
Total Cost per round Trip						-	1,436.69
Cost per Cubic Yard	\$1,436.69	/ 15.38	cubic yards =				\$93.41
Plus 10% contractor profit							9.34
Total Cost per Cubic Yard						:	\$102.75
Rounded Cost per Cubic Yard						=	\$103.00

Insulation - Calcium Silicate (Non-Hazardous)

A trailer with a 30 cubic yard capacity is used for insulation because of its lighter weight. For purposes of this computation the dumpster is assumed to be 90% full (although the tipping fee is based on the assumption of 100% full truck - i.e., the weight to volume conversion uses 30 cubic yards - the full volume of the dumpster). A cubic yard of calcium silicate insulation weighs 121.5 pounds or .060750 tons. 30 cubic yards times .060750 tons/cubic yard = 1.82 tons. (The dumpster charge is the same for 20 and 30 CY dumpsters.)

Truck Cost Tipping Fees	\$425.00 \$33.17	/ haul / ton	X X	1 haul 1.82 tons	= =_	425.00
Cost per Cubic Yard Plus 10% contractor profit	\$485.37	/ 27 cub	ic yards =		_	485.37 \$17.98 <u>1.80</u>
Rounded Cost per Cubic Yard					=	<u>\$19.77</u> \$20.00

SALVAGE VALUE FACTORS

The salvage value factors, presented in dollars per ton, were provided by scrap metals dealers. The list covers all salvageable materials recovered from FPL sites.

Iron & Steel Stainless Steel Aluminum (Sheet Metal) Wire & Cable:	\$120 / ton \$2,000 / ton \$1,340 / ton
- Insulated Copper - Insulated Aluminum	\$2,100 / ton \$1,020 / ton
Copper Nickel Allovs	\$5,000 / ton
- 70/30 Cupro-Nickel	\$4,000 / ton \$6,000 / top
- Monel Admiralty Brass	\$10,000 / ton \$10,000 / ton \$3,600 / ton
Aluminum Brass Titanium	\$2,800 / ton \$2,800 / ton \$4,000 / ton

OTHER SITE COSTS

Site Management Expenses

Site management expenses refer to FPL's management costs and contractors' expenses associated with the dismantlement project. The cost factors provided by FPL's Power Generation Division (PGD) and updated by Construction Estimating are: FPL expenses of \$21,134 per month, both office and site, and contractor's expenses of \$25,948 per month for site indirect costs.. These expenses are to be incurred over the 18 month dismantlement period for the Sanford Plant. FPL's management costs include administration, engineering, permit costs and various other costs. Contractors' expenses include field management, supervison, security, etc..

Site Management Expenses per month	\$47,082
Number of months	18
Total Site Management Expenses	\$847,476

Intake & Discharge Backfill

FPL's PGD developed this cost factor on the basis of a typical such structure for FPL's production plants. The assumption is that a volume of 1,600 cubic yards for the intake and 1,120 cubic yards for the discharge will need to be filled. Construction Estimating has updated the costs. The charge for the Intake is \$44,128; the cost for the discharge is \$35,115. Sanford has 2 intakes and 2 Discharges:

	Cost/ Struct	Quantity	Totals
Intake	\$44,128	2	\$88,256
Discharge	\$35,115	2	\$ <u>70,</u> 230
			\$158,486

Grading and Seeding

This cost refers to the restoration of the dismantled area to a green field area. The land is filled with sand, spread with topsoil and then seeded. The cost factor provided by PGD and updated by Construction Estimating is \$63,579 per acre. The acreage was determined for each site by reviewing engineering drawings to determine the areas requiring this effort. Assumptions underlying this factor include 2,000 cubic yards per acre to be backfilled and 968 cubic yards per acre of topsoil to be spread and seeded.

Sanford Acreage to be graded and seeded	45.60
Cost Factor	\$63,579
Total Grading and Seeding Expense	\$2,899,202

Other Site Contamination & Special Waste

Florida Power & Light's Environmental Department has provided the following information about certain environmental related costs at the company's generating stations. At Sanford, the following cost estimates have been identified:

Description	Amount
Asbestos [see Unit 3 detail]	\$1,101,767
Lead in paint/material	\$300
Basins Clean Out/ Material	\$36,450
Special Waste	\$632,003
Tanks/Washwater	55,718
Soil/Other Contamination	40,800
Total	\$1,867,038

Removal, Disposat & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
SANFORD COMMON										
FERC Account 341										
Improvements to Site										
Access Roads and Parking Areas	CY	1	3,140.00	3,140.00	36.48	114,547	103.00	323,420	0,00	0
Concrete Walkways	CY	1	81.07	81.07	36.48	2,957	103.00	8,350	0.00	0
Station Sign - Concrete	CY	1	11.00	11.00	91.20	1,003	103.00	1,133	0.00	0
Station Sign - Concrete Foundation	CY	1	7.11	7.11	91.20	648	103.00	732	0.00	Ū
Rail System Complete - (3520 ties, 5280 LF of rail)	TN	1	352.00	352.00	504.10	177,443	00.0	0	120.00	42,240
Yard Lighting Complete	CY	1	55.00	55.00	91.20	5,016	103.00	5,665	0,00	0
Subtotal						301,615		339,301		42,240.
Domestic Water Distribution System and Water Treatment										
Service Water Booster Pump	TN	1	3.00	3.00	504.10	1.512	0.00	0	120.00	360
Yard Fire Protection - System Complete	TN	1	32.66	32.66	504.10	16,464	0.00	0	120.00	3.919
Lawn Sprinkler System - Incl. Pumps w/ Motors, Compit.	TN	1	5.00	5.00	504.10	2.521	0.00	0	120.00	600
Acid Mixing Pumps and Piping system-Water Treatment	TN	1	85.00	85.00	504.10	42.849	0.00	0	120.00	10,200
Cooling Resv. Make-up Pumps	TN	2	1.00	2.00	504.10	1,008	0.00	0	120.00	240
Cooling Resv. Make-up Piping	TN	1	66.68	66,68	504.10	33,613	0.00	0	120.00	8.002
Well Filed Pumps	TN	1	2.00	2,00	504.10	1.008	0.00	0	120.00	240
Piping from Well Field to raw water Storage	TN	1	527.60	527.60	504.10	265,963	0.00	0	120.00	63,312
Storm Drain Piping complete	TN	1	245.18	245.18	349.60	85,715	n/a	0	0.00	0
Ground Water Storage Tank(150,000 gal)	TN	1	202.50	202.50	312.40	63,261	0.00	0	120.00	24,300
Elevated Water Storage Tank - 80,000 Gallons	TN	1	108.00	108.00	312.40	33,739	0.00	0	120.00	12,960
Elevated Water Storage Tank - Foundation-Concrete	CY	1	40.00	40.00	36.48	1,459	103.00	4,120	0.00	0
Treated Water Transfer Pump	TN	1	1.00	1.00	504.10	504	0.00	D	120.00	120
Elevated Water Storage Tank(100,000 gal)	TN	1	135.09	135.09	312.40	42,202	0.00	0	120.00	16,211
Fire Protection - Raw Water Fire Pump	TN	1	1.00	1.00	504.10	504	0.00	0	120.00	120
Fire Protection - F/Pump concrete slab Subtotal	CY	1	6.50	6.50	91.20	593 592,916	103.00	<u>670</u>	0.00	0 140,584,
Station Structures				. m	- 4 00					
Results Building - R/Concrete Foundn	CY	1	17.50	17.50	91.20	1,596	103.00	1,803	0,00	0
Results Building - concrete block walls	CY	1	7.57	7.57	36.48	276	103.00	780	0.00	0
Spare Parts Warehouse - Structural Steel	IN	1	67.00	67.00	504.10	33,775	0.00	0	120.00	8,040
Spare Pars warehouse - Foundation - Concrete	CY	1	83.33	83,33	91.20	7,600	103.00	8,583	0.00	0
Hydrogen Storage Biulding(18x9)	CY	1	5.69	5.69	36.48	208	103.00	586	0,00	· 0
Records Storage Building - concrete	CY CY	1	15.72	15.72	30,48	5/3	103.00	1,619	0.00	0.
Electrical Storage Building - concrete	CY CY	1	41.44	41.44	36.48	1,512	103.00	4,268	0.00	0
Training Pulliting and the	CY	1	20.80	20.80	36,48	/59	103.00	2,142	0,00	0
Fraining Building - concrete		1	114.87	114,87	36,48	4,190	103.00	11,832	0.00	0
Electrical Motor Repair Building - Buder	IN Thi	1	60.00	00.00	504.10	30,246	0.00	0	120.00	7,200
Instances & Control Duilding I hulles	1 IN	1	30.00	30.00	504.10	15,123	0.00	U	120.00	3,600
Esprication Building buller	Th	4	42.00	42.00	504.10	21,172	0.00	0	120.00	5,040
Lab Building , Concerts Block Malle(51+22)	CY CY	4	44.00	44.00	204.10	22,180	0.00	4 000	120.00	5,280
Lab building Concrete Foundation (51x33)	CV	4	17.09	17.09	30.48	645	103,00	1,822	0.00	0
Subtotal	U	I	83.50	83.50	91.20	148,383	103.00	43,065	0.00	29,160
Sanford Boathouse Facility										

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		Number	Units	Total	Removal		Disposal	T -1-1	Salvage	
Removal Disposal & Salvana	Unit of	Compo	Or Measure	TOtal	Cost per	Joraj	Cost per	Iotal	value	Iotai
Cost Worksheet	Massura	nente	Component	Monetime	Mancuro	Kemoval	Unit of	Disposal	per Unit of	Salvage
Structure - Steel - Boathouse	TN	1	4 00	Mieașure 4 00	504 10	2.016	Measure	COSI	Measure	Value
Foundation and Seawall - concrete- hoatbouse	CY	1	5.00	4.00 5.00	01 20	2,010	102.00	515	120.00	480
Subtotal	0.	•	0.00	0.00	51.20	2 470	103.00	515	0.00	490
						2,412		515		400
Total Account 341						1,045,386		387,670		212,464
FERC Account 346										
Miscellaneous Power Plant Equinment										
Service Air Compressor	TN	1	4.55	4 55	312.40	1 421	0.00	0	120.00	546
Serv. Air Compressor - Concrete Foundation	CY	i	7.00	7.00	91 20	638	103.00	721	0.00	040
Total Account 346		•	1.00	7.00	51.20	2 060	100.00	721	0.00	
						2,000		121		J40
TOTAL SANFORD COMMON						1,047,446		388,391		213,010
SANFORD UNIT 3										
FERC Account 311										
Site Sewer System										
Storm Sewers and Drains - Concrete (8" - 48")	CY	1	54 31	54 31	340.60	19 097	102.00	5 504	0.00	
Floor Drains. Sumo Purnos & Oily Sen 6" Cl Pine	TN	1	31.00	31.00	504 10	15 627	0.00	5,554	120.00	2 720
Sanitary Sewer Concrete	CY	1	96 78	96 78	349.60	33 834	103.00	0 069	0.00	3,720
Oil Separator	CY	1	12.63	12.63	91 20	1 152	103.00	1 301	0.00	0
Subtotal	0.	•	12.00	12.00	01.20		105.00	16 863	0.00	2 700
						05,000		10,003		3,720
Euel - Oil/Gas System/Area										
Fuel Oil - Pump Trnsfr Pit & Trnch - Reinforced Conc	CY	1	59.50	59 50	91.20	5 426	103 00	6 1 2 9	0.00	
Fuel Oil - Transfer Pit Sump Pumps	TN	2	4.90	9.80	312.40	3.062	0.00	0	120.00	1 176
Fuel Oil Suction Heaters	TN	2	10.75	21,50	312.40	6.717	0.00	0	120.00	2 580
Fuel Oil Supports over canal	CY	1	106.25	106,25	91.20	9,690	103.00	10,944	0.00	-,+
Fuel Oil Piping - Steel (6" - 18")	TN	1	134.51	134.51	312,40	42.021	0.00	0	120.00	16,141
Gas Piping - main line to main valve	TN	1	27.30	27.30	312.40	8,529	D.00	0	120.00	3 276
Subtotal						75,444		17,072		23,173
Service Water and Raw Water Systems										
Water Treatment - Area Slab - Concrete	CY	f	105.00	105.00	91.20	9,576	103.00	10,815	0.00	o
Fire Protection Piping - Cl 2.5* to 8*	TN	1	· 46.25	46.25	504.10	23,315	0.00	0	120.00	5.550
Raw Water Storage Tank - 50,000 gal.	ΤN	1	17.49	17.49	312.40	5,464	0.00	0	120.00	2,099
Raw Water Pump and Motor	TN	1	5.00	5,00	504.10	2,521	0.00	0	120.00	600
Raw Water Storage Tank - Foundation	CY	1	8.00	8.00	91.20	730	103.00	824	0.00	0
Fire Protection - Concrete	CY	1	6.00	6,00	91.20	547	103.00	618	0.00	0
Service Water - Cast Iron Piping - 4" to 6"	TN	1	22.45	22.45	504.10	11,317	0.00	0	120.00	2.694
Subtotal						53,469		12,257		10,943
Intake System										
Intake Structure - Reinforced Concrete	CY	1	731.00	731.00	91.20	66.667	103.00	75,293	0.00	0
Intake Structure - Structural Steel(Incl. crane)	TN	1	21.00	21.00	234.30	4.920	0.00	0	120.00	2.520
Intake Structure - Wingwall Cap & Crane Rail Pads	CY	1	. 31.11	31.11	91.20	2.837	103.00	3.204	0.00	2,020
Intake Structure - Traveling Water Screens	TN	2	11.40	22,80	312.40	7,123	0.00	0	120.00	2.736
Intake Structure - Screen Wash Pumps and motors	TN	2	3.00	6.00	312.40	1.874	0.00	0	120.00	720
Intake Structure - Concrete Stop Logs	CY	1	11.50	11.50	91.20	1,049	103.00	1,185	0.00	0
Intake Cooling Water Pump Motors	TN	2	3.00	6.00	312.40	1,874	0.00	0	120.00	720
Intake Structure - Hoists/Crane	TN	1	2.00	2.00	312.40	625	0.00	0	120.00	240

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		Number	Units	Total	Removal	Total	Disposal	T-4-1	Salvage	Tetel
Removal Disposal & Salvaga	link of	Camaa	or measure	i otal Aleste est	Costper	iotai Demonal	Costper	IOTAI	value	lotai Calvarad
Cost Wedshort	Unit of	Compo-	per	Units of	Unit or	Kemovai	Unit of	Disposal	per Unit of	Salvage
Intake Conduit - Reinformed Concrete Dine 54*(250 6)	measure	nents	Lomponent	Measure 188.00	Measure	Cost	Measure	Cost	Measure	Value
Intake Condition RenitorCed Concrete Pipe, 54 (350 ft)	CY	4	186,90	100.90	349.60	00,340	103.00	19,251	0.00	0
Intake Screen Refuse Line - Cast Iron Dine		1	101.00	2.00	91.20	10,000	103.00	18,/10	100.00	240
Subtotal		•	2.00	2.00	504.10	1,000	0.00	447.040	120.00	
30000						109,605		117,642		7,176
Discharge System										
Discharge Conduit - 42* Reinforced Concrete Pipe	CY	1	85.75	85.75	349.60	29,978	0.00	0	0.00	0
Discharge Transition and Thrust Blocks	CY	1	131.00	131.00	91.20	11,947	103.00	13,493	0.00	o
Discharge Structure - Reinforced Concrete	CY	1	198.65	198.65	91.20	18,117	103.00	20,461	0.00	0
Discharge Conduit - 54" f/ Unit 4 - anticipated(300ft)	CY	1	160.20	160,20	349.60	56,006	0.00	. 0	0.00	o
Discharge Structure - Concrete Stop Logs	CY	1	11.50	11.50	91.20	1,049	103.00	1.185	0.00	0
Subtotal						117,097		35,138	_,	0
Station Structures										
Substructure concrete footings niers beams Complete	CY	1	222.00	232.00	01.20	21 150	102.00	22 000	0.00	
Substructure Reinforced Concrete - Mate	cv	1	1 225 50	1 325 50	01.20	120 994	103.00	20,090	0.00	0
Structural Steel - Main Steel		4	1,323.30	1,325.50	91.20	71,000	103.00	130,327	0.00	20 540
Stool Hand Pailing and Missellangeue	TN	4	304,30	304.30	234.30	< 1,29 () E 009	0.00	U O	120.00	30,510
Steel Station Roof	TN	-	19.20	19.20	312.40	0,990	0.00	U	120.00	2,304
Station Floort & Paof Painfound Consult	CY CY	4	14.90	14.95	312.40	4,070	0.00	100.070	120.00	1,794
Station Frons & Robi - Remorces Concrete			991.00	991.00	91.20	90,379	103.00	102,073	0.00	0
Station Crane - Coloy 50/15 Ton Gantry Crane		1	25.00	25.00	234.30	5,858	0.00	0	120.00	3,000
Station Elevator - Westinghouse 1200 lb capacity	IN	1	21.00	21.00	312.40	6,560	0.00	0	120.00	2,520
Emergency Dieser Generators	IN	1	8.50	8.50	312.40	2,655	0.00	0	120.00	1,020
Hydrogen Storage Sneiter - Concrete (18x9)CBB	CY	1	5.69	5.69	36.48	208	103.00	586	0.00	0
Service Building - Concrete Block	CY	1	76.19	76.19	36.48	2,779	103.00	7,848	0.00	0
Intake Chiomation Building - CBB (13x14)	CY	1	8.17	8.17	36.48	298	103.00	842	0.00	0
Chlorine Storage Building - CBB (15x13)	CY	1	5.89	5.89	36.48	215	103.00	607	0.00	0
Concrete Foundation - Serv, Chem, Hydro, Co2	CY	1	837.30	837.30	91.20	76,362	103.00	86,242	0.00	0
All other Concrete - sewers, dock, FO pipe Sppts, tmch	CY	1	1,095.30	1,095.30	36.48	39,957	103.00	112,816	0.00	0
Subtotal						449,281		471,435		47,154
Total Account 311						934,775		670,408	-	92,166
FERC Account 312										
Boiler Plant Equipment				-						
Fuel Oil & Gas Equipment			-							
Fuel - Light Oil Tank(1,000 BBL)	TN	0	4.44	0.00	n/a	0	0.00	0	120.00	0
Fuel - Service Oil Tank(6,000 BBL)	TN	2	26.66	53.32	n/a	34,090	0.00	53,850	0.00	0
Fuel Tank - Foundation and firewall(12,000 BBLS)	CY	1	295.00	295.00	n/a	34,090	0.00	70,588	0.00	0
Fuel Oil Tank - Cleaning	BBLS	1	13,000.00	13,000.00	n/a	o	0.00	130,000	0.00	0
Fuel Tank - Sand Base	CY .	1	45.00	45.00	n/a	o	0.00	35.778	0.00	0
Fuel Oil Transfer Heaters	TN	2	4.00	8.00	312.40	2,499	0.00	o	120.00	960
Fuel Oil Heaters and strainers	TN	16	1.00	16.00	312.40	4,998	0.00	à	120.00	1 920
Fuel Oil Burner Pumps/motors - Regular	TN	3	1.50	4.50	312.40	1.406	0.00	0	120.00	540
Fuel Oil Booster Pump	TN	1	1.50	1.50	312 40	469	0.00	0	120.00	180
Fuel Oil Booster Purno Motor(75 hp)	TN	1	1.50	1.50	312 40	469	0.00	0	120.00	180
Fuel Oil/Gas Burners & Igniters	TN	16	0.60	03.6	312 40	2 900	0.00	ő	120.00	1 152
Gas Piping - 18", 400 ft	TN	1	16 55	18.55	312.40	5 170	0.00	0	120.00	1,132
Fuel Oil Piping - 16" carbon steel	TN	1	3 70	3 70	312 40	1 184	0.00	0	120.00	1,000
Fuel Oil Pining - Supports - Concrete	CY	1	10.00	10.00	91 20	042	103.00	1 020	0.00	400
Miscellaneous Steel and Other	TN	1	2.83	283	312.40	984	0.00	1,030	120.00	240
Evel Oil Pining Insulation	CY	1	25.00	25.00	71.00	1 775	20.00	500	0.00	340
	<i></i>		20.00	20.00	11.00	1,175	20,00	500	0.00	U,

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Removal, Disposal & Salvage Lot Workhowd, Salvage Unit of Maarure Cost per mems Total Composed Value Maarure Total Cost Value Maarure Total Cost Value Maarure Total Cost Value Maarure Total Cost Value Maarure Total Cost Value Maarure Cost Maarure Cost Value Total			Number	Units		Removal	-	Disposal		Salvage	
Removal, Disparal 4 Solvage Unit of Unit of Comport Marco Value Number of Solvage Solvage Part of Comport Marco Value Remove Cost Mathemary Cost Mature Cost Mathemary Cost Mature Cost Mathemary Cost Mathmathmary Cost Mathemary			of	of Measure	Total	Cost per	Total	Cost per	Total	Value	Total
Cott Workheit Measure Component Measure Const Measure Measure <th>Removal, Disposal & Salvage</th> <th>Unit of</th> <th>Compo-</th> <th>per</th> <th>Units of</th> <th>Unit of</th> <th>Removal</th> <th>Unit of</th> <th>Disposal</th> <th>per Unit of</th> <th>Salvage</th>	Removal, Disposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	per Unit of	Salvage
Fuel C Petrog Installed CV 1 50.00 71.00 3.568 20.00 1.000 0.00 0 Balle Example 0 0 0.4465 292.546 7.772 Balle Example TN 1 650.0 820.00 234.30 194.468 0.00 0 120.00 92.200 Diale Example TN 1 165.00 165.00 37.40 97.40 0.00 0 120.00 22.200 Diale Foundation TN 1 17.75 27.50 91.20 7.182.01 103.00 0.00 0 120.00 23.450 Al Princet relaxing TN 1 120.00 13.00 31.40 5.107 0.00 0 120.00 23.00 1.00.0 1.00.0 <	Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cast	Measure	Value
Subbit 94.465 222,545 7.772 Delife Enclanded Provements N 1 60.00 232,50 194.400 0.00 0 120.00 90.000 Delife Touchais TN 1 185.00 80.00 234.50 194.400 0.00 0 120.00 90.000 Delife Touchais TN 1 113.70 173.30 274.80 100.00 0 120.00	Fuel Oil Piping Insulation	ĊY	1	50.00	50.00	71.00	3,550	20.00	1,000	0.00	0
Bolie Flavenerit Filtering	Subtotal						94,495		292,546		7,712
Bable Fourier Bable Fourier TN 1 650 or Fourier 234.30 194.460 0.00 0 120.00 22.22.00 Pladsman, Greing & Hendmin TN 1 115.00 166.00 113.00 6.00 6 120.00 22.20 0 120.00 22.20 0 120.00 22.20 0 0 0 120.00 22.100 22.20 12.00 22.00 22.00 22.00 22.00 22.00 22.00 22.00 22.00 0 0 120.00 12.00											1
Boar Traine TN 1 850.00 820.00 820.00 820.00 820.00 120.00 920.20 Balar Dronshin CN 1 777.00 787.60 97.20 77.120 103.00 61.13 0.00 0 120.00 122.20 Balar Dronshin CN 1 777.50 787.60 97.20 77.120 103.00 61.13 0.00 0 120.00 123.40 Balar Dronshin TN 1 107.50 77.44 3.356 0.00 0 120.00 123.40 Soldborns TN 1 107.50 77.44 3.356 0.00 0 120.00 150.00 120.	Boiler Equipment										
Participant TN 1 185.00 185.00 372.40 67.744 0.00 0 120.00 22.20 Bater Foundation TN 1 113.70 173.70 23.49 103.00 61.71 0.00 61 120.00 13.64 Bater Foundation TN 1 113.70 173.70 23.49 51.077 0.00 0 120.00	Boller Frame	TN	1	830.00	830.00	234.30	194,469	0.00	0	120.00	99,600
Bour Found CY 1 74750 7420 14300 81,13 0.00 0 12000 13200 13300 23430 20640 0.00 0 12000 12000 23000 12000 23000 0 12000 23000	Platforms, Grating & Handrails	TN	1	185.00	185.00	312.40	57,794	0.00	0	120.00	22,200
Baller Divar TN 1 113.70 13.70 234.30 284.40 0.00 0 120.00 13.84 Air Prehaster and lances TN 2 108.00 214.30 51.077 0.00 0 120.00 <t< td=""><td>Boller Foundation</td><td>CY</td><td>1</td><td>787.50</td><td>787.50</td><td>91.20</td><td>71,820</td><td>103.00</td><td>81,113</td><td>0.00</td><td>oj</td></t<>	Boller Foundation	CY	1	787.50	787.50	91.20	71,820	103.00	81,113	0.00	oj
Bits Display Display Zaka Display Zaka Display Zaka Display Display <thdisplay< th=""> <thdisplay< th=""></thdisplay<></thdisplay<>	Boller Drum	TN	1	113.70	113.70	234.30	26,640	0.00	0	120.00	13,644
Ar Probability and Jances TN 2 109.00 248.00 243.30 51,077 0.00 0 120.00 28.61 Soldbiower TN 1 107.0 107.0 102.00 120.00 160.00 100.00 100.00 120.00 150.00 116.48 14.	Boller Other - Including:										
Sobolivers TN 1 10.75 312.40 3.388 0.00 0 120.00 1,280 Hangers and Supports and lance TN 1 180.00 180.00 180.00 224.30 6.560 0.00 0 120.00 3.360 Parmace TubesSphtrWhwaits TN 1 224.00 224.30 186.377 0.00 0 120.00 150.00 166.40 0.00 0 120.00 150.00 165.00 120.00 150.00 120.00 150.00 120.00 150.00 120.00 150.00 120.00 150.00 120.00 150.00 120.00 150.00 120.00 150.00 120.00 150.00 120.00 150.00 120.0	Air Preheater and lances	TN	2	109.00	218.00	234.30	51,077	0.00	0	120.00	26,160
Hangers and Supports and links TN 1 18.00 312.40 5.822 0.00 0 120.00 2.160 Downcomes TN 1 28.00 28.00 234.30 6.660 0.00 0 120.00 98.480 Rehastis and Pit Attemperator TN 1 28.20 128.20 234.30 10.644 0.00 0 120.00 65.040 Casing/Dutsflues TN 1 45.00 45.00 312.40 46.61 0.00 0 120.00 65.040 Burners TN 1 15.00 312.40 46.61 0.00 0 120.00 15.00 Attemportator and SH control TN 1 114.88 312.40 35.00 0.00 120.00 120.00 36.00 Silences TN 1 40.00 40.00 312.40 35.00 0.00 120.00 36.00 20.00 120.00 36.00 20.00 120.00 48.00 0.00 0.00 0.00	Sootblowers	TN	1	10.75	10.75	312.40	3,358	0.00	0	120.00	1,290
Downcomes TN 1 28.00 234.30 6.660 0.00 0 120.00 3.380 Purnace Tubes/Spht/Witzels TN 1 129.20 234.30 108,377 0.00 0 120.00 15,504 Reheater and RH attemperator TN 1 129.20 234.30 10,544 0.00 0 120.00 5,400 Casing/Ducts/Files TN 1 542.00 312.40 40,61 0.00 0 120.00 15,504 Burners TN 1 15.00 312.40 40,61 0.00 0 120.00 130.00 130.00 130.00 120.00 130.00 130.00 120.00 130.00 120.00 130.00 120.00 130.00 120.00 120.00 130.00 130.00 130.00 120.00 120.00 120.00 120.00 120.00 120.00 120.00 120.00 30.00 120.00 120.00 23.40 10.00 120.00 23.40 10.00 120.00	Hangers and Supports and links	TN	1	18.00	18.00	312.40	5,623	0.00	0	120.00	2,160
Furnace Tubes/Spht/Mixedis TN 1 804.00 224.30 188.377 0.00 0 120.00 86.480 Reheter and Ri Hattemperator TN 1 45.00 224.30 10.544 0.00 0 120.00 65.040 Casing/Ductor/Flues TN 1 45.00 42.00 45.20 32.240 4.063 0.00 0 120.00 15.004 Casing/Ductor/Flues TN 1 43.00 31.240 4.063 0.00 0 120.00 15.004 Marcosi Headra TN 1 14.86 312.40 4.068 0.00 0 120.00 32.00 <td< td=""><td>Downcomers</td><td>TN</td><td>1</td><td>28.00</td><td>28.00</td><td>234.30</td><td>6,560</td><td>0.00</td><td>0</td><td>120.00</td><td>3,360</td></td<>	Downcomers	TN	1	28.00	28.00	234.30	6,560	0.00	0	120.00	3,360
Reheater and RH attemperator TN 1 120.00 120.00 15.004 Economizer TN 1 450.00 452.00 324.30 10.544 0.00 0 120.00 65.400 Cashg/Ducts/Flues TN 1 450.00 452.00 332.40 4661 0.00 0 120.00 65.400 Miscelanous Shel and Equipment TN 1 15.00 312.40 4.061 0.00 0 120.00 15.00 Air Coll Heature TN 1 15.00 312.40 40.69 0.00 0 120.00 136.00 Silencers TN 1 3.00 30.00 372.40 53.50 20.00 1.000 1.00 10.00 32.612 </td <td>Furnace Tubes/Sphtr/Wtrwalls</td> <td>TN</td> <td>1</td> <td>804.00</td> <td>804.00</td> <td>234.30</td> <td>188,377</td> <td>0.00</td> <td>0</td> <td>120.00</td> <td>96,480</td>	Furnace Tubes/Sphtr/Wtrwalls	TN	1	804.00	804.00	234.30	188,377	0.00	0	120.00	96,480
Economizer TN 1 45.00 45.00 105.44 0.00 0 120.00 65.400 Casing/Duck/Elues TN 1 13.00 312.40 160.321 0.00 0 120.00 15.	Reheater and RH attemperator	TN	1	129.20	129.20	234.30	30,272	0.00	0	120.00	15,504
$ \begin{array}{c} \mbox{Cashap} Ca$	Economizer	TN	1	45.00	45.00	234.30	10,544	0.00	0	120.00	5,400
Burners TN 1 13.00 13.00 13.00 13.00 10.00 0 122.00 1500 Attemperator and Hounding TN 1 114.88 114.88 114.88 114.88 114.88 114.88 10.00 0 120.00 180 Micecelaneous Stell and Equipment TN 1 14.88 114.88 112.40 123.69 0.00 0 120.00 380 Silencers TN 1 40.00 40.00 312.40 12.496 0.00 0 120.00 48.00 Insulation CY 1 50.00 50.00 71.00 3,550 20.00 1,000 0.00 0 20.00 20.	Casing/Ducts/Flues	TN	1	542.00	542.00	312.40	169,321	0.00	0	120.00	65,040
Altemperator and SH control TN 1 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.20.00 2.20.00 1.20.00 2.20.00 1.20.00 2.20.00 <t< td=""><td>Burners</td><td>TN</td><td>1</td><td>13.00</td><td>13.00</td><td>312.40</td><td>4,061</td><td>0.00</td><td>0</td><td>120.00</td><td>1,560</td></t<>	Burners	TN	1	13.00	13.00	312.40	4,061	0.00	0	120.00	1,560
Miscellanaous Shel and Equipment TN 1 114.88 114.89 312.40 358.88 0.00 0 120.00 137.86 Air Coll Headras TN 1 40.00 40.00 312.40 132.40 12.406 0.00 0 120.00 360 360 312.40 12.406 0.00 0 120.00 4800 0.00 0 120.00 4800 0.00 0 0.00 0 0 0.00 0 0.00 0 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 120.00 480 114.87 0.00 0 120.00 2.820 116.75 0.00 0 120.00 2.820 116.75 0.00 0 120.00 120.00 120.00 120.00 120.00 120.00 120.00 120.00 120.00 120.00 120.00	Attemperator and SH control	TN	1	1.50	1.50	312.40	469	0.00	0	120.00	180
Air Coll Headers TN 1 3.00 3.00 312.40 9.37 0.00 0 120.00 36800 Silencers TN 1 40.00 40.00 312.40 12.466 0.00 0 120.00 48.00 Insulation CY 1 50.00 50.00 71.00 3.550 20.00 1,000 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 371,524 371,524 371,524 371,524 0.00 0 120.00 2.8612 0.00 0 2.8007 114,725 371,524 371,524 0.00 0 120.00 2.868 1.20.00 2.868 1.20.00 2.868 1.20.00 2.868 1.20.00 2.868 1.20.00 2.868 1.20.00 2.868 1.20.00<	Miscellaneous Steel and Equipment	TN	1	114.88	114.88	312.40	35,889	0.00	0	120.00	13,786
Silencers TN 1 40.00 40.00 312.40 12.46 0.00 0 120.00 4,800 Insulation CY 1 326.12 326.12 326.02 1000 326.612 0.00 0	Air Coil Heaters	TN	1	3.00	3.00	312,40	937	0.00	0	120.00	360
Insulation CY 1 50,00 50,00 71,00 3,550 20,00 1,000 0,00 0 Subtata Bojler Plant Auxiliaries HP. Feedwater Heater #1 TN 1 23,60 234,30 5,566 0.00 0 120,00 2,820 L.P. Feedwater Heater #1 TN 1 21,40 234,30 5,566 0.00 0 120,00 2,820 L.P. Feedwater Heater #2 TN 1 21,40 234,30 5,666 0.00 0 120,00 2,820 L.P. Feedwater Heater #3 TN 1 7,90 7,90 234,30 2,413 0.00 0 120,00 4,928 L.P. Feedwater Heater #4 TN 1 10,30 13,30 2,413 0.00 0 120,00 1,280 1,280 1,280 0,120,00 120,00 1,280 1,280 1,280 1,280 0,30 0 120,00 1,280 1,280 1,280 1,280	Silencers	TN	1	40.00	40.00	312.40	12,496	0.00	0	120.00	4,800
Insulation CY 1 326.12 327.1524 Boller Clark Feed/water Heater #2 TN 1 234.30 5,014 0.00 0 120.00 2,820 L.P. Feed/water Heater #5 TN 1 16.15 15.15 234.30 2,413 0.00 0 120.00 120.00 120.00 120.00 120.00 220.00 20.00 0 120.00	Insulation	CY	1	50.00	50.00	71.00	3,550	20.00	1.000	0.00	0
Subtotal 1,280,907 114,725 371,524 Bojar Plant Auxiliaries IIII Auxiliaries IIIIII Auxiliaries IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Insulation	CY	1	326.12	326.12	1,250.00	407,650	100.00	32,612	0.00	0
Boiler Plant Auxiliaries IP. Feedwater Heater #1 TN 1 23.50 234.30 5,506 0.00 0 120.00 2,820 H.P. Feedwater Heater #2 TN 1 21.40 234.30 5,014 0.00 0 120.00 2,820 L.P. Feedwater Heater #2 TN 1 7.90 7.90 234.30 1,651 0.00 0 120.00 2,820 L.P. Feedwater Heater #4 TN 1 10.30 10.30 234.30 2,413 0.00 0 120.00 1,236 L.P. Feedwater Heater #6 TN 1 10.30 10.30 234.30 2,413 0.00 0 120.00 1,236 Boiler Feed Pumps incl motors TN 3 7,50 22,50 312.40 7,029 0.00 0 120.00 2,380 Condensate Storage Tank - 60,000 Gal(21x24) TN 1 19.67 312.40 6,145 0.00 120.00 2,380 Condensate Racovery Tank (14x6x4) TN 2	Subtotal						1,280,907		114,725		371,524
Beller Flent Auxiliaries V <thv< th=""> V V V</thv<>									-		
H.P. Feedwater Heater #1 TN 1 23.50 234.30 5,506 0.00 0 120.00 2,820 L.P. Feedwater Heater #2 TN 1 21.40 21.40 234.30 5,014 0.00 0 120.00 2,880 L.P. Feedwater Heater #3 TN 1 7.80 7.90 234.30 1,851 0.00 0 120.00 1,286 L.P. Feedwater Heater #3 TN 1 10.30 10.30 234.30 2,413 0.00 0 120.00 1,286 L.P. Feedwater Heater #6 TN 1 10.30 10.30 234.30 2,413 0.00 0 120.00 1,286 BOIler Feed Pumps incl motors TN 1 15.15 15.15 234.30 3,550 0.00 0 120.00 2,380 Condensate Storage Tank - 60,000 Gal(21x24) TN 1 19.67 19.67 312.40 6,145 0.00 0 120.00 2,380 Condensate Racovery Tank Foundation CY 1 14.40 12.40 12.40 131 103.00 1,277	Boiler Plant Auxiliaries					1					1
H.P. Feedwater Heater #2 TN 1 21.40 234.30 5,014 0.00 0 120.00 2,568 L.P. Feedwater Heater #3 TN 1 7,90 7,90 234.30 1,851 0.00 0 120.00 4,288 L.P. Feedwater Heater #4 TN 1 10.30 10.30 234.30 2,413 0.00 0 120.00 1,238 L.P. Feedwater Heater #6 TN 1 10.30 10.30 234.30 2,413 0.00 0 120.00 1,238 L.P. Feedwater Heater #6 TN 1 15.15 151.5 154 234.30 3,550 0.00 0 120.00 1,238 Bolier Feed Pumps incl motors TN 3 7.50 22.50 312.40 7,029 0.00 0 120.00 2,380 Condensate Storage Tank - 60,000 Gal(21x24) TN 1 19.67 312.40 6,145 0.00 0 120.00 2,380 Condensate Storage Tank - 60,000 Gal(21x24) TN 1 19.67 312.40 91.20 1,131 103.00 1,2	H.P. Feedwater Heater #1	TN	1	23.50	23.50	234.30	5,506	0.00	0	120.00	2,820
L.P. Feedwater Heater #3 TN 1 1 7.90 7.90 234.30 1.851 0.00 0 120.00 9488 L.P. Feedwater Heater #4 TN 1 10.30 10.30 234.30 2.413 0.00 0 120.00 1.238 L.P. Feedwater Heater #5 TN 1 10.30 10.30 234.30 2.413 0.00 0 120.00 1.238 H.P. Feedwater Heater #6 TN 1 115.15 15.15 234.30 3.550 0.00 0 120.00 1.818 Boiler Feed Pumps incl motors TN 3 7.50 22.50 312.40 7.029 0.00 0 120.00 2.700 BFP - Foundation CY 1 16.00 19.00 1.428 0.00 0 120.00 2.380 Condensate Storage Tank - 60.00 Gal(21x24) TN 1 1.987 198.67 312.40 6.145 0.00 0 120.00 2.380 Condensate Recovery Tank (14x6x4) TN 2 1.50 30 312.40 91.20 1.131 103.00 1.277 0.00 0 0 Condensate Recovery Tank (14x6x4) TN 2 1.50 3.00 312.40 937 0.00 0 120.00 380 Condensate Recovery Tank Foundation CY 2 3.54 7.08 91.20 4.464 103.00 729 0.00 0 120.00 20 Condensate Recovery Tank Foundation TN 3 1.50 4.50 312.40 1.406 0.00 0 120.00 2.00 380 Condensate Recovery Tank Ki Compressor TN 3 1.50 4.50 312.40 312 0.00 0 120.00 360 Condensate Pump motor TN 3 1.50 4.50 312.40 1.406 0.00 0 120.00 360 Condensate Pump to TN 3 3.50 9.60 312.40 2.999 0.00 0 120.00 120 Condensate Pump to TN 3 3.50 9.60 312.40 7.81 0.00 0 120.00 360 Condensate Pump to TN 3 3.50 9.60 312.40 7.81 0.00 0 120.00 360 Blowdown Tank TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 360 Blowdown Tank TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 360 Blowdown Tank TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 360 Blowdown Tank TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 360 Blowdown Tank TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 360 Blowdown Tank TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 360 Blowdown Tank TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 360 Blowdown Tank TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 360 Blowdown Tank TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 360 Blowdown Tank TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 360 Blowdown Tank TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 360 Blowdown Tank TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 360 Blowdown Tank TN 1 0 6.77 6.77 312.40 2.115 0.00 0 120.00 360 Blowdown Tank TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00	H.P. Feedwater Heater #2	TN	1	21.40	21.40	234.30	5,014	0.00	0	120.00	2,568
L.P. Feedwater Heater #4 TN 1 10.30 123.00 244.30 2,413 0.00 0 120.00 1,236 L.P. Feedwater Heater #5 TN 1 10.30 10.30 234.30 2,413 0.00 0 120.00 1,236 H.P. Feedwater Heater #6 TN 1 15.15 15.15 234.30 3,550 0.00 0 120.00 1,818 Boiler Feed Pumps incl motors TN 3 7.50 22.50 312.40 7,029 0.00 0 120.00 2,700 BFP - Foundation CY 1 19.67 19.67 312.40 6,145 0.00 0 120.00 2,380 Condensate Storage Tank - 60,000 Gal(21x24) TN 1 19.67 19.67 312.40 6,145 0.00 0 120.00 2,380 Condensate Recovery Tank (Foundation CY 1 12.40 12.40 91.20 1,131 103.00 120.00 0 0 0 0 0 0.00 0 120.00 120.00 360 120.00 120.00 1	L.P. Feedwater Heater #3	TN	1	7.90	7.90	234.30	1,851	0.00	0	120.00	948
L.P. Feedwater Heater #5 TN 1 10.30 123.00 120.00 120.00 128.00 H.P. Feedwater Heater #6 TN 1 15.15 15.15 234.30 3,550 0.00 0 120.00 1,818 Boiler Feed Pumps incl motors TN 3 7.50 22.50 312.40 7,029 0.00 0 120.00 2,700 BFP - Foundation CY 1 16.00 19.00 1,458 103.00 1,648 0.00 0 Condensate Storage Tank - 60,000 Gal(21x24) TN 1 19.67 312.40 61,445 0.00 0 120.00 2,380 Condensate Storage Tank Foundation CY 1 12.60 13.00 312.40 937 0.00 0 120.00 360 Condensate Recovery Tank (14x6x4) TN 2 1.50 3.00 312.40 937 0.00 0 120.00 360 Condensate Recovery Tank (14x6x4) TN 1 100 100 312.40 3.00 312.40 3.00 120.00 120.00 120.00 120.	L.P. Feedwater Heater #4	TN	1	10.30	10.30	234.30	2,413	0.00	0	120.00	1,236
H.P. Feedwater Heater #6 TN 1 15.15 15.15 234.30 3,550 0.00 0 120.00 1,818 Boiler Feed Pumps incl motors TN 3 7.50 22.50 312.40 7,029 0.00 0 120.00 2,700 BFP - Foundation CY 1 16.00 16.00 91.20 1,459 103.00 1,648 0.00 0 Condensate Storage Tank - 60,000 Gal(21x24) TN 1 19.67 19.67 312.40 61,445 0.00 0 120.00 2,380 Condensate Storage Tank Foundation CY 1 12.40 12.40 91.20 1,131 103.00 1,277 0.00 0 Condensate Racovery Tank (14x6x4) TN 2 1.50 300 312.40 937 0.00 0 120.00 360 Condensate Racovery Tank Foundation CY 2 3.54 7.08 91.20 646 103.00 729 0.00 0 120.00 120.00 120.00 120.00 120.00 120.00 120.00 120.00 120.00	L.P. Feedwater Heater #5	TN	1	10.30	10.30	234.30	2,413	0.00	٥	120.00	1,236
Boiler Feed Pumps incl motors TN 3 7.50 22.50 312.40 7,029 0.00 0 120.00 2,700 BFP - Foundation CY 1 16.00 191.20 1,459 103.00 1,648 0.00 0 Condensate Storage Tank - 60,000 Gal(21x24) TN 1 19.67 19.67 312.40 6,145 0.00 0 120.00 2,360 Condensate Storage Tank Foundation CY 1 12.40 12.40 91.20 1,131 103.00 1,277 0.00 0 Condensate Recovery Tank Foundation CY 2 3.54 7.08 91.20 646 103.00 729 0.00 0 Condensate Recovery Tank Foundation CY 2 3.54 7.08 91.20 646 103.00 729 0.00 0 120.00 120.00 120.00 120.00 120.00 120.00 120.00 540 Condensate Recovery Cooler TN 3 3.20 9.60 312.40	H.P. Feedwater Heater #6	TN	1	15.15	15.15	234.30	3,550	0.00	0	120.00	1,818
BFP - Foundation CY 1 16.00 16.00 91.20 1,452 103.00 1,648 0.00 0 Condensate Storage Tank - 60,000 Gal(21x24) TN 1 19.67 19.67 312.40 6,145 0.00 0 12.000 2,380 Condensate Storage Tank Foundation CY 1 12.40 191.20 1,131 103.00 1,277 0.00 0 Condensate Recovery Tank (Foundation CY 1 12.40 12.40 91.20 1,131 103.00 1,277 0.00 0 Condensate Recovery Tank (Foundation CY 2 3.54 7.08 91.20 646 103.00 729 0.00 0 0 0 0 120.00 120.00 120.00 120.00 120.00 120.00 120.00 120.00 120.00 1400 14.55 312.40 1.406 0.00 0 120.00 11.52 11.55 2.50 312.40 2.407 781 0.00 0 120.00	Boiler Feed Pumps incl motors	TN	3	7.50	22.50	312.40	7,029	0.00	0	120.00	2,700
Condensate Storage Tank - 60,000 Gal(21x24) TN 1 19.67 19.67 312.40 6,145 0.00 0 120.00 2,380 Condensate Storage Tank Foundation CY 1 12.40 12.40 91.20 1,131 103.00 1,277 0.00 0 Condensate Recovery Tank (14x6x4) TN 2 1.50 3.00 312.40 937 0.00 0 120.00 360 Condensate Recovery Tank Foundation CY 2 3.54 7.08 91.20 646 103.00 729 0.00 0 Condensate Recovery Cooler TN 1 1.00 1.00 312.40 312 0.00 0 120.00 120.00 120.00 120.00 120.00 120.00 120.00 140 1.40 1.406 0.00 0 120.00 140 1.50 30.20 9.60 312.40 1,406 0.00 0 120.00 1.50 1.50 1.50 312.40 2,167 0.00 0 <t< td=""><td>BFP - Foundation</td><td>CY</td><td>1</td><td>16.00</td><td>16.00</td><td>91.20</td><td>1,459</td><td>103.00</td><td>1,648</td><td>0.00</td><td>0</td></t<>	BFP - Foundation	CY	1	16.00	16.00	91.20	1,459	103.00	1,648	0.00	0
Condensate Storage Tank Foundation CY 1 12.40 12.40 12.40 131 103.00 1,277 0.00 0 Condensate Recovery Tank (14x6x4) TN 2 1.50 3.00 312.40 937 0.00 0 120.00 360 Condensate Recovery Tank Foundation CY 2 3.54 7.08 91.20 646 103.00 729 0.00 0 Condensate Recovery Cooler TN 1 1.00 1.00 312.40 312 0.00 0 120.00 1540 120.00 120.00 11.52 1.55 12.40 140 2,187 0.00 0 120.00 300 120.00 300 120.00 300 120.00 300 120.00 300 120.00 3	Condensate Storage Tank - 60,000 Gal(21x24)	TN	1	. 19.67	19.67	312.40	6,145	0.00	0	120.00	2,360
Condensate Recovery Tank (14x6x4) TN 2 1.50 3.00 312.40 937 0.00 0 120.00 360 Condensate Recovery Tank Foundation CY 2 3.54 7.08 91.20 646 103.00 729 0.00 0 Condensate Recovery Cooler TN 1 1.00 1.00 312.40 312 0.00 0 120.00 1152 1152 1152 1152 1152 1152 1152 1152 1152 1152 1152 1152 1152 1152 1152 1152 1152 1152 1152<	Condensate Storage Tank Foundation	CY	1	12.40	12.40	91.20	1,131	103.00	1,277	0.00	0
Condensate Recovery Tank Foundation CY 2 3.54 7.08 91.20 646 103.00 729 0.00 0 Condensate Recovery Cooler TN 1 1.00 1.00 312.40 312 0.00 0 120.00 120 120 Condensate Pump TN 3 1.50 4.50 312.40 1,406 0.00 0 120.00 540 Condensate Pump motor TN 3 3.20 9.60 312.40 2,999 0.00 0 120.00 540 Condensate Fump motor TN 3 3.20 9.60 312.40 2,999 0.00 0 120.00 840 Instrument Air Compressor TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 300 Blowdown Tank TN 1 2.50 250 312.40 7.81 0.00 0 120.00 300 Boiler Fill/Condensate Transfer Pump(40 hp) TN 4<	Condensate Recovery Tank (14x6x4)	TN	2	1.50	3.00	312.40	937	0.00	0	120.00	360
Condensate Recovery Cooler TN 1 1.00 1.00 312.40 312 0.00 0 120.00 120 Condensate Pump TN 3 1.50 4.50 312.40 1,406 0.00 0 120.00 540 Condensate Pump motor TN 3 3.20 9.60 312.40 2,999 0.00 0 120.00 1,152 Instrument Air Compressor TN 2 3.50 7.00 312.40 2,187 0.00 0 120.00 840 Blowdown Tank TN 1 2.50 2.50 312.40 781 0.00 0 120.00 300 Evaporator TN 1 2.50 2.50 312.40 781 0.00 0 120.00 300 Evaporator TN 1 2.50 2.50 312.40 781 0.00 0 120.00 300 Boiler Fill/Condensate Transfer Pump(40 hp) TN 4 1.00 4.00	Condensate Recovery Tank Foundation	CY	2	3.54	7.08	91.20	646	103.00	729	0.00	0
Condensate Pump TN 3 1.50 4.50 312.40 1,406 0.00 0 120.00 540 Condensate Pump motor TN 3 3.20 9.60 312.40 2,999 0.00 0 120.00 1,152 Instrument Air Compressor TN 2 3.50 7.00 312.40 2,187 0.00 0 120.00 840 Blowdown Tank TN 1 2.50 2.50 312.40 7,81 0.00 0 120.00 300 Evaporator TN 1 2.50 2.50 312.40 7,81 0.00 0 120.00 300 Boller Fill/Condensate Transfer Pump(40 hp) TN 4 1.00 4.00 312.40 1,874 0.00 0 120.00 300 Extraction Heater Drain Pump(100 hp) TN 2 3.00 6.00 312.40 1,874 0.00 0 120.00 720 Miscellaneous Steel and Equipment -Bolier Aux. TN 1 <td>Condensate Recovery Cooler</td> <td>TN</td> <td>1</td> <td>1.00</td> <td>1.00</td> <td>312.40</td> <td>312</td> <td>0.00</td> <td>D</td> <td>120.00</td> <td>120</td>	Condensate Recovery Cooler	TN	1	1.00	1.00	312.40	312	0.00	D	120.00	120
Condensate Pump motor TN 3 3.20 9.60 312.40 2.999 0.00 0 120.00 1,152 Instrument Air Compressor TN 2 3.50 7.00 312.40 2,187 0.00 0 120.00 840 Blowdown Tank TN 1 2.50 2.50 312.40 781 0.00 0 120.00 300 Evaporator TN 1 2.50 2.50 312.40 781 0.00 0 120.00 300 Boiler Fill/Condensate Transfer Pump(40 hp) TN 4 1.00 4.00 312.40 1,874 0.00 0 120.00 300 Extraction Heater Drain Pump(100 hp) TN 2 3.00 6.00 312.40 1,874 0.00 0 120.00 720 Miscellaneous Steel and Equipment -Boiler Aux. TN 1 6.77 6.77 312.40 1,874 0.00 0 120.00 812 Subtotal	Condensate Pump	TN	3	1.50	4.50	312.40	1.406	0.00	0	120.00	540
Instrument Air Compressor TN 2 3.50 7.00 312.40 2,187 0.00 0 120.00 840 Blowdown Tank TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 300 Evaporator TN 1 2.50 2.50 312.40 7.81 0.00 0 120.00 300 Boiler Fill/Condensate Transfer Pump(40 hp) TN 4 1.00 4.00 312.40 7.81 0.00 0 120.00 300 Boiler Fill/Condensate Transfer Pump(40 hp) TN 4 1.00 4.00 312.40 1,874 0.00 0 120.00 480 Extraction Heater Drain Pump(100 hp) TN 2 3.00 6.00 312.40 1,874 0.00 0 120.00 720 Miscellaneous Steel and Equipment -Boiler Aux. TN 1 6.77 6.77 312.40 2,115 0.00 0 120.00 812 Subtotal TN 1 21.05 21.05 234.30 4.932 0.00 0	Condensate Pump motor	TN	3	3.20	9.60	312.40	2 999	0.00	0	120.00	1 152
Blowdown Tank TN 1 2.50 100 12.00 0.00 120.00 300 Blowdown Tank TN 1 2.50 2.50 312.40 781 0.00 0 120.00 300 Evaporator TN 1 2.50 2.50 312.40 781 0.00 0 120.00 300 Boiler Fill/Condensate Transfer Pump(40 hp) TN 4 1.00 4.00 312.40 1,250 0.00 0 120.00 300 Boiler Fill/Condensate Transfer Pump(100 hp) TN 4 1.00 4.00 312.40 1,874 0.00 0 120.00 720 Miscellaneous Steel and Equipment -Boiler Aux. TN 1 6.77 6.77 312.40 2,115 0.00 0 120.00 812 Subtotal 51,799 3,654 21,311 Boiler Plant Piping Main Steam Piping TN 1 21.05 21.05 234.30 4.932 0.00 0 120.00 2526	Instrument Air Compressor	TN	2	3.50	7 00	312.40	2 187	0.00	0	120.00	840
Evaporator TN 1 2.50 2.50 312.40 101 0.00 0 120.00 300 Boiler Fill/Condensate Transfer Pump(40 hp) TN 4 1.00 4.00 312.40 1,250 0.00 0 120.00 300 Boiler Fill/Condensate Transfer Pump(100 hp) TN 4 1.00 4.00 312.40 1,250 0.00 0 120.00 480 Extraction Heater Drain Pump(100 hp) TN 2 3.00 6.00 312.40 1,874 0.00 0 120.00 720 Miscellaneous Steel and Equipment -Boiler Aux. TN 1 6.77 6.77 312.40 2,115 0.00 0 120.00 812 Subtotal 51,799 3,654 21,311 21,311 21,311 21,311 21,05 234.30 4,932 0.00 0 120.00 2 526	Blowdown Taok	TN	1	2.50	2.50	312.40	781	0.00	0	120.00	300
Boiler Fill/Condensate Transfer Pump(40 hp) TN 4 1.00 4.00 312.40 1,250 0.00 0 120.00 480 Extraction Heater Drain Pump(100 hp) TN 2 3.00 6.00 312.40 1,874 0.00 0 120.00 480 Miscellaneous Steel and Equipment -Boiler Aux. TN 1 6.77 6.77 312.40 2,115 0.00 0 120.00 812 Subtotal 51,799 3,654 21,311 51,799 3,654 21,311 Boiler Plant Piping TN 1 21.05 21.05 234.30 4.932 0.00 0 120.00 2 526	Evaporator	TN	1	2.50	2.50	312.40	781	0.00	0	120.00	300
Extraction Heater Drain Pump(100 hp) TN 2 3.00 6.00 312.40 1,874 0.00 0 120.00 720 Miscellaneous Steel and Equipment -Boiler Aux. TN 1 6.77 6.77 312.40 2,115 0.00 0 120.00 720 Subtotal 51,799 3,654 21,311 51,799 3,654 21,311 Boiler Plant Piping TN 1 21.05 21.05 234.30 4.932 0.00 0 120.00 2 526	Boiler Fill/Condensate Transfer Pumo(40 ho)	TN	4	1.00	4 00	312.40	1 250	0.00	0	120.00	480
Miscellaneous Steel and Equipment -Boiler Aux. TN 1 6.77 6.77 312.40 2,115 0.00 0 120.00 812 Subtotal 51,799 3,654 21,311 51,799 3,654 21,311 Boiler Plant Piping TN 1 21.05 21.05 234.30 4,932 0.00 0 120.00 812	Extraction Heater Drain Pump(100 hp)	TN	2	3.00	6.00	312.40	1 974	0.00	0	120.00	400
Boiler Plant Piping TN 1 21.05 21.05 234.30 4.932 0.00 0 120.00 812 Main Steam Piping TN 1 21.05 234.30 4.932 0.00 0 120.00 2 526	Miscellanenus Steel and Equipment -Roller Arm	TN	1	. 5.00 8.77	A 77	312.40	1,0/4	0.00	0	120.00	120
Boiler Plant Piping TN 1 21.05 234.30 4.932 0.00 0 120.00 2 526	Subtatal		•	0.13	0.11	V12.40	51 700	0.00	2654	120.00	012
Boiler Plant Piping Main Steam Piping TN 1 21.05 21.05 234.30 4.932 0.00 0 120.00 2.526	Cabiolar						51,799		3,054		21,311
Main Steam Piping TN 1 21.05 21.05 234.30 4,932 0.00 0 120.00 2.526	Boiler Plant Piping										
	Main Steam Piping	TN	1	21.05	21.05	234.30	4,932	0.00	0	120.00	2.526

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		Number	Units		Removal		Disposal		Salvage	
		of	of Measure	Total	Cost per	Total	Cost per	Totai	Value	Total
Removal, Disposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	ner Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Hot Reheat Piping	TN	1	34.42	34.42	234.30	8,065	0.00	0	120.00	4,130
Cold Reheat Piping	TN	1	29.08	29.08	234.30	6,813	0.00	D	120.00	3,490
Condensate and Air Evaporation	TN	1	47.31	47.31	312.40	14,780	0.00	0	120.00	5,677
Extraction Steam Piping	TN	1	8.28	8.28	312.40	2,587	0.00	0	120.00	994
Boiler Feed Piping	TN	1	10.58	10.58	234.30	2,479	0.00	0	120.00	1,270
Boiler Feed/Plant Piping Insulation	CY	1	350.00	125.00	71.00	8,875	20.00	2,500	0.00	0
Boiler Feed/Plant Piping Insulation	CY	1	150.00	150.00	71.00	10,650	20.00	3,000	0.00	0
Silencers	TN	1	1.20	1.20	312.40	375	0.00	0	120.00	144
Saturated Auxiliary Steam - Piping	TN	1	34.94	34,94	312.40	10,915	0.00	0	120.00	4,193
Service & Cooling Water Piping	TN	1	57,96	57.96	504.10	29,218	0.00	o	120.00	6,955
Instrument, Sampling & Control Piping	TN	1	37.46	37,46	504.10	18,884	0.00	0	120.00	4,495
Miscellaneous Steel and Equipment	TN	1	28.52	28.52	312.40	8,910	0.00	0	120.00	3,422
Subtotal						127,481		5,500		37,296
Feedwater Treatment and Cooling Water Equipment										1
Cooling Water Pumps	TN	2	2.00	4.00	312.40	1,250	0.00	0	120.00	480
Cooling Water Piping	TN	1	272.07	272.07	312.40	84,995	0.00	0	120.00	32,648
Cooling Water Heat Exchangers	TN	2	1.50	3,00	504.10	1,512	0.00	0	120.00	360
Subtotal						87,757		0		33,468
						1				
Forced and Induced Draft Equipment										
FD Fans Foundations - Reinforced Concrete	CY	1	28.30	28.30	91.20	2,581	103.00	2,915	0.00	o
FD Fans w/ motors and couplings	TN	2	43,50	87.00	234.30	20,384	0.00	0	120.00	10,440
FD Air Ducts(incl. windboxes)	TN	1	69.25	69.25	312.40	21,634	0.00	0	120.00	8,310
Insulation	CY	1	50.00	50,00	71.00	3,550	20.00	1,000	0.00	0
Insulation	CY	1	280.00	280.00	1,250.00	350,000	100.00	28,000	0.00	0
Gas ducts	TN	1	69.25	69.25	312.40	21,634	0.00	0	120.00	8,310
Stack Foundation - Reinforced Concrete	CY	1	620.00	620.00	91.20	56,544	103.00	63,860	0.00	0
Stack - lining/shaft	CY	1	519,75	519.75	91.20	47,401	103.00	53,534	0.00	0
ID Fans Foundations - Reinforced Concrete	CY	1	32.00	32.00	91.2D	2,918	103.00	3,296	0.00	0
ID Fans w/ motors and couplings	TN	2	43.50	87.00	312.40	27,179	0.00	0	120.00	10,440
Miscellaneous Steel and Equipment	ŤN	1	22.55	22.55	312.40	7,045	0.00	0	120.00	2,706
Subtotal						560,869		152,605		40,206
Total Account 312						2,203,308		569,030		511,537
			•							
FERC Account 314										
<u>Turbo-Generator Units</u>										
Pedestal - Reinforced Concrete	CY	1	983.00	983.00	91,20	89,650	103.00	101,249	0.00	0
Turbine - Exciter and other	TN	1	147.35	147,35	177.50	26,155	0.00	0	120.00	17,682
Turbine - Stator	TN	1	216.25	216.25	177.50	38,384	0.00	0	120.00	25,950
Turbine - HP - IP Cylinder Cover	TN	1	20.00	20.00	177.50	3,550	0.00	0	120.00	2,400
Turbine - LP Cylinder Cover	TN	1	20.50	20.50	177.50	3,639	0.00	0	120.00	2,460
Turbine - LP Blade Ring(upper half)	TN	1	20.00	20.00	177.50	3,550	0.00	0	120.00	2,400
Turbine - IP Rotor	TN	1	14.00	14.00	177.50	2,485	0.00	0	120.00	1,680
Turbine - LP Rotor	TN	1	18.00	18.00	177.50	3,195	0.00	0	120.00	2,160
Turbine - Generator Rotor	TN	1	. 30.15	30,15	177.50	5,352	0.00	0	120.00	3,618
Turbine Copper	TN	1	37,00	37.00	695.80	25,745	0.00	0	5,000.00	185,000
Turbine Piping	TN	1	207.20	207.20	234.30	48,547	0.00	0	120.00	24,864
Turbine Insulation	CY	1	210.00	210.00	1,250.00	262,500	100.00	21,000	0.00	0
Turbine Enclosure	TN	1	14.75	14.75	312.40	4,608	0.00	0	120.00	1,770
Miscellaneous Steel and Equipment	TN	1	16.90	16.90	312.40	5,280	0.00	0	120.00	2,028

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		Number	Units		Removal		Disposal		Salvage	
.		of	of Measure	Total	Cost per	Total	Cost per	Total	Value	Total
Removal, Disposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	per Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Subtotal						522,638		122,249		272,012
Condensers and Auxiliaries						ļ				
Condenser Shell	TN	1	285.00	285.00	234.30	66,776	0.00	0	120.00	34,200
Condenser - Aluminum-Brass Tubes	TN	1	87.07	87.07	504.10	43,892	0.00	0	2,800.00	243,796
Condenser Foundation - Reinforced Concrete	CY	1	185.25	185.25	91.20	16,895	103.00	19,081	0.00	0
Circulating Water Pumps - 58,000 gpm(incl mtr)	TN	2	29.50	59.00	312.40	18,432	0.00	0	120.00	7,080
Circulating Water Piping	TN	1	98.73	98.73	312.40	30,843	0.00	0	120.00	11,848
Condensate Pumps - 12" suction, 8" dischrg(incl mtrs)	TN	3	15.97	47.91	312.40	14,967	0.00	0	120.00	5,749
Condensate Pump - Foundation - RI Concrete	CY	T	10.50	10.50	91.20	958	103.00	1,082	0.00	5.040
Lube Of Classics Table (4500 and	IN	1	47.00	47.00	312.40	14,063	0.00	0	120.00	5,640
Lube Oil Storage Tank (4500 gal)		1	23.50	23.50	312.40	10 820	0.00	0	120.00	2,020
Miscellaneous Steel and Equipment	161	1	41.07	41.07	312.40	12,030	0.00		120.00	316.061
300000						227,010		20,102		310,001
Total Account 314						750,254		142,411		588,073
FERC Account 315										1
Accessory Electrical Equipment										
Foundations & Structures								_		
Main Generator Leads & Enclosures(aluminum)	TN	1	10.00	10.00	420.00	4,200	0.00	0	1,340.00	13,400
Manholes and Handholes - Concrete	CY	1	49.00	49,00	36.48	1,788	103.00	5,047	0.00	0
I ransformer Foundations - Concrete	CY	1	39.00	39.00	91.20	3,557	103.00	4,017	0.00	0
Switchgear Foundations - Concrete	CY	1	37.00	37.00	91.20	3,3/4	103.00	3,811	0,00	U
Load Control Centers Foundations - Concrete	CY	1	12.00	12.00	91.20	1,094	103.00	1,236	0.00	0
Aux Power Transformer - 7,500 kva		1	17.40	17.40	504.10	8,771	0.00	0	120.00	2,088
Transformer	IN	1	23.25	23.25	504.10	11,720	0.00	0	F 000 00	2,790
Stempe Retter		1	0.00	2.00	525.40 504.10	1 512	0.00	· U	120.00	380
Underground Ducts - Constrate	CY.	4	75.00	75.00	01-20	6 840	103.00	7 725	0.00	500
Conduit - rigid alum	TN	4	13.00	42.70	504 10	21 525	0.00	1,725	1 340 00	57 218
Exposed Conduits and Trave	TN	1	92.70	86.84	504.10	43 776	0,00	0	1 340 00	116 368
Buswork and Cooper tubing	TN	1	1.00	1.00	504.10	504	0.00	0	5,000,00	5 000
Motor Control Centers	TN	1	4 50	4.50	504.10	2 268	0.00	0	120.00	540
Power/Control Witting	TN	i	84.56	84.56	852.00	72 045	0.00	0	2 100 00	177 576
Main Control Board for B-T-G	TN	i	. 3.00	3.00	504.10	1.512	0.00	ů	120.00	360
f oad Control Centers Transformers	TN	2	3.10	6.20	504.10	3,125	0.00	ō	120.00	744
Switchoear - 4,160v Metalclard	TN	1	20.00	20.00	504.10	10.082	0.00	0	120.00	2,400
Switchgear - 480y Metalclad	TN	1	18.00	18.00	504.10	9.074	0.00	o	120.00	2,160
Total Account 315		-				206,769		21,836		381,002
FERC Account 316										
Miscellaneous Power Plant Equipment										
Service Air Compressor	TN	1	8.00	8.00	312.40	2,499	0.00	0	120.00	960
Air Compressor - Concrete Foundation	CY	1	11.00	11.00	91.20	1,003	103.00	1,133	0.00	0
Total Account 316						3,502		1,133		960
TOTAL SANFORD UN IT 3						4,098,610		1,404,819		1,573,738
SANFORD UNITS 4 & 5 FERC Account 341										
Site Sewer System				1						

Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Storm Sewers and Drains - Concrete(8" - 48")	TN	1	245.18	245.18	349.60	85,715	0.00	Ö	0.00	0
Floor Drains, Sump Pumps & Oily Sep 6" CI Pipe	TN	1	22.50	22.50	504.10	11,342	0.00	0	120.00	2,700
Oil Separator - Site Sewer	CY	0	31.48	0.00	91.20	0	103.00	0	0.00	0
Subtotal						97,057		0		2,700
Fuel Oil System/Area										
Fuel Oil Storage Tank - 268,000 BBLS	TN	0	890.80	0.00	n√a	102,272	0.00	0	120.00	0
Fuel Oil Tank - Cleaning(268,000 BBLS)					n/a	0	n/a	550,000	0.00	0
Fuel Oil Storage Tank - Sand Base					n/a	0	n/a	224,000	0.00	0
Fuel Oil - Pump Transfer Pit - Reinforced Concrete	CY	1	106.00	106.00	91.20	9,667	103.00	10,918	0.00	0
Fuel Oil - Concrete Pipe Trenches	CY	1	51.35	51.35	91.20	4,683	103.00	5,289	0.00	C
Fuel Oil - Transfer Pit Pumps	TN	1	7.50	7.50	312.40	2,343	0.00	0	120.00	900
Fuel Oil - Concrete Retaining Wall	CY	1	741.50	741.50	91.20	67,625	103.00	76,375	0.00	0
Fuel Oil Pipe - Reinforced Concrete Supports	CY	1	43.00	43.00	91.20	3,922	103.00	4,429	0.00	0
Fuel Oil Piping - Steel (6" - 18")-Unload to Tanks	TN	1	31.44	31.44	312.40	9,822	0.00	0	120.00	3,773
Subtotal	•					200,334		871,011		4,673
Service Water and Raw Water Systems										
Water Treatment - Area Slab - Concrete	CY	1	520.00	520.00	91.20	47,424	103.00	53,560	0.00	0
Water Treatment - Chlorination System	TN	1	1.00	1.00	312.40	312	0.00	0	120.00	120
Fire Protection Piping - CI 2.5" to 8"	TN	1	34.22	34.22	504.10	17,250	0.00	0	120.00	4,106
Wash Water Booster Pump	TN	1	1.00	1.00	504.10	504	0.00	0	120.00	120
Drainage Lift Station Sump Pumps	TN	1	1,30	1.30	504.10	655	0.00	0	120.00	156
Service Water - Cast Iron Piping - 4" to 6"	TN	1	78.33	78.33	504.10	39,486	0.00	0	120.00	9,400
Subtotal						105,632		53,560		13,902
Intake System										
Intake Structure - Reinforced Concrete	CY	1	1,901.00	1,901.00	91.20	173,371	103.00	195.803	0.00	0
Intake Structure - Structural Steel(incl. crane)	TN	1	50.28	50.28	234.30	11,781	0.00	o (120.00	6.034
Intake Structure - Traveling Water Screens	TN	4	12.19	48.76	312.40	15,233	0.00	0	120.00	5,851
Intake Structure - Screen Wash Pumps	TN	4	0.50	2.00	312.40	625	0.00	0	120.00	240
Intake Structure - Concrete Stop Logs	CY	1	11.50	11.50	91.20	1,049	103.00	1,185	0.00	o
Open Cooling Water Piping	TN	1	58.68	58.68	349.60	20,515	0.00	0	120.00	7.042
Intake Cooling Water Pump Motors	TN	4	1.75	7.00	312.40	2,187	0.00	o	120.00	840
Intake Cooling Water Pumps	TN	4	1.37	5.48	312.40	1,712	0.00	0	120.00	658
Lake Fill Pumps	TN	2	. 4.67	9.34	312.40	2,918	0.00	0	120.00	1.121
Intake Structure - Crane incl. hoists	TN	2	25.23	50.46	312.40	15,764	0.00	0	120.00	6,055
Intake Conduit - Reinforced Concrete Pipe,78"	CY	1	1,123.50	1,123.50	349,60	392,776	0,00	0	0.00	0
Intake Transition Blocks - Concrete	CY	1	433.51	433.51	91.20	39,536	103.00	44,652	0.00	0
Intake Screen Refuse Line - Concrete Pipe	CY	1	72.09	72.09	349.60	25,203	0,00	0	0.00	0
Subtotal						702,667		241,639		27,840
Discharge System										
Discharge Conduit - 78" Reinforced Concrete Pipe	CY	1	933,45	933,45	349.60	326.334	0.00	o	0.00	0
Discharge Transition and Thrust Blocks	CY	1	115.00	115.00	91.20	10.488	103.00	11.845	0.00	ő
Discharge Structure - Reinforced Concrete	CY	1	424.00	424.00	91.20	38,669	103.00	43.672	0.00	0
Discharge Structure - Concrete Stop Logs	CY	1	. 11.50	11.50	91.20	1.049	103.00	1.185	0.00	0
Subtotal						376,540		56,702	0.00	0
Station Structures										
Substructure concrete footings, piers, beams	CY	1	599.00	599.00	91.20	54.629	103.00	61 607	0.00	
Substructure Reinforced Concrete - Miscellaneous	CY	1	4,437.00	4,437.00	91.20	404,654	103.00	457,011	0.00	0

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		Number	Units		Removal		Disposal		Salvage	
Removal, Disposal & Salvage	Unit of	of Compo-	of Measure ner	Total Inite of	Cost per Linit of	Total	Cost per	Total	Value	Total
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Structural Steel - Main Steel	N.	-	539.50	539.50	234.30	126,405	0.00	0	120.00	64,740
Steel - Hand Railing and Miscellaneous	Ę		10.00	10.00	312.40	3,124	0.00	0	120.00	1,200
Station Floors & Roof - Reinforced Concrete	Շ	-	958.00	958.00	91.20	87,370	103.00	98,674	0.00	0
Station Crane - Whiting 70/15 Crane - Bridge & Trolley	Ę	ы	115.20	230.40	234.30	53,983	0.00	0	120.00	27,648
Station Elevator - Westinghouse 1200 lb capacity	Ę	7	45.60	91.20	312.40	28,491	0.00	0	120.00	10,944
Diesel Generator Building - Concrete	Շ	-	45.90	45,90	36.48	1,674	103.00	4,728	0.00	0
Errergency Diesel Generators	Z	-	9.25	9.25	312.40	2,890	0.00	0	120.00	1,110
Hydrogen Storage Shelter - Concrete	Շ	~	46.76	46.76	36.48	1,706	103.00	4,816	00.0	0
2000181						764,925		626,926		105,642
Total Account 341						2,247,155		1,849,837		154,757
FERC Account 342 Boller Plant Equipment Fuel Oil & Gas Equipment										<u> </u>
Fuel - Metering Oit Tank - Out of Service, Cleaned(12,000 Fuel - Metering Oit Tank - Now Damin Tank 112 mm BEL)	ŗ	00	25.00 75.00	0.0	n/a	16,020	0.00	0	120.00	0
Fuel Tank - Foundation and firewall	2	•	0.07	0.0	e/u	16,020	0.0 n/a	0 66.342	0.02	
Fuel Oil Tank - Cleaning (12,000 BBLS)					e/u	0	n/a	0	0.00	0
					9/U	070 68	D/3	27,218	0.00	
						010176		000'08		5
Boiler Plant Auxiliaries Boiler Feed Purns	NT	e	31.65	04 05	342 40	Can OC	000	¢	120.00	
Boiler Feed Pump Foundation	: ≿	, .	407.00	407.00	04.20	37 118	103.00	14 021		460'II
Condensate Storage Tank - 150,000 Gal	E	~ ~	43.26	86.52	312 40	27.029	000		120.00	10 382
Condensate Storage Tank Foundation	Շ	-	194.00	194.00	91.20	17,693	103.00	19.982	0.00	0
Condensate Recovery Tank	r.	17	3.67	7.34	312.40	2,293	0.00	0	120.00	881
Condensate Recovery Tank Foundation	Շi	2	3.55	7.10	91.20	648	103.00	731	0.00	0
Condensate Recovery Drain Cooler	Ęi	2	1.00	2.00	312.40	625	0.00	0	120.00	240
currensee recovery veric condenser Subtotal	<u>z</u>	N	7.8.1	3.64	312.40	1,137 116,205	0.00	62,634	120.00	437 23.334
										-
Total Account 342					•	148,245		156,194		23,334
FERC Account 343 Power Movers Heat Recovery Steam Generalor Structure (HBSG)										
Generator Terminal Enclosure	NT	ø	10.50	84.00	312.40	26,242	0.00	0	120.00	10,080
Concrete	Շ		140.00	140.00	91.20	12,768 39,010	103.00	14,420	0.00	10,080
HRSG Enclosures	i									
Combustion Turbine Inlet Filter	Ę	æ (27.00	216.00	312.40	67,478	0.00	0	120.00	25,920
SGF HRSG Vents & Drains Pump	z Z	হাৰ	0.082	2,320.00 2.80	312.40 312.40	724,768	0.0	00	120.00 121 00	278,400
Supporting Steel	N	80	10.50	84.00	312.40	26.242	0.00		120.00	10.080
Concrete	Շ	-	2,133.00	2,133.00	91.20	194,530	103.00	219,699	0.0	0
						1,013,892		219,699		314,736

Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Saivage Value
HRSG Pressure Parts										
Heat Recovery Steam Generator	TN	8	3,495.50	27,964.00	234.30	6,551,965	0.00	0	120.00	3,355,680
Concrete	CY	1	22,700.00	22,700.00	91.20	2,070,240	103.00	2,338,100	0.00	0
						8,622,205		2,338,100		3,355,680
Industrial Gas Turbine						l				
Gas Turbine	TN	8	188 50	1 508 00	234 30	353 324	0.00	0	120.00	190.060
Concrete	CY	1	1 225 00	1 225 00	91.20	111 720	103.00	128 175	120.00	100,500
	0.	•	1,220.00	1,220.00	01.20	465.044	100.00	126,175	0.00	180 960
								,20,110		100,000
Stm Gen/Bir/HRSG Blowdown Cooling System						1				
WSA Blowdown Pump	TN	2	0.44	0.88	312.40	275	0.00	0	120.00	106
						275		0		106
Pakast Sustam										
HPH Hot Rohast Voluer	7-51		0.50	00.00	040.40			_		
	10	32	2.50	80.00	312.40	24,992	0.00	0	120.00	9,600
						24,992		U		9,600
Steam Turbine										
Generator	TN	8	260.00	2,080.00	177.50	369.200	0.00	0	120.00	249 600
High Pressure Steam Valves	TN	32	1.75	56.00	312.40	17,494	0.00	0	120.00	6.720
Miscellaneous Valves	TN	4900	0.01	49.00	312.40	15,308	0.00	0	120.00	5.880
Concrete	CY	1	1,830.00	1,830.00	91.20	166,896	103,00	188,490	0.00	0
						568,898		188,490		262,200
Visi Emergence Condensate Dura	-		0.05	0.05	040.40	1.045				
Concrete		1	3.25	3.25	01 20	1,015	0.00	0	120,00	390
			3.75	3.75	91.20		103.00	386	0.00	
						1,001		360		390
Condenser Air Removal System										
CAB Air Compressor	TN	3	4.40	13.20	312.40	4,124	0.00	0	120.00	1.584
HRB Condenser Air Extraction Hogger	TN	2	9.15	18.30	312.40	5,717	0.00	0	120.00	2,196
HRB Condenser Air Extraction Ejector	TN	2	3.75	7.50	312.40	2,343	0.00	0	120.00	900
Concrete	CY	1	12.00	12.00	91.20	1,094	103.00	1,236	0.00	0
					1	13,278		1,236		4,680
Condepart Contine Mistor Dure Sustem										
SWE Condensate Storage & Makeun Pump	751		0.44	4 70	912.40	Fro	0.00		100.00	
FWC Condensate Storage a Makeup Fump		4	0.44	35 20	312.40	10 006	0.00	U	120.00	211
Concrete	CY	1	50.00	50.00	91 20	4 560	102.00	5 150	120.00	4,224
	0.	•	00,00	00.00	01.20	16 106	103.00	5,150	0.00	4.425
						10,100		0,100		4,430
Air Cooling System, G.T.										
Cooling Fan Module	τN	8	4.25	34.00	312.40	10,622	0.00	0	120.00	4,080
Concrete	CY	1	35.00	35.00	91.20	3,192	103.00	3,605	0.00	0
						13,814		3,605		4,080
Component/Closed Cooling Water System				7.00	040 KF					
ECB Closed Cooling Water Spray Pumps		0	1.20	12.00	312.40	2,249	0.00	0	120.00	864
ECB Closed Cooling Water Cooling Tower	TN	2	3.∠U 58.10	116 20	312.40	3,999	0.00	0	120.00	1,536
Lob crosce cooling trater cooling tower	114	2	30.10	110.20	312.40	30,301	0.00	U	120.00	13,944

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		Number			Removal		Dispotal		Salvaga	
		of	of Measure	Total	Cost ner	Total	Cost per	Total	Value	Total
Removal Disposal & Salvage	Unit of	Compos	Dor	Unite of	Unit of	Bomovali	Unit of	Disposal	value	Calvada
Cost Worksheet	Moseura	nente	Component	Meseuro	Meacure	Cost	Manager	Cost	per unit of	Jaivayo
Fuel Gas Heat Exchangers	TN	8	13.50	108.00	312.40	32 730	0.00	COSt	120.00	12 060
Concrete		1	450.00	450.00	01 20	33,739	102.00	46 250	120.00	12,900
Subtotal	0.	,	400.00		51.20	117 328	103.00	46 350	0.00	20 304
C.C.C.C.						117,020		40,000		23,004
Total Account 343						10,896,200		2,943,611		4,176,251
FERC Account 344										
Turbo-Generator Units										
Pedestal - Reinforced Concrete	CY	1	4,011.00	4,011.00	91.20	365,803	103.00	413,133	0.00	0
Turbine - Stator	TN	2	327.10	654.20	177.50	116,121	0.00	0	120.00	78,504
Turbine - HP/IP Cylinder Cover	TN	2	46.10	92.20	234.30	21,602	0.00	0	120.00	11,064
Turbine - No.1 LP Cylinder Cover	TN	2	45.90	91.80	234,30	21,509	0.00	0	120.00	11,016
Turbine - No. 1 Inner Cylinder Cover	TN	2	19.55	39.10	177.50	6,940	0.00	0	120.00	4,692
Turbine - HP/IP Rotor	ŤN	2	27.30	54.60	177.50	9,692	0.00	0	120.00	6,552
Turbine - No. 1 LP Rotor	TN	2	48.00	96.00	177.50	17,040	0.00	0	120.00	11,520
H.P. Upper Shell	TN	2	31.00	62.00	177.50	11,005	0.00	0	120.00	7,440
H.P. Lower Shell	TN	2	31.21	62.42	177.50	11,080	0.00	0	120,00	7,490
Generator - Rotor	TN	2	58.75	117.50	177.50	20,856	0.00	0	120.00	14,100
Turbine - LP Rotor Lifting Gear	TN	2	4.00	8.00	177.50	1,420	0.00	0	120.00	960
Turbine Copper	TN	1	48.00	48.00	695.80	33,398	0.00	0	5,000.00	240,000
Turbine Piping	TN	2	260.00	520.00	234.30	121,836	0.00	0	120.00	62,400
Turbine Insulation	CY	2	420.00	840.00	71.00	59,840	20.00	16,800	0.00	0
Turbine Enclosure	TN	2	36.75	73.50	312.40	22,961	0.00	0	120.00	8,820
Miscellaneous Steel and Equipment- Turbine area	TN	2	19.67	39.34	312.40	12,290	0.00	0	120.00	4,721
Turbine Generator Mat - concrete	CY	1	1,961.00	1,961.00	91.20	178,843	103.00	201,983	0.00	0
Subtotal						1,032,036		631,916		469,279
Condensers and Auxiliaries	1									
Condenser Shell	TN	2	867.50	1,735.00	234.30	406,511	0.00	0	120.00	208,200
Condenser - Aluminum-Brass Tubes	TN	2	223.51	447.02	504.10	225,343	0.00	0	2,800.00	1,251,656
Condenser Foundation - Reinforced Concrete	CY	1	110.00	110.00	91.20	10,032	103.00	11,330	0.00	0
Circulating Water Pumps/Motors - 58,000 gpm	TN	4	38.82	155.28	312.40	48,509	0.00	0	120.00	18,634
Condensate Pumps - 12" suction, 8" dischrg(incl mtrs)	TN	4	15.70	62.80	312.40	19,619	0.00	0	120.00	7,536
Turbine Oil Conditioner	TN	4	12.25	49.00	312.40	15,308	0.00	0	120.00	5,880
Turbine Lube Oil Coolers	TN	1	4.00	4.00	312.40	1,250	0.00	0	120.00	480
Turbine Insulation	CY	2	- 175.00	350.00	71.00	24,850	20.00	7,000	0.00	0
Miscellaneous Steel and Equipment- Cond & Aux.	TN	1	22.91	22.91	312.40	7,157	0.00	0	120.00	2,749
Lube Oil Storage Tank	TN	2	1,53	3.06	312.40	956	0.00	0	120.00	367
Subtotal						759,534		18,330		1,495,502
Total Account 344						1,791,570		650,246		1,964,781
FERC Account 345										
Accessory Electrical Equipment				ĺ						
Foundations & Structures						}				
Main Generator Leads & Enclosures(aluminum)	TN	2	15.00	30.00	852.00	25,560	0.00	0	1,340.00	40,200
Manholes and Handholes - Concrete	CY	1	. 961.00	961.00	36.48	35,057	103.00	98,983	0.00	0
Transformer Foundations - Concrete	CY	1	673.00	673.00	91.20	61,378	103.00	69,319	0.00	0
Switchgear Foundations - Concrete	CY	1	348.00	348.00	91.20	31,738	103.00	35,844	0.00	0
Load Control Centers Foundations - Concrete	CY	1	30.00	30.00	91.20	2,736	103.00	3,090	0.00	o
Aux Power Transformer - 7,500 kva	TN	2	81.55	163.10	504.10	82,219	0.00	0	120.00	19,572
Startup Transformer	ŤΝ	1	62.00	62.00	504.10	31,254	0.00	0	120.00	7,440

		Number	Units		Removal		Disposal		Salvage	
		of	of Measure	Total	Cost per	Total	Cost per	Total	Value	Total
Removal, Disposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	per Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Station Service Transformer	TN	1	54.35	54.35	504.10	27,398	0.00	0	120.00	6,522
Transformer Copper	TN	1	0.00	0.00	525.40	0	0.00	0	5,000.00	0
Storage Battery	TN	2	3.00	6.00	504.10	3,025	0.00	0	120.00	720
Underground Ducts - Concrete	CY	1	2,778.00	2,778.00	349.60	971,189	103.00	286,134	0.00	0
Engineered Hangers	TN	1	375.00	375.00	504.10	189,038	0.00	0	120.00	45,000
Non-Engineered hangers	TN	1	40.00	40.00	504.10	20,164	0.00	0	120.00	4,800
Conduit - rigid aluminum - Access Electrical	ŤN	2	21.43	42.86	504.10	21, 6 06	0.00	0	1,340.00	57,432
Underground Conduit - Access Electrical	CY	2	10.00	20.00	36.48	730	103.00	2,060	0.00	0
Exposed Conduits and Trays - Access Electrical	TN	2	92.90	185.80	504.10	93,662	0.00	0	1,340.00	248,972
Buswork - Aluminum	TN	2	12.41	24.82	504.10	12,512	0.00	0	1,340.00	33,259
Motor Control Centers - Access Electrical	TN	10	37.50	375.00	504.10	189,038	0.00	0	120.00	45,000
Copper Wiring - 24,000 ft.	TN	1	7.92	7.92	852.00	6,748	0.00	0	2,100.00	16,632
Power/Control Wiring - 390,000 ft.	TN	1	288.00	288.00	852.00	245,376	0.00	0	2,100.00	604,800
Main Control Board for B-T-G	TN	1	3.00	3.00	504.10	1,512	0.00	0	120.00	360
Load Control Centers Transformers	TN	9	3.15	28.35	504.10	14,291	0.00	0	120.00	3,402
Control Boards - PECC	TN	1	209.40	209.40	504.10	105,559	0.00	0	120.00	25,128
Switchgear - 4,160v Metalclad - Access Electrical	TN	1	20.00	20.00	504.10	10,082	0.00	0	120.00	2,400
Switchgear - 480v Metalclad - Access Electrical	TN	1	18.00	18.00	504.10	9,074	0.00	0	120.00	2,160
						2,190,942		495,430		1,163,799
digh Initial Response Exciter System						ſ		i		
GEC W/LCI	TN	4	38.50	154.00	504.10	77,631	0.00	0	120.00	18,480
GEC WO/LCI	TN	4	26.00	104.00	504.10	52,426	0.00	0	120.00	12,480
Steam Turbine Excitation Equipment	ŤN	2	37.50	75.00	504.10	37,808	0.00	0	120.00	9,000
Concrete	CY	1	420.00	420.00	91.20	38,304	103.00	43,260	0.00	0
						206,169		43,260		39,960
Total Account 345						2,397,112		538,690		1,203,759
TOTAL SANFORD UNITS 4 & 5						17,480,281		6,138,579		7,522,882

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Scherer Plant

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Scherer Unit 4 and Related Common Facilities

The Scherer Steam Plant is a coal fired generating station consisting of four units and all the common facilities required in generating electricity. It is located on 12,000 acres of land (the main operating area of the plant site is approximately 3,500 acres) in Monroe County near the Ocmulgee River about 17 miles north of Macon, Georgia. Although built for Georgia Power Corporation (GPC), Florida Power & Light Company (FPL) and Jacksonville Electric Authority (JEA) have completed the purchase of one generating unit, Scherer Unit 4, and related common facilities. The installment purchase of these facilities was effected in four installments over the period from 1991 to 1995. FPL owns 76.36% and JEA owns 23.64% of Unit 4. FPL owns 38.18% of the common facilities related to units 3 and 4 and 19.09% of those common facilities related to all four units.

Scherer Unit 4 achieved initial operation on December 21, 1988 and was declared commercial on February 28, 1989. The unit consists of a boiler turbine generator, condenser, a 530-foot high natural draft-cooling tower, a shared smokestack (shared with unit 3), electrical switching equipment, and water and fuel facilities. Common facilities include the power house (which houses the four generating units at the site), Lake Juliette (a man-made 3,600 acre lake), a 350 acre ash disposal pond, an ash settling pond, a retention pond, a coal storage yard and a 500 kV switchyard, to interconnect the 4 units at the site to Georgia Power's transmission system. For purposes of this dismantlement study, the estimated retirement dates for Scherer are as follows:

Unit	<u>Year</u>
$\overline{\text{Common}}$ to Units $1-4$	2029
Common to Units 3 & 4	2029
Unit 4	2029

The dismantlement of the plants is assumed to require 2 years beginning in 2034.

Scherer Unit 4 can produce 818 megawatts of electricity. The boiler is capable of producing 5,790,000 pounds of steam per hour at 2,400 pounds per square inch pressure at 1,000 degrees Fahrenheit. Under full load conditions the boiler burns 322 tons of coal per hour (7,728 tons per day). Scherer burns western coal which is delivered by rail from Powder River Basin and is unloaded by a sophisticated coal handling system which is capable of unloading an 80 car train in a half hour. The unit uses a closed loop steam cycle with a separate loop of water drawn from Lake Juliette to serve as a coolant in the condensers. The turbine generators, manufactured by General Electric, have a nameplate generating capacity of 818 megawatts and at full load produce 1.2 million horsepower. Electrostatic precipitators are used to remove more than 99% of the fly ash from the flue gasses that leave the boiler after the coal burning process. An automatic opacity sensor in the 1,000-foot stack monitors emissions.

Florida Power & Light Company last requested and received approval for a change in dismantlement accruals for the Scherer Units in Docket No. 070378-EI, Order No. PSC-08-0095-PAA-EI, issued on February 14, 2008. The effective date of the current accruals is January 1, 2007.

SCHERER SUMMARY OF DISMANTLEMENT COSTS

FERC		Removal Cost	Disposal Cost	Salvage Value	Total
Account	Description	(A)	· (B)	(C)	(D)=(A + B + C)
	Scherer Common (supporting Units 1 through 4)				(-) (-)
	Production Plant				
311	Structures and Improvements	1,203,882	1,017,596	80,004	2,141,474
312	Boiler Plant Equipment	4,875,054	3,597,684	527,149	7,945,589
314	Turbogenerator Units	263,402	198,360	34,968	426,794
315	Accessory Electrical Equipment	2,570	0	960	1,610
316	Miscellaneous Equipment	1,127	0	420	707
	Subtotal	6,346,035	4,813,640	643,501	10,516,174
	Cite 14				
	Site Management Expenses	1,129,968			1,129,968
	Special Waste	4,307,982			4,307,982
	Intake & Discharge Backtill	79,243			79,243
	Ash Pond Consolidation and Removal	20,183,452			20,183,452
	Grading & Seeding	57,221,100			57,221,100
	Subtotal	82,921,745	0	0	82,921,745
	Tota:	80 267 770	4 913 640	643 501	00 407 049
	Contingency - 16%	14 202 845	4,013,040	643,501	93,437,918
	Total Scherer Common (supporting Units 1 through 4)	102 550 634	5 563 800	642 504	15,053,027
		103,550,024	3,303,022	643,501	108,490,945
	Unusable M&S Inventory	2,645,874		436,569	2,209,305
	Total Scherer Common including Unusable M & S	106,196,498	5,583,822	1,080,070	110,700,250
					•
	FPL's Ownership Percentage - 19.09%	20,272,911	1,065,952	206,185	21,132,678
:					21,132,678
	Scherer Common (supporting Units 3 &4)				
311	Structures and improvements	134,000	170,136	8,661	295,475
312	Boiler Plant Equipment	3,106,286	2,785,673	88,541	5,803,418
314	Turbogenerator Units	10,513	6,742	3,360	13,895
315	Accessory Electrical Equipment	0	0	0	0
316	Miscellaneous Equipment	0	0	0	0
	Subtotal	3,250,799	2,962,551	100,562	6,112,788
	Contingency - 16%	520,128	474,008		994,136
	Total Scherer Common (supporting Units 3 & 4)	3,770,927	3,436,559	100,562	7,106,924
	FPL's Ownership Percentage - 38.18%	1,439,740	1,312,078	38,395	2,713,424
	Pakana Uale 4				-
214	Structures and improvements	4 450 070	100 004		
310	Structures and improvements	1,156,070	198,294	369,420	984,944
312	Turbenes protect lists	11,892,388	353,434	5,026,784	7,219,036
314		10,613,358	2,808,225	883,640	12,537,943
315	Accessory Electrical Equipment	549,169	U	1,631,638	(1,082,469)
010	viscellarieous Equipment	14,404	0 0 050	5,400	9,054
	Contineerou 16%	24,225,437	3,359,953	7,916,882	19,668,508
	Total Soberon Linit 4	3,870,070	537,592	7010000	4,413,662
	I ULAI SURFEEF UNIX 4	28,101,507	3,897,545	7,910,882	24,082,171
	EPL's Ownership Percentage - 76.36%	21 458 311	2 976 166	6 046 331	18 380 145
		21,400,011	2,010,100	0,040,001	10,009,140
	Total Dismantlement Costs - FPL's Ownership	43,170,962	5,354,196	6,289,911	42,235,247

SCHERER

DISMANTLEMENT COST FOR INFLATION PROJECTION

	Labor	Material & Equipment	Burial	Salvage	Total
Description	(A)	(B)	(C)	(D)	(A) + (B) + (C) - (D)
Scherer Common (supporting Units 1 through 4)	11,658,650	8,614,262	1,065,952	206,185	21,132,678
Scherer Common (supporting Units 3 & 4)	863,844	575,896	1,312,078	38,395	2,713,424
Scherer Unit 4	12,874,987	8,583,324	2,976,166	6,045,331	18,389,145
Total	25,397,480	17,773,482	5,354,196	6,289,911	42,235,247

Labor is 60% of Removal Cost from Summary of Dismantlement Costs. Material & Equipment is 40% of Removal Cost from Summary of Dismantlement Costs. Burial is 100% of Disposal Cost from Summary of Dismantlement Costs. Salvage is 100% of Salvage from Summary of Dismantlement Costs.

SCHERER DISMANTLEMENT ASSUMPTIONS

FPL and the Jacksonville Electric Authority (JEA) are joint owners of Scherer Unit 4 and related Common Facilities. Contractually each co-owner is responsible for his share of all dismantlement costs.

FPL will provide management personnel for the dismantlement effort.

FPL will prepare the request for proposal package and solicit bids for the dismantlement effort.

FPL will provide site security during the dismantlement.

FPL will hire a demolition contractor to perform the actual dismantling work. This contractor will have the salvage rights to all plant equipment and structural material.

The land will be made available for future use.

All dismantling work will be done in accordance with OSHA regulations.

The lube oil storage tanks will be cleaned and their contents disposed of according to the requirements of current regulations.

The following items will be removed:

- a. All structures, equipment, and concrete pads, pedestals, foundations, etc;
- b. All underground gas, oil, sewer and water piping and electrical conduits (underground concrete piping to be collapsed);
- c. All hazardous and contaminated materials, e.g., acid filled lead batteries, oil tank residue.

Discussions with FPL's Power Generation Division (PGD) indicate that the return of the site to a green field condition entails removal of all structures above the wood pilings and steel-encased concrete pilings. The removal of the pilings would be unfeasible and, therefore, will remain in place.

All coal except unrecoverable base in the storage area will be burned before dismantling occurs. Unrecoverable base coal will be removed to the ash pond.

Scrap will be unprepared, i.e., cut only to the extent required to load the pieces on scrap dealers' trailers. Trucking costs for removal are paid by the scrap dealer and are reflected in the salvage value paid.

The estimate does not reflect land value or its resale.

The productivity factors employed are assumed valid for purposes of this study.

A contingency of 16% has been applied to the total removal and disposal costs. This contingency percentage covers costs associated with delays occurring after dismantlement begins, due to such causes as equipment failure and weather delays.

The costs of such overhead items as project management, site security, etc., have been estimated by FPL's Construction and Corporate Services Department. These costs are listed on the cost summary pages for each site's dismantlement study.

All materials and equipment are assumed to be either fully salvageable or to be disposed of completely. The availability of powerful cutting shears makes possible the cutting of even the heaviest steel to a size that permits salvage as scrap. Any unusable materials and supplies inventory will be sold as scrap. Estimated balances of such inventory (with related salvage value) have been included on the cost summary pages for each site's dismantlement study.

SCHERER DISMANTLEMENT ASSUMPTIONS (continued)

A 30% swell factor is used to compute the disposal cost per cubic yard of concrete. One cubic yard of concrete becomes 1.3 cubic yards of concrete rubble after demolition.

The switchyard and ancillary equipment (FERC account 353) will remain in place with the exception of the main power transformers, oil circuit breakers, superstructures, and foundations associated with the tie-in of plant generated power in the switchyard. However the dismantlement cost of substation equipment is not included in this study, so as to avoid duplicating recovery of costs already included in the net salvage factors of the substation plant accounts' depreciation rates.

An expandable grout will be used to dismantle the turbine pedestals. The chimneys will be control-blasted.

It is assumed that dismantlement activity at Scherer will begin five years after end of service. The end of service dates used for this assumption conform to the economic recovery period ending dates used in the Scherer depreciation study submitted in March, 2005 using actual and estimated plant and reserve data as of December 31, 2005. This study was accepted as part of the stipulation and settlement agreement that resolved the 2005 rate case and was approved by the Florida Public Service Commission in Docket Number 050188-EI, Order Number PSC-05-0902-S-EI on September 14, 2005. The economic recovery dates used for this assumption are as follows:

<u>Unit</u>	Economic Recovery Date
Common to Units 1 - 4	2029
Common to Units 3 & 4	2029
Unit 4	2029

FPL's Environmental Department recently completed a survey of asbestos quantities at our fossil sites, which estimated the cost to abate asbestos in the Scherer Unit 4 cooling tower fill material at \$8,683,391.

DISMANTLING ACTIVITIES: COAL FIRED PLANTS

- Remove loose equipment, furniture, and spare parts.
- Drain liquids, drum-up, and dispose of drums.
- Remove solid and liquid waste from waste treatment processing areas landfilled material, precipitated material in ponds and tanks, contaminated resins and reactants.
- Strip all insulation and covering, package and remove to acceptable landfill.
- Collapse circulating water lines. Remove underground piping and backfill all trenches.
- Remove main steam, hot and cold piping, downcomers, valves and supports, pumps, motors, generator auxiliary equipment, feedwater heaters, soot blowers, and condensers.
- Remove makeup structure, equipment, pumps, piping and valves.
- Remove systems that must be completed prior to the start of the boiler removal, including lube oil pumps, all piping, instrument and electrical systems.
- Remove forced drafts and induced draft ductwork, air heaters and fans.
- Remove hoppers, burners, upper and lower headers, manways, and waterwalls.
- Remove heavy steel structures and above ground steel precut key members, lower and cut at ground level.
- Remove fire protection, building heating, compressors, air dryers, control equipment and electrical systems.
- Disassemble crane, boiler feed pumps, and turbine generator.
- Separate scrap metals, and remove to scrap yard.
- Remove and dispose of miscellaneous rubble.
- Remove turbine pedestals, foundations, and heavy concrete structures and buildings, stack foundations, equipment foundations, and substructures. Remove to landfill.
- Install environmental monitoring equipment, for example, at wells.
- Cut off piles and remove pile caps. Remove concrete encased duct banks and underground piping.
- Remove railroad tracks.
- Test and remove contaminated soil/bases all areas.

DISMANTLING ACTIVITIES: COAL FIRED PLANTS (Continued)

- Remove or improve remaining site facilities such as buildings, fences, parking areas in accordance with local code and regulations.
- Install/modify existing site storm water runoff system.

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- Remove gas supply metering site, valve stations, underground distribution system.
- Remove marine facilities such as fuel unloading docks, equipment, bridges, and dams.
- Cut and remove oil tanks, piping, valves, and supports.
- Remove top soil/gravel, backfill, and remove barrier wall foundation.
- Backfill, site grading, seeding and mulching.

SCHERER DISMANTLEMENT STUDY

DEVELOPMENT OF COST FACTORS

Cost factors have been developed to compute the net salvage value of the demolition of Scherer Unit 4. The net salvage value of the demolition is the net of: the removal and disposal cost and the salvage value of equipment and steel not disposed of. These factors provide a unit cost or value for removal, disposal and salvage of a given unit of measure of the component materials of which a power plant is constructed. The assumption is that the cost or value per unit of a given component can be multiplied by the quantity of that component in the plant to calculate a total cost or value for removal, disposal, or salvage of that component.

REMOVAL COST FACTORS

The removal cost factors developed for this study have two elements: a burdened labor rate and productivity factor. The burdened labor rate multiplied by the productivity factor yields the removal cost factor. The labor rates used in this study are from R.S. Means Construction Data. The crew rate per man-hour is for a crew consisting of six journeymen laborers, one outside foreman and one heavy equipment operator - a typical crew for demolition work. The rate includes the cost per man-hour of a crane, an excavator, and a front end loader. The equipment cost is also from R.S. Means, and both equipment and labor are adjusted by the appropriate R.S. Means City Cost Index. (Means provides national average rates for labor and equipment which are then adjusted by City Cost Indexes to arrive at the appropriate rate for a given region.) The productivity factors employed, e.g., the number of man-hours required to remove a given unit of measure of concrete, were developed by an engineering consulting firm. These factors are assumed valid for purposes of this study.

Labor Rate

Labor rates are for non-union crews and the per crew hour rate is based on a forty hour week.

Labor Foreman Heavy Equipment Operator	\$41.46 \$52.64 \$50.16	× × ×	6 1 1		= = =	\$248.77 \$52.64 \$50.16
Total Cost per hour of 8 man crew		\$351.57	1	8	=	\$351.57 \$43.95

Equipment Rate

The equipment rate is based on the following equipment:

	Crane/Excavator Front End Loader Cutting Equipment					32,270.00 6,407.90 231.75
	Total per month					\$38,909.65
	38,909.65	1	176	hours per month :	=	221.08
Cost per man hour				\$221.08 /	8 =	\$27.63 1.00
Total Cost per man hour						\$28.63

Equipment & Labor Summary

Labor Equipment	\$43.95 28.63
Rounded	\$72.58 \$73.00
For Concrete demolition add \$5.00 per hour additional equipment charge.	\$78.00

The Removal Cost Factor is the product of the productivity factor for removal of a particular component multiplied by the total burdened hourly labor rate. The removal cost factors for all materials to be removed from FPL's sites are as follows:

<u>Components</u>	Hourly Rate	Productivity Factor	Removal Factor
Extra Heavy Steel (1)	\$73.00	2.50 MH / Ton	\$182.50 / Ton
Heavy Steel (2)	\$73.00	3.30 MH / Ton	\$240.90 / Ton
General Steel	\$73.00	4.40 MH / Ton	\$321.20 / Ton
Light Steel	\$73.00	7.10 MH / Ton	\$518.30 / Ton
Concrete	\$78.00	0.48 MH / CY	\$37.44 / CY
Reinforced Concrete	\$78.00	1.20 MH / CY	\$93.60 / CY
Copper-Elect. Cable &			,
Generator Leads &	\$73.00	12.00 MH / Ton	\$876.00 / Ton
Copper - Generator	\$73.00	9.80 MH / Ton	\$715.40 / Ton
Copper - Transformer	\$73.00	7.40 MH / Ton	\$540.20 / Ton
General Insulation	\$73.00	1.00 MH / CY	\$73.00 / CY
Inground Pipe-Metal(3)	\$73.00	6.00 MH / Ton	\$438.00 / Ton
Concrete Pipe	\$78.00	4.60 MH / Ton	\$358.80 / CY

(1) Includes turbine generator.

(2) Includes parts of the steam generator, pipe larger than 8 inches.

(3) Includes cost to backfill the trenches.

DISPOSAL COST FACTORS

Three cost factors were developed to compute the cost of disposal of non-hazardous wastes at the Swift Creek Landfill. Concrete and calcium silicated insulation are non-hazardous wastes. The tipping fee of \$35.00/ton, and the haul rate, \$145 per haul (including driver) were provided by Southland Waste Systems of Macon, Georgia.

Cost factors were also developed to compute the cost of removal and disposal of oil tanks, including the cost of related soil remediation. Such costs are computed for each tank in FPL's system, and are located appropriately in the detailed spreadsheet.

Concrete

One cubic yard of concrete in place weighs 3,950 pounds. One cubic yard becomes 1.3 cubic yards after demolition. Each load will contain 15.38 cubic yards (20 cu. yds./1.3) of in place concrete. 15.38 cubic yards weighs 61,000 pounds or 30.50 tons.

Truck Cost Tipping Fees Total Cost per round Trip	\$145.00 \$35.00	/ haul / ton	× X	1 haul 30.5 tons	a a	\$145.00
Cost per Cubic Yard Plus 10% contractor profit Total Cost per Cubic Yard	\$1,212.50	/ 15.38 cubic yards =				\$78.84
Rounded Cost per Cubic Yard						\$87.00

Insulation - Calcium Silicate (Non-Hazardous)

A trailer with a 30 cubic yard capacity is used for insulation because of its lighter weight. For purposes of this computation the dumpster is assumed to be 90% full (although the tipping fee is based on the assumption of 100% full truck - i.e., the weight to volume conversion uses 30 cubic yards - the full volume of the dumpster). A cubic yard of calcium silicate insulation weighs 121.5 pounds or .060750 tons. 30 cubic yards times .060750 tons/cubic yard = 1.82 tons. (The dumpster charge is the same regardless of whether capacity is 20, 30 CY.)

Dumpster Charge Tipping Fees	\$145.00 \$35.00	/ haul / ton	x x	1 haul 1.82 tons	n N	\$145.00 63.70
Total Cost per round Trip						\$208.70
Cost per Cubic Yard Plus 10% contractor profit	\$208.70	/ 27 cubic yards =				\$7.73 0.77
Total Cost per Cubic Yard					:	\$8.50
Rounded Cost per Cubic Yard						\$9.00
\$79,243

SALVAGE VALUE FACTORS

The salvage value factors, presented in dollars per ton, were provided by scrap metals dealers. The list covers all salvageable materials recovered from FPL sites.

Iron & Steel Stainless Steel	\$120 / ton \$2,000 / ton
Aluminum (Sheet Metal)	\$1,340 / ton
wire & Cable:	
- Insulated Copper	\$2,100 / ton
- Insulated Aluminum	\$1,020 / ton
Copper	\$5,000 / ton
Nickel Alloys	
- 70/30 Cupro-Nickel	\$4,000 / ton
- 80/20 Cupro-Nickel	\$6,000 / ton
- Monel	\$10,000 / ton
Admiralty Brass	\$3,600 / ton
Aluminum Brass	\$2,800 / ton
Titanium	\$4,000 / ton

OTHER SITE COSTS

Site Management Expenses

Site management expenses refer to FPL's management costs and contractors' expenses associated with the dismantlement project. The cost factors provided by FPL's Construction Estimating Department are: FPL expenses of \$21,134 per month, both office and site, and contractor's expenses of \$25,948 per month. These expenses are to be incurred over the 24 month dismantlement period for the Scherer Plant. FPL's management costs include include administration, engineering, permit costs and various other costs. Contractor's expenses include field management, supervision, security, etc..

Site Management Expenses per month	\$47,082
Number of months	24
Total Site Management Expenses	\$1,129,968
Intake & Discharge Backfill	
FPL's Power Generation Department (PGD) developed this cost factor on the basis of a	
typical such structure for FPL's production plants. The assumption is that a volume of 1,600	
for the intake and 1 120 cubic vards for the discharge will need to be filled. FPI 's Construction	

for the intake and 1,120 cubic yards for the discharge will need to be filled. FPL's Construction Estimating Department has updated the costs The cost for the intake is \$44,128. The cost for the discharge is \$35,115 making a total cost of:

Grading and Seeding

This cost refers to the restoration of the dismantled area to a green field area. The land is filled with sand, spread with topsoil and then seeded. The cost factor provided by FPL's Power Generation Division has been updated by the Construction Estimating Department. The cost factor is \$63,579 per acre. The acreage was determined for each site by reviewing engineering drawings to determine the areas requiring this effort. Assumptions underlying this factor include 2,000 cubic yards per acre to be backfilled and 968 cubic yards per acre of topsoil to be spread and seeded.

Scherer Acreage to be graded	and seeded	900.00
Cost Factor		\$63,579
Total Grading and Seeding Exp	Dense	\$57,221,100
Ash Pond		
Common to Scherer Units 1 - 4 i	s a 490 acre ash pond. Georgia Power Corporation	
has analyzed the cost of activitie	es associated with removing this pond as follows:	
The original estimate of \$19,210	,973 has been increased by Global Insight inflation factors	
for 2007 and 2008.		
	Description	
	Ash Consolidation to 49 acres	\$8,875,520
	Multi-layer Subtitle D Cap/18" clay cap	8,782,227
	Design and Engineering	118,209
	Site Suitability Study	66,539
	Well Installation	84,750
	Annual Maintenance	541,070
	Groundwater Monitoring (20 wells)	1,715,137
	Total Cost to dismantle Ash Pond	\$20,183,452

Other Site Contamination & Special Waste

Florida Power & Light's Environmental Department has provided the following information about certain environmental related costs at the company's generating stations. At Scherer, the following cost estimates have been identified:

<u>Description</u>	Amount
Asbestos [see Unit 4 detail]	\$8,683,391
Special Waste	4,307,982
Total	\$12 <u>,991</u> ,373

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Removal, Disposal & Salvage Cost Worksheet SCHERER SITE COMMON	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
[SUPPORTING UNITS 1 THROUGH 4] CAccount 311 Induces & Improvements Onds										
Concrete - Spittway Subtotal Ash Discosal Pond-	Շ	₹	696.0	696.0	93.60	65,146 65,146	87.00	60,552 60,552	0.00	00
Concrete - Spillway Subtotal	ζ	~	285.0	285.0	03.60	26,676 26,676	87.00	24,795 24,795	0.00	00
intenance Equipment Storage House Substructure Concrete Structural Steel Aetal Siding Subtotal	오 토 토		84.0 15.0 1.1	84.0 15.0 1.1	93.60 240.90 518.30	7,862 3,614 570 12,046	87,00 0.00 0.00	7,308 0 7,308	0.00 120.00 120.00	0 1,800 132 1,932
titer Treatment Building Structure Concrete Structure Steel Aetal String Aetal Wall Panel Assonry - Concrete Block	ò 롣 롣 ≿ ò		3,400.0 220.0 16.0 200.0	3,400.0 220.0 16.0 14,6 200.0	93.60 240.90 518.30 37.44	318,240 52,998 8,293 7,567 7,488	87.00 0.00 0.00 0.00 0.00	295,800	0.00 120.00 120.00	0 28,400 1,752
toof - Precast Concrete Roof Decking ther Superstructure Concrete Subtotal rinna Buildina	ሪሪ		206.0 450.0	206.0	37,44 37,44	7,713 16,848 419,147	87,00	370,272 38,150 370,272	0.00 0.00 0.00	0 0 30,072
iubstructure Concrete itructural Steel Subtotal drocen House	ζ Į		230.0 40.0	230.0 40.0	93.60 240.90	21,528 9,636 31,164	87.00 0.00	20,010 0 20,010	0.00	0 4,800 4,800
ubistructure Concrete recast Concrete Wall Panel lasonry - Concrete Block toof - Precast Concrete Roof Decking Subtotal	555		183.0 223.3 273.3 217.8	183.0 223.3 273.3 217.8	93.60 37.44 37.44 37.44	17,129 8,360 10,232 8,154 43,875	87.00 87.00 87.00 87.00	15,921 19,427 23,777 18,949 78,074	0.00 0.00 0.00 0.00	0000
ubstructure Concrete Ubstructure Concrete Subtotal Protection Building	ç	**	611.0	611.0	93.60	57,190 57,190	87.00	53,157 53,157	0.00	00
Troucture Contrain ubstructure Contrate - Valve House ubstructure Contrate - Building #1 ubstructure Contrate - Building #1 asonry Block Building #1 & #2 recast Roof Panel - Building #1 & #2 recast Roof Panel - Building #1 & #2	3333		246.0 261.0 518.7 518.7 4.1	246.0 261.0 108.0 518.7 4.1	93.60 93.60 93.60 37.44 37.44	23,026 24,430 10,109 19,420 153 153	87.00 87.00 87.00 87.00	21,402 22,707 9,396 45,127 356 98,988	00.0 00.0 00.0 00.0 00.0 0 0.0 0 0 0 0	

Removal, Disposal & Salvage	Unit of	Number of Compo-	Units of Measure per	Total Units of	Removal Cost per Unit of	Totai Removal	Disposal Cost per Unit of	Total Disposal	Salvage Value per Unit of	Totai Salvage
	measure_	nents	Component	Measure	Measure	Cost	Measure	COST	measure	value
Substructure Concerts	• ~ ~	4	196.0	196.0	02.60	17 410	97.00	16 193	0.00	0
Structure Concrete		1	100.0	100.0	93.00	5 200	67.00	10, 102	120.00	2 840
Structural Steel	1 N	I	ZZ ,U	22.0	240.90	0,000	0.00	10 400	120.00	2,040
Subtotal						22,710		10,102		2,040
Security Building										
Precast Concrete Wall Panel	° CY	1	137.8	137.8	.37.44	5,159	87.00	11,989	0.00	0
Masonry - Concrete Block	CY	1	141.7	141.7	37.44	5,305	87.00	12,328	0.00	0
Precast Concrete Roof Decking	CY	1	80.6	80.6	37.44	3,018	87.00	7,012	0.00	0
Subtotal						13,482		31,329		0
Well Pumo House								l		
Substructure Concrete - Well Pump House	- CY	1	22.0	22.0	93.60	2.059	87.00	1.914	0.00	0
Substructure Concrete - Pump House #2	CY	1	9.0	9,0	93.60	842	87.00	783	0,00	0
Structural Steel - Well Pump House	TN	1	30	3.0	240.90	723	0.00	0	120.00	360
Structural Steel - Pump House #2	TN	1	10	10	240.90	241	0.00	0	120.00	120
Precest Wall Panel - Wall Pump	TN	1	100.0	100.0	518 30	51,830	0.00	D	0.00	0
Precast Poof - Well Pump House	CY	1	31.1	31.1	37 44	1 164	87.00	2 706	0.00	ő
Concrete - Roof - Pump House #2	CY.	1	20	20	37 44	75	87.00	174	0.00	0
Metal Siding - Pump House #2	TN	1	270.0	270.0	518 30	139 941	0.00	0	120.00	32 400
Subtotal		•	210.0	1.0.0	010.00	196 875	0.00	5.577	120.00	32,880
Subiotai						100,010		0,017		02,000
Lube Oil Storage House	_									
Substructure Concrete	CY	1	56.0	56.0	93.60	5,242	87.00	4,872	0.00	0
Structural Steel	TN	1	26.0	26.0	240.90	6,263	0.00	0	120.00	3,120
Precast Concrete Wall Panel	CY	1	1 46,7	146.7	37.44	5,492	87.00	12,763	0.00	0
Masonry - Concrete Block	CY	1	204.4	204.4	37.44	7,653	87.00	17,783	0.00	0
Precast Concrete Roof Decking	ĊY	1	63.1	63.1	37.44	2,362	87.00	5,490	0.00	0
Subtotal						27,012		40,908		3,120
Waste Water Control House										
Architectural Work:	-									
Masonry Block - House #1	CY	1	54.4	54.4	37.44	2,037	87.00	4,733	0.00	0
Masonry Block - House #2	CY	1	54.4	54.4	37.44	2,037	87.00	4,733	0.00	0
Precast Roof Panel - House #1	ĊY	1	35.6	35.6	37.44	1,333	87.00	3,097	0.00	0
Precast Roof Panel - House #2	CY	1	35.6	35.6	37.44	1,333	87.00	3,097	0.00	0
Subtotal			•			6,740		15,660		0
Air Compressor nouse	- cv	4	50.0	50.0	03.60	4 690	87.00	4 350	0.00	
Substructure Concrete		4	12.0	12.0	240.00	7,000	0,.00	+,050 0	120.00	1 4 4 0
Structural Steel Subtotal		1	12.0	12.0	240.90	7,571	0.00	4,350	120.00	1,440
								,		
River Intake Switchgear Building										
Substructure Concrete	CY	1	50.0	50.0	93.60	4,680	87.00	4,350	0.00	0
Structural Steel	TN	1	9.0	9.0	240,90	2,168	0.00	0	120.00	1,080
Masonry - Concrete Block	CY	1	33.3	33.3	37.44	1,247	87.00	2,897.	0.00	0
Precast Concrete Wall Panel	CY	1	90.0	90.0	37.44	3,370	87.00	7,830	0.00	0
Precast Concrete Roof Decking	CY	1	57.2	57.2	37.44	2,142	87.00	4,976	0.00	0
Subtotal						13,607		20,053		1,080
Nitrogen Storage Pad										
Substructure Concrete	CY	1	4.0	4.0	93.60	374	87.00	348	0.00	o
Subtotal					l	374		348		0

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Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Seware Treatment Facility										
Collection System Piping Concrete Subtotal	- cy	1	24.0	24.0	93.60	2,246 2,246	87.00	2,088 2,088	0.00	0
Utility Trench Concrete	CY	1	103.0	103.0	93.60	9,641	87.00	8,961	0.00	o
Waste Water Treatment System Concrete - Chernical Waste Basin Subtrial	– cy	1	440.0	440.0	93.60	41,184	87.00	38,280	0.00	0
Foundation:						41,104		55,200		0
Concrete - Waste Water Basins Subtotal	CY	1	1,275	1,275.0	93.60	<u>119,340</u> 119,340	87.00	<u>110,925</u> 110,925	0.00	0
Security Guard House	_									
Substructure Concrete Subtotal	CY	1	43.0	43.0	93.60	4,025 4,025	87.00	<u> </u>	0.00	0
Water Treatment Chlorine Storage House										
Structural Steel	TN	1	17.0	17.0	240.90	4,095	0.00	0	120.00	2,040
Precast Concrete Roof Decking	CY	1	69.4	69.4	37.44	2,598	87.00	6,038	0.00	0
Subiotal						6,693		6,038		2,040
Total Account 311						1,203,882		1,017,596		80,004
FERC Account 312										
Boiler Plant Equipment										
Auxiliary Boller System	- _{cv}	4	20	20	03.60	1 870	97.00	1 740	0.00	
Boiler	TN	2	328	20 656	240.90	158 030	01.00	1,740	120.00	78 720
Subtotal		-	020		240.00	159,902	0.00	1,740	120.00	78,720
Feedwater System:										
Pump	- TN	3	23	69	321.20	22,163	0.00	0	120.00	8,280
4" Pipe	TN	1	2	2	321.20	642	0.00		120.00	240
Subtotal						22,805		0		8,520
Steam Distrib. System	_									
Piping - less than 4"	TN	1	3	3	321.20	964	0.00	0	120.00	360
8" Pipe	TN	1	5	5	321.20	1,606	0.00	0	120.00	600
10" Pipe 14" Dine		1	14	14	321.20	4,497	0.00	0	120.00	1,680
16" Pice	TN	1	65	60	321.20	27,302	0.00	0	120.00	10,200
Subtotal	114	•	Ť	4	321.20	35,654	0.00	0	120.00	13,320
Coal Handling System										
Unloading Conveyors	- TN	1	26	26	321.20	8,351	0.00	0	120.00	3.120
Conveyor Motors	TN	4	0	1	321.20	385	0.00	0	120.00	144
Structural Steel - Conveyor S1	TN	1	91	91	240.90	21,922	0.00	0	120.00	10,920
Structural Steel - Conveyor S2	TN	1	91	91	240,90	21,922	0.00	0	120.00	10,920
Metal Siding - Conveyor S1	TN	1	7	7	518.30	3,628	0.00	0	120.00	840
Metal Siding - Conveyor S2	TN	1	5	5	518,30	2,592	0.00	0	120.00	600
Metal Roofing - Conveyor S1	TN	1	6	6	518.30	3,110	0.00	0	120.00	720

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		Number	Units of	Total	Removal Cost per	Total	Disposal	Tetal	Salvage	Total
Bamoval Disposal & Salvaga	linit of	Comno	Measure	linite of	Unit of	Bomoval	Cost per	Sotal)	value per	i otan Celuena
Cost Workshoot	Unit of	Compo-	Company	Units of	Manaver	Removal	Unit of	Disposat	Unit of	Salvage
Metal Roofing - Conveyor S2	TN	nents	Component	Measure	519 20	2 110	Measure	Lost	Measure 120.00	Value
Foundation Concrete Commun S1		4	776	0	010.30	3,110	0.00	0	120.00	720
Foundation Concrete - Conveyor S1	CY CY	4	220	220	93.60	21,104	87.00	19,002	0.00	0
Tunnel Conveyor St	UT N	-	470	226	93.00	21,104 450 064	87.00	19,662	0.00	U 50.400
Tunnel Conveyor ST		4	470	470	321.20	150,964	0,00	0	120,00	56,400
Conveyor S2		4	470	470	321.20	150,964	0.00	0	120.00	56,400
Conveyor Concrete - Superstructure (S1)			20	20	93,60	2,434	87.00	2,262	0.00	0
Conveyor Concrete - Superstructure (S2)	CY	1	26	26	93.60	2,434	87.00	2,262	0.00	0
Conveyor S1	IN	1	15	15	321.20	4,818	0.00	0	120.00	1,800
Conveyor S2	IN	1	15	15	321.20	4,818	0.00	0	120.00	1,800
Motor	IN	2	3	5	321.20	1,606	0.00	0	120.00	600
Conveyor to Crshr Hse Concrete - Lunnel	CY	1	795	795	93.60	/4,412	87.00	69,165	0.00	0
Subtotal						499,778		113,013		144,984
Coal Storage Area						1				
Unburned Coal	CY	1	35,000	35,000	0.00	0	5.00	175,000	0.00	0
Concrete - Pump Structure	CY	1	235	235	93.60	21,996	87.00	20,445	0.00	0
Concrete - Drainage Channel	CY	1	6,400	6,400	93.60	599,040	87.00	556,800	0.00	0
Concrete - Storage Pond	CY	1	5.635	5.635	93.60	527,436	87.00	490,245	0.00	0
Car Unloading Area Foundation Concrete	CY	1	10.920	10.920	93.60	1.022.112	87.00	950.040	0.00	0
Structural Metal - Grating	TN	1	50	50	321.20	16.060	0.00	0	120.00	6,000
Subtotal		•				2 186 644	0.00	2 192 530	120.00	6,000
C C C C C C C C C C C C C C C C C C C						2,100,011		2,152,000		0,000
Reclaim System				-						
Hopper & Tunnel Structure - Concrete	- CY	1	1,070	1,070	93.60	100,152	87.00	93,090	0.00	0
Hopper & Trestle Concrete	CY	1	2,825	2,825	93.60	264,420	87.00	245,775	0.00	0
Tunnel - Concrete	CY	1	752	752	93.60	70,387	87.00	65.424	0.00	0
Structural Metal - Support Steel	TN	1	21	21	240,90	5.059	0.00	0	120.00	2 520
Reclaim Convevor	LE	1	232	232	321.20	74.518	0.00	0	120.00	27 840
Matar	TN	2	1	2	321,20	642	0.00	ŏ	120.00	240
Subtotal				_		515,178		404.289		30,600
										,
Coal Handling Service Building	_					ſ				
Substructure Concrete - Building Found.	CY	1	1,273	1,273	93.60	119,153	87.00	110,751	0.00	0
Concrete - Paving	CY	1	2,050	2,050	93.60	191,880	87.00	178,350	0.00	0
Concrete - Ramp	CY	1	205	205	93.60	19,188	87.00	17,835	0.00	0
Structural Steel	TN	1	161	161	240.90	38,785	0.00	0	120.00	19,320
Precast Concrete Roof Decking	CY	1	903	903	37.44	33,820	87.00	78,587	0.00	0
Concrete - Roof	CY	1	229	229	37,44	8,574	87.00	19,923	0.00	0
Metal Siding	TN	1	16	16	518.30	8,293	0.00	0	120,00	1,920
Subtotal						419,693		405,446		21,240
Coal Handling Control House	_									
Substructure Concrete	CY	1	107	107	93.60	10,015	87.00	9,309	0.00	0
Structural Steel	TN	1	39	39	321.20	12,527	0.00	0	120.00	4,680
Superstructure - Concrete	CY	1	36	36	93.60	3,370	87.00	3,132	0.00	0
Superstructure - Metal Siding	TN	1	6	6	518.30	2,960	0.00	0	120.00	685
Subtotal						28,872		12,441		5,365
Evel Handling Railmad										
Tresties - Structural Steel	TN	1	995	995	240.90	239 696	0.00	0	120.00	110.400
Trestles - Concrete Abutment	CY	1	117	117	93 60	10 951	87.00	10 170	0.00	113,400
Trastles - Concrete Bents	CY	1	1.550	1 550	93.60	145 080	87.00	134 850	0.00	0
Grating	TN	1	50	50	321 20	16 060	0.00	134,030	120 00	8 000
Subtotal				~		411 787	0.00	145 020	120.00	125 400
										120,400

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Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Mat Ash Mandline Contains Transment Contains										
Wet Ash Handling System - Transport System	C V	4	405	405	02 60	20 700	67.00	20.075	0.00	
Supports - Concrete			420	420	93.00	39,760	87,00	30,975	0.00	0
Piping - Grating	IN		6U 0.000	80	321.20	25,595	0.00	0	120.00	9,600
Piping - Trench Concrete	CY	1	2,800	2,800	93.60	262,080	87.00	243,600	0.00	0
Sudiolai					[327,006		280,575		9,600
Constant Air Sustan										
Air Dietrib System	TN	1	34	24	321.20	10 021	0.00	0	120.00	4.080
Subtotal	IN		54	34	521.20	10,921	0.00	0	120.00	4,080
Service Water System										
Service Water Pumping Substruct Concrete	CY	1	456	456	93.60	42,682	87.00	39,672	0.00	. 0
Masonry Wall	CY	1	25	25	37.44	936	87.00	2.175	0.00	0
Precast Concrete Roof Decking	CY	1	9	9	37.44	333	87.00	774	0.00	0
less than 4" Pipe	TN	1	12	12	321.20	3.854	0.00	0	120.00	1 440
4" Pine	TN	1	8	8	321 20	2.570	0.00	ů.	120.00	960
6ª Pine	TN	1	40	A∩	321 20	12 848	0.00	ů	120.00	4 800
8" Pipe	TN	11	50	550	321 20	176 660	0.00	0	120.00	000 33
12" Pine	TN	1	14	14	321.20	4 497	0.00	0	120.00	1 680
16" Pine	TN	1	5	5	321.20	1 606	0.00	ő	120.00	800
Subtotal		•	2	Ŭ		245,986	0.00	42,621	120.00	75,480
Chemical Waste Treatment System										
Sedimentation Tank	TN	6	4	23	321.20	7.323	0.00	0	120.00	2.736
Filtration Pump	TN	4	2	9	321.20	2,955	0.00	0	120.00	1.104
Subtotal						10,278		0		3,840
Total Account 312				i		4.875.054		3.597.684		527 149
FERC Account 314 Turbogenerator Units						4,010,004		0,001,004		521,148
Cooling Water System										
Cooling Water Dischrge Structure Concr	CY	1	810	810	93.60	75,816	87.00	70,470	0.00	0
Subtotal						75,816		70,470		0
Storage Water Intake Structure:	~		040	0.40	02.60	00 700	87.00	00.470	0.00	
Concrete	CY	1	948	948	93.60	88,733	87.00	82,476	0.00	0
Concrete - Deflector Wall	CY	1	144	144	37.44	5,391	87.00	12,528	0.00	0
Concrete - Superstructure	CY	1	320	325	37.44	12,168	87.00	28,275	0.00	0
Grating	IN	1	11	11	321.20	3,533	0.00	0	120.00	1,320
Structural Steel	IN	1	17	17	240.90	4,095	0,00	0	120.00	2,040
Subtotal						113,920		123,279		3,360
Storage Water Supply System			-			5 700		_		
Pump	TN	4	5	18	321.20	5,782	0.00	0	120.00	2,160
Motor	TN	4	11	44	321.20	14,261	0.00	0	120.00	5,328
Subtotal			·			20,043		0		7,488
Storage Pond Intake Structure	04	4	ED	50	03.60	1001			0.00	
Intake Structure Concrete	CY	1	53	53	93,60	4,961	87.00	4,611	0.00	0
Grating	IN	1	3	3	321.20	964	0.00	0	120.00	360
Subtotal						5,925		4,611		360

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Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Totai Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Lifting System										
Overhead Crane	TN	1	198	198	240.90	47,698	0.00	0	120,00	23,760
Subtotal						47,698		0		23,760
Total Account 314						263,402		198,360		34,968
FERC Account 315										
Accessory Electrical Equipment										
A.U. System - 4kv						_				
Distribution System Switchgear Frame	TN	8	1	8	321.20	2,570	0.00	0	120.00	960
						2,570		0		960
FERC Account 316										
Miscellaneous Plant Equipment										
Station Maintenance Equipment	TN	1	0.50	0.5	321.20	161	0.00	0	120.00	60
Station Test Equipment	TN	1	0.50	0.5	321.20	161	0.00	0	120.00	60
Machine Shop Equipment	TN	1	0.50	0.5	321.20	161	0.00	Ő	120.00	60
Station Stores Equipment	TN	1	0.50	0.5	321.20	161	0.00	õ	120.00	60
Training Equipment	TN	1	0.50	0.5	321.20	161	0.00	0	120.00	60
Plant Furnishings	TN	1	0.50	0.5	321.20	161	0.00	ō	120.00	60
Site Support Mobile Equipment	TN	1	0.50	0.5	321.20	161	0.00	0	120.00	60
Total Account 316						1,127		0		420
TOTAL SCHERER SITE COMMON (SUPPORTING UNITS 1 THROUGH 4)						6,346,035		4,813,640		643,501
SCHERER UNITS 3 & 4 COMMON FERC Account 311										
Structures & Improvements										
Emergency Generator Building										
Substructure Concrete	CY	1	104.0	104.0	93.60	0 734	87.00	0.049	0.00	
Structural Steel	TN	1	17.0	17.0	240.90	4,005	0.00	8,040	120.00	
Metal Siding	TN	1	2 350 0	12	518 30	000	0.00	0	120.00	2,040
Insulation	CY	1	125.0	125.0	73.00	9 125	9.00	1 125	0.00	141
Masonry - Concrete Block	CY	1	136.7	136 7	37 44	5 118	87.00	11 803	0.00	0
Roof - Precast Concrete Roof Decking	CY	1	170.0	170.0	37.44	6.365	87.00	14,790	0.00	0
Subtotal						35,046	01.00	36,856	0.00	2,181
Substructure Concrete - House #1	CY	1	187.0	187.0	93.60	17,503	87.00	16,269	0.00	0
Substructure Concrete - House #2	CY	1	187.0	187.0	93.60	17,503	87.00	16,269	0.00	0
Structural Steel - House #1	TN	1	27.0	27.0	240.90	6,504	0.00	0	120.00	3,240
Structural Steel - House #2	TN	1	27.0	27.0	240.90	6,504	0.00	0	120.00	3,240
Masonry Block - House #1	CY	1	245.0	245.0	37,44	9,173	87.00	21,315	0.00	0
Masonry Block - House #2	CY	1	215.6	215.6	37.44	8,072	87.00	18,757	0.00	o
Insulation	CY	1	100.0	100.0	73.00	7,300	9.00	900	0.00	Ō
Precast Wall Panel - House #1	CY	1	173.1	173.1	37.44	6,481	87.00	15,060	0.00	0
Precast Wall Panel - House #2	CY	1	173.1	173.1	37.44	6,481	87.00	15,060	0.00	0
Precast Roof Panel - House #1	CY	1	164.4	164.4	37.44	6,155	87.00	14,303	0.00	0
Precast Roof Panel - House #2	CY	1	164.4	164.4	37.44	6,155	87.00	14,303	0.00	0
Subtotal						97,831		132,236		6,480

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letoT 905v162	Salvage Value per Value of	lstoT Dispozal	Disposal Cost per Unit of	lstoT lsvom9Я	Removal Cost per Unit of	fotoT to stinU	Units of Measure Der Component	Kumber of Compo-	to finU muzseM	Removal, Disposal & Salvage Cost Worksheet
aniev	anseam	1500	AINSPAIN	1500	21068-000	AIDEROW	manodinos	Plater	0100	Chem Wat Trunnt Contr Hse
0 0	00'0	1,044 1,044	00-78	1,123	09'66	0.21	12.0	ŀ	λЭ	Substr Concrete Subtotal
199'8		961,071		134,000						115 Inuoco latoT
										FERC Account 312 Boiler Plant Equipment Lighter Oil System
0 0	00.0 00.0	468,81 468,81	00.78 00.78	960,51 260,51	09`£6 09`£6	0.281 0.281	0.281 0.281	۱ ۱	CX CX	Fuel Supply Facilities, Lighter Oil System Fuel Supply Facils Foundation Concrete Fuel Storage Facils Foundation Concrete
n		900'1 C		0/0/#6						Fuel Storage Facilities
0	00.0	4'320	00.78	088, 1 888.82	09°£6	0.08	0.0 2 0.0 2	6 6	70 70	Foundation Retaining Enclosure - Concrete
089'1	120.00	0	00.0	20'00	e/u	0.41	0.7	z	NL	Tank Demodition
0 0 089'L	00.0 00.0	148,666 13,000 220,826	- 8/U	0 848,611	6/U 8/U	0.2	0.1	2	198	obi Manualion Clean Tank (11,900 bbi capacity) Subiotal
ō	00.0	000'0+2'1	00.78	000,278,1	09.56	0.000.02	0.000,0S	ŀ	72 72	Stack Subfoundation, Stack
56,400 26,400 0	00.021	722,100 0 2,462,100	00.0	2,719,544	351,20	0'02Z	0.022	ŀ	NL	Steel Liner Steel Liner Subtotal
					55.00		0.307		,, , ,	Coal Handling Switchgear House Subtound Wrk, Ci Hindlg Switchgear House
5' 64 0	150'00 0'00	0 596'91	00'0 00'78	990'Z Z9Z'8L	351,20	55.0	55'0	l L	NL	Structural Steel
764 770,E	120.00	<u>996'9↓</u>	- 00.0	888,1 605,72	06.812	9.6	9°C	L	NL	Superstructure - Metal Siding Subtotal Treated Water System
002'2	120.00	0	00.0	272,91	321.20	0.08	0.8f 0.8	1 7	NL NL	Raw Water Supply Pump
096'6 089'i	120.00	0	00'0	50'2	321.20	0.41	0.41	ŀ	NL	4" Pipe Subtotal Chemical Storage Facilities:
0	00.0	0#8,72	00.78	296'6Z	09.56	350.0	0.02£ 0.45	L L	KD CX	Tark Foundation Concrete
088,2 088,2 088,2	00.00	976'67 0 990'7	00'0	41,937 150,747 150,747	321.20	0.64	0.61	L	NL	eqi" - Pipe Bubtotal Subtotal
0	00.00	965,6	00.78	601,01 1880 11	02 126	106.0	0.801 0.08	ŀ	YD CY	Tank Foundation Concrete Tank Foundation Concrete
0	00.021	01+1+01	00'29	11,232	09'66	120.0	130.0	i	λO	Piping - Trench Concrete
022 198	120.00	0	00.0	1/26	321.20	0'9	6.1 2	4	NL	qmun Treatment Pump

IstoT	egevis2 Teg eulsV	IstoT	Disposal Cost per	[sto]	Removal Cost per	IstoT	Units of Measure	Number Ö		
Sevies	to tiaU	lesoqelQ	Unit of	IsvomeA	Unit of	to atinU	ber	-odmoJ	Jo finU	Removal, Disposal & Salvage
SUISV	etussem	1500	enuseem	1500	OC 165	eluzea	10900dmon	 รามอน	NIL	Water Treatment Tank
31'644	00.021	968,91	00'0	106,845	07.170	0.61	<u>6</u> .0	7	ы	International Internation
		000101		010'001		1 2				Filtered Water Svstem
									-	:buidid majsks kidding
081	150.00	0	00.0	1,285,1	321.20	0.4	0.1	٢	NL .	Less than 4" Pipe
074	120.00	0	00'0	1,927	321.20	0.8	0.8	Ļ	NL	4" Pipe
5,160	150.00	0	00'0	587,8	321.20	0.81	0.81	ţ	N1	eqi9 "ð
098'8		0		†66 '8						Estorad Water Storada
0	00.0	4'320	00.78	4,680	09.56	0'05	0.08	ŀ	۲ ۵	
6'540	120.00	0	00.0	207,81	321.20	25.0	0.28	L	NL	juei
6,240		035,4		286,12 AAC ADL E						Istotdu2 S15 trucosta IstoT
1140,00		le (0'69/'7		007'001'0		ļ				FERC Account 314
										Lube Oil System Lube Oil System
096,5	120.00	0	B/U	9 00 0	12/U	0.82	14.0	z		Oll Storage Tank
		5,262	e/u	0	e/u			L		Soil Remediation
		084'7	e/u	0	e/u			1		Tank Cleaning
0	00.0	0	12/U	2'2'3	e/u	0'#9	0.43	ŀ		Oil Storage Tank Foundation Concrete
096'5		741'9		E19'01						letordu 2
096'£		6,742		E13,01						Arc integration for the second states of the second
100'262		199'296'2		662'09Z'E						TOTAL SCHERER UNITS 3 & 4 COMMON
										SCHERER UNIT 4
										zinemevenesi Structures & Improvements Architecturs
11'400	120.00		00.0	\$°5,14	321.20	0'96	0'96	ŀ	NL _	ຍແກະເວ
0	00.0	¥11,2	00.78	891'1	37.44	2.16	31.2	F	λO	Masonry Block - MCC Room
0	00'0	682'+	00.78	978'1	37.44	8.64	5.64	ŀ	10 LO	Masonry Block - Battery Room
099	00'021	ŏ	00.0	198'Z	06,818	G . G	5.8	i	λÖ	Metal Panel - Operator Floor
020,1	00'071	0	00.0	905'5	06.816	C.8	C.B	ŀ	10	Metal Panel - Switchgear Room
0	00.0	C86 05	00.78	000 40	100°C (0.982	0.002	5	10	Nonether Concrete Roof
13,080		982'69		11'352						letoidus
1,440	00.021		00.0	3'824	351.20	0.21	12.0	L	NL	Fire Protection System - Piping
004.011	120.00	0	00'0	968'927	618.30	0.026	0'026	ŀ	NL _	Steam Generator Building
0	00.0	108,5	00.78	902'1	44 7E	32.25	32.28	r	Cλ	Masonry Block - Restrooms
444	120.00	0	00.0	810,1	518.30	7.6	<u>7.</u> ε	ł	NL	Metal Panel - Compressor Room
820'Z	120.00	0	00'0	692'8	218'30	6'9L	6.91	1	NL	Metal Panel - Elevator End
954	120.00	ů l	00.0	269'2	06.813	2.3	Z'9	i	NL	moog sizylenA teteW - lens9 listeM
420	00.021	0	00.0	1712 C	06,818	6.6	6,5 2,3	L L	NI	Metal Parel - Operator H End
697 1	120.00	0	00'0	£721	218'30	1.21	1.21	L	NL	Accousticat Panel - Fan Room

088,41		0		39,829		1				REDUCTS
14,880	120.00	0	- 00'0	39,829	321.20	124.0	0.15	4	NI	ROUGE VARIEL CITCURATION PUMP
								•	142	
312'000	_	0		671'578						RIDIOUS
4'350	120.00	0	. 00'0	11'203	321.20	0.95	2.0	29L	NI	Siewoig 1000
0++,1	120.00	0	00.0	7 98'E	321.20	071	0.21	L	NI	ANULI MEH INDUDAN SED
2'250	120.00	0	00'0	9//'71	321,20	0.94	0.04	, L	NI	
076'26	00.021	0	00'0	660'797	02.126	0.918	0.018	i	NI	
00#'101	120.00	0	00.0	+L+'L/Z	02.126	0.648	0.646	í	NI	
000'96	00.021	0	00.0	096'992	02.125	0.008	0.008	i	NI	
00*,8	120.00	0	00.0	#8# 'ZZ	07.128	0.07	0.66	7	NU	IIB1 IIIB38(C IIA IB9C
					00 100	0.02	0.30		IN.L	
								•		Seal Air Swelour
096,878,1		007'67		197'060'#						1201000
134'940	00.021	0	00.0	995'095	07.126	0.221.1	0.221		NO.	
0	00.0	00/67	00.6	008'057	00.000	0.000,0	0.000,0	•	NI	Proposition Enabled In A
07/10#/1	00.021	0	00'0	Cebibeb's	00.62	0'000'51	0.000 5	•	XU	Boiler Setting Insulation
	00.001	Ŭ	000	300 000	06.0%5	0 909 71	0 902 11	+	NL	Bailer
										Bailet Endosure
										Steam Generating System
										Boiler Plant Equipment
										CERC Account 312
07#'800		+07'001		a rates ti						
0011090		NOC 801		020 991 1						tts Account 311
		0171		1.70						
<u>b</u>		12121		254						letotdu2
ľ		8101	00.78	725	177 TE	0.41	0.41	1	YO CY	Concrete Substructure
1										Environmental Monitoring Facility
001'0				casto.						
000'	00/071			060 81						Subtotal
	00 021	0	00.0	891.5	240.90	0.6	0.6	ŀ	NL	adig "Or
1000,1	00 021	0	00.0	9217	321.20	13.0	13.0	ŀ	NL	9qi4 "8
099.1	00 021	0	00.0	9/1 7	321.20	13.0	13.0	i.	NL	eqi9 "ð
360	120.00	0	000	796	321.20	3.0	3'0	i	NI,	4" Pipe
009	120.00	, v	00 0	809. t	321.20	0.2	5.0	1	NL	edid ** nerti sseJ
						ſ				Fire Protection System
0	00:0	135 540		606'99		I .				letotdu2
lo I	00.0	132.240	00.78	606.88	44°28	1,520.0	1,520.0	ŀ	λD	Root - Concrete
										Superstructure Concrete
001/177	00:071	_				I .				
000 222	120.00	0	00.0	905.924	240.90	0.268.1	1'862'0	ŀ	NL	Coal Bunker
0.00				a. at						
929 5	00.071	0		54'212		l				Istotdu2
200,4	150.00	0	00.0	358.5	06.818	172	⊅ ′∠	ŀ	NL	Metal Panel - Cable Spread Room
255 7	150.00	0	0.00	117.81	05.813	1.85	1.85	ŀ	NL	metal Panel - Tripper Room
801	120.00	0	00.00	997	518.30	6'0	6'0	1	NL	mooA COMprintpiJ - Iens9 leteM
845	120.00	0	00'0	£03.1	518.30	5.9	6.2	L	NL	Metal Panel - Record Storage Room
										Superstructure
1.00'0 L						1				
AAA ALT		150.2		242,523						letotdu2
PPF .	150.00	0	00.0	622	518.30	5.1	5.1	Ł	NL	Metal Panel - MCC Room
912	120.00	0	00.0	5,229	518.30	5.4	£'‡	F	NL	Metal Panel - HVAC Room
	00.0	5.250	00.6	18,250	00'EZ	550.0	S20'0	ŀ	LO_	noitaiuani
SISTEN STATE	erużeeM	150)	enusseM	teoD	Measure	Measure	Component	ztnen	enseeM	Cost Worksheet
aneviez	to tinU	lesogal	to tinU	Removal	to JinU	to atinU	ber	-odmoD	to tinU	Removal, Disposal & Salvage
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Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Totai Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Pulvenzed Coal Finng System										
Boller Burners	TN	9	0.5	4.5	321.20	1,445	0.00	0	120.00	540
	IN	9	23.0	207.0	240.90	49,866	0.00	0	120.00	24,840
Motor - 600 np (7 ea) & 800 np (2 ea)	IN	9	3.8	34.2	321.20	10,985	0.00	0	120.00	4,104
Foundation Concrete	CY	1	208.0	208.0	93.60	19,469	87.00	18,096	0.00	0
Coal Feeders	IN	9	5.0	45.0	240.90	10,841	0.00	0	120.00	5,400
Subtotal						92,606		18,096		34,884
Primary Air System:										
Primary Air Ductwork	TN	1	845.0	845.0	321.20	271,414	0.00	0	120.00	101,400
Fan	TN	2	66.0	132.0	321.20	42,398	0.00	0	120.00	15,840
Motor	TN	2	30.3	60,6	321.20	19,465	0.00	0	120.00	7,272
Foundation Concrete	CY	1	95.0	95.0	93.60	8,892	87.00	8,265	0.00	0
Coal Firing System Piping	TN	1	17.0	17.0	321.20	5,460	0.00	0	120.00	2,040
Coal Firing System Hoist	IN	19	26.0	494.0	321.20	158,673	0.00	0	120.00	59,280
Subtotal						506,302		8,265		185,832
Lighter Oil System	_									
Ignitors	TN	72	0.2	14.4	321.20	4,625	0.00	0	120.00	1,728
Fuel Supply Motor	TN	2	0.4	0.8	518.30	415	0.00	0	120.00	96
Piping	TN	1	7.0	7.0	518.30	3,628	0.00	0	120.00	840
Subtotal						8,668		0		2,664
Fuel Storage Facilities, Lighter Oil System										
Fuel Storage Pump	TN	2	1.5	3.0	518.30	1,555	0.00	0	120.00	360
Fuel Storage Piping - 3"	TN	1	3.0	3.0	518.30	1,555	0.00	0	120.00	360
Insulation	CY	1	100.0	100.0	73.00	7,300	9.00	900	0.00	0
Feedwater Motor	TN	1	9.9	9.9	321.20	3,180	0.00	0	120.00	1,188
Subtotal						13,590		900		1,908
Boiler Plant Equipment										
Blowdown Piping										
Blowdown Piping -Less than 4" Pipe	TN	1	14.0	14.0	518.30	7,256	0.00	0	120.00	1,680
Blowdown Piping -6" Pipe	TN	1	3.0	3.0	321.20	964	0.00	0	120.00	360
Blowdown Piping -12" Pipe	TN	1	6.0	6.0	240.90	1,445	0.00	0	120.00	720
Blowdown Piping -16" Pipe	TN	1	8.0	8.0	240.90	1,927	0.00	0	120.00	960
Insulation	CY	1	125.0	125.0	73.00	9,125	9.00	1,125	0.00	0
Blowdown Piping -24" Pipe	TN	1	30.0	30.0	240.90	7,227	0.00	0	120.00	3,600
Subtotal						27,944		1,125		7,320
Draft System										
Precipitators Foundation - Concrete	CY	4	185.0	740.0	93.60	69,264	87.00	64,380	0.00	0
Precipitators Drainage Slab - Concrete	CY	1	830.0	830.0	93.60	77,688	87.00	72,210	0.00	0
Precipitator	TN	4	1,915.0	7,660.0	240.90	1,845,294	0.00	0	120.00	919,200
Precipitator Structural Steel	TN	1	410.0	410.0	240.90	98,769	0.00	0	120.00	49,200
Precipitator Grating	TN	1	25.0	25.0	518.30	12,958	0.00	0	120.00	3,000
Forced Draft Fan Outlet Ductwork	TN	1	80.0	80.0	321.20	25,696	0.00	0	120.00	9,600
Forced Draft Fan Foundation	CY	1	25,0	25.0	93.60	2,340	87.00	2,175	0.00	0
Forced Draft Fan Support Steel	TN	1	150.0	150.0	240.90	36,135	0.00	0	120.00	18,000
Precip. Inlet Ductwork	TN	1	783.0	783.0	321.20	251,500	0.00	0	120.00	93,960
Precip. Foundation Support Steel	TN	1	200.0	200.0	240.90	48,180	0.00	0	120.00	24,000
Precip. Foundation Concrete	CY	1	200.0	200.0	93.60	18,720	87.00	17,400	0.00	0
Precip. Outlet Ductwork	TN	1	427.0	427.0	321.20	137,152	0.00	0	120.00	51,240

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096.95	120.00	0	00.0	261.47	240.90	0.805	0.80£	ŀ	NL .	laat2 toggi 2
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192	120.00	0	00'0	19	321.20	9.1	9.1	ŀ	NL	Convevor - Motor
008.1	120.00	0	00'0	818,4	321.20	0.21	12'0	ŀ	NL	Convevor - Metal Siding
080,1	120.00	0	00'0	168,2	321.20	0.6	0.6	۶.	NL	Conveyor - Metal Roofing
0	00.0	805,7	00.78	3*1*2	37.44	0.48	0.48	1	λD	Conveyor - Concrete Superstructure
0	00.0	18,444	00.78	19,843	09.66	212.0	212.0	4	YO CY	Conveyor Foundation - Concrete
008,81	120.00	0	00'0	0 7 6,76	240.90	12210	122.0	٢	NL .	Support Steel
										Conveyor to Crusher House:
				a la		l				
360		0		627						Subtotal
360	120.00	0	0010	723	240.90	3.0	3.0	F	NL .	Magnetic Separator
										Transfer Conveyor
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066 571		0	_	082.065						Istotdug
099.01	00.021	0	00.0	28,266	321.20	0.88	22.0	4	NL	and the President and the State of the State
132.360	120.00	0	00'0	416.286	321.20	0.821.1	0.282	4	NL .	
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827.76		348		696.101						istotdu2
0	00.0	348	00.78	374	09.60	0.4	0.4	Ļ	YO	Forced Draft Fan Foundation - Concrete
827,7	120.00	0	00.0	20'02	321.20	4.4	1.91	*	NL	Forced Draft Fan Motors
30'00	120.00	0	00.0	005,08	321.20	250.0	62.5	4	NL .	Forced Draft Fans
										Forced Draft Fans & Drives, Draft System
000,285,1		<u>919'221</u>	-	3,119,245		1				Istotdu2
0	00.0	050,4	00'6	35,850	00.67	0.024	0'097	F	YO CY	Ductwork System Insulation
027,68	120.00	0	00'0	810,721	240,90	0.168	6.158	L L	NL	ID Fan Ductwork Fndin - Support Steel
0	00.0	007,8	00.78	092'6	09.66	0.001	0.001	1	λD	ID Fan Ductwork Foundation - Concrete
080,28	120.00	0	00.0	107,912	321.20	0.488	0.488	F	NL	Induced Draft Ductwork
48,000	120.00	0	00.0	096'96	240.90	0.004	0.004	F	NL	Precip. Ductwork Support Steel
0	0.00	007,8	00.78	6'360	09'86	0.001	0.001	۱	Y)	Precip. Ductwork Foundation - Concrete
suleV	eruseem	1500	Measure	1200	Measure	Measure	InenoqmoJ	stnen	Measure	Cost Worksheet
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Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Coal Handling Motor Control House										
Substructure Concrete	— CY	1	70.0	70.0	93.60	6,552	87.00	6,090	0.00	0
Structural Steel	TN	1	8.0	8.0	240.90	1,927	0.00	0	120.00	960
Roof Decking Concrete	CY	1	117.8	117.8	37.44	4,410	87.00	10,249	0.00	0
Wall Panel Concrete	CY	1	191.1	191.1	37.44	7,155	87.00	16,626	0.00	0
Subtotal					-	20,044		32,965		960
Coat Handling Crusher House										
Substructural Concrete	CY	1	295.0	295.0	93.60	27,612	87.00	25,665	0.00	0
Structural Steel	TN	1	194.0	194.0	240.90	46,735	0.00	0	120.00	23,280
Subtotal						74,347		25,665		23,280
Architectural Work - Superstructure:										
Masonry - Concrete Block	- CY	1	161.1	161.1	37.44	6,032	87.00	14,016	0.00	0
Concrete	CY	1	85.0	85.0	37.44	3,182	87.00	7,395	0.00	0
Metal Siding	TN	1	12.0	12.0	321.20	3,854	0.00	0	120.00	1,440
Subtotal						13,068		21,411		1,440
Wet Ash Handling System										
Pyrite Hopper	TN	2	2.4	4.8	321.20	1,542	0.00	0	120.00	576
4" & 12" Pipe	TN	1	3,0	3.0	321.20	964	0.00	0	120.00	360
Subtotal						2,506		0		936
Boiler Bottom Ash Removal System:										
Clinker Grinder	TN	4	3.0	12.0	240.90	2,891	0.00	0	120.00	1,440
Piping - 4"	TN	1	4.0	4.0	321.20	1,285	0.00	0	120.00	480
Piping - 6"	TN	1	4.0	4.0	321.20	1,285	0.00	0	120.00	480
Piping - 8"	TN	1	30.0	30.0	321.20	9,636	0.00	0	120.00	3,600
Piping - Ash 10"	TN	1	24.0	24.0	240.90	5,782	0,00	0	120.00	2,880
Piping - 12"	TN	1	3.0	3.0	240.90	723	0.00	0	120.00	360
Air Separator & Tank	TN	1	2.0	2.0	321.20	642	0.00	0	120.00	240
Transport System - Pump	TN	6	15.2	91.2	321.20	29,293	0.00	0	120.00	10,944
Transport System - Motor Subtotal	IN	6	5.2	31.2	321.20	61,558	0.00	0	120.00	24,168
Boiler Plant Equipment										
Sluce Water System		,	• -						100.00	
Less than 4" Pipe	TN	1	8.0	8.0	321.20	2,570	0.00	0	120.00	960
4" Pipe	IN	1	7.0	7.0	321.20	2,248	0.00	0	120.00	840
6" Pipe		1	8.0	0.8	321.20	2,570	0.00	0	120.00	960
10" Pipe	IN	1	13.0	13.0	240,90	3,132	0.00	0	120.00	1,560
12 Pipe	IN	1	5.0	5.0	240.90	1,205	0.00	0	120.00	600
Lining System Motor	IN	2	1.1	2.2	321.20	707	0.00	0	120.00	264
Lifting System Hoist	IN	1	18.0	18.0	321.20	5,782	0.00		120.00	2,160
Subtotal						18,214		0		7,344
Control Air System:			107	0.7	004.00		0.00		400 00	
Air Uryer	IN	1	9.7	9.7	321.20	3,116	0.00	0	120.00	1,164
Compressor	IN	1	6.0	6.0	321.20	1,927	0.00		120.00	720
subtotar						5,043		0		1,884

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Removal, Disposal & Salvage	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Air Distribution System - Piping:		1								
Less than 4" Pipe		1	37.0	37.0	321.20	11,884	0.00	0	120.00	4,440
4" Pipe	TN	1	2.0	2.0	321,20	642	0.00	0	120.00	240
8" Pipe	TN	1	5.0	5.0	321.20	1,606	0.00	0	120.00	600
Subtotal						14,132		0		5,280
Plant Service Water System										
Plant Service Water Pump		1	22.0	22.0	321 20	7.066	0.00	n	120.00	2 640
Motor	TN	1	14.4	14.4	321 20	4 825	0.00	õ	120.00	1 728
Subtotal			••••		OLT.LU	11.691	0.00		120.00	4 268
						11,001		v		4,300
Piping, Main line:										
Less than 4" Pine		1	3.0	3.0	221.20	064	0.00		400.00	222
4" Pine	TN	1	6.0	5 .0	221.20	1 0 2 7	0.00	0	120.00	300
6" Pine	TM		19.0	10.0	321.20	5,300	0.00	0	120.00	/20
loculation	CV CV		10.0	10.0	321.20	5,782	0.00	0	120.00	2,160
		1	100.0	100.0	73.00	7,300	9,00	900	0.00	0
	IN	1	12.0	12.0	240.90	2,891	0.00	0	120,00	1,440
	IN	1	4.0	4.0	240.90	964	0,00	0	120.00	480
16" Pipe	TN	1	5.0	5.0	240.90	1,205	0.00	0	120.00	600
Subtotal						21,033		900		5,760
Main Turbine Steam System										
Main Steam Dining										
19" Dina	TN		44.0	44.0	040.00	·		_		
Inculation		1	11.0	11.0	240.90	2,650	0.00	0	120.00	1,320
	CY	1	100.0	100.0	73.00	7,300	9.00	900	0.00	0
22" Pipe	TN	1	105.0	105.0	240.90	25,295	0.00	0	120.00	12,600
28" Pipe	TN	1	202.0	202.0	240.90	48,662	0.00	0	120.00	24,240
Subtotal						83,907		900		38,160
Use Defende Distant										
Hot Reneat Piping:										[
32" Pipe	TN	1	224.0	224.0	240.90	53,962	0.00	0	120.00	26,880
Insulation	CY	1	100.0	100.0	73.00	7,300	9.00	900	0.00	. 0
42" Pipe	TN	1	193.0	193.0	240.90	46,494	0.00	0	120.00	23,160
Subtotal						107,756		900		50,040
Cald Babast Bialast										
22 2/4" Dies	— m		én n			4				
			60.0	60.0	240.90	14,454	0.00	0	120.00	7,200
	CY	1	100.0	100.0	73.00	7,300	9.00	900	0.00	0
42° Pipe	IN	1	76.0	76.0	240.90	18,308	0.00	0	120.00	9,120
Subtotal						40,062		900		16,320
Main Steam Burgers Suntan Disian										
12ª Dieg			40.0							
			13.0	13.0	240.90	3,132	0.00	0	120.00	1,560
	LY	1	100.0	100,0	73.00	7,300	9.00	900	0,00	0
	IN	1	65.0	65,0	240.90	15,659	0.00	0	120.00	7,800
Subtotal						26,091		900		9,360
Extraction Steam System										
8" Pipe	TN	1	3.0	3.0	321.20	OR A	0.00		120.00	200
Insulation	CY	1	100.0	100.0	73.00	7 200	0.00	0001	120.00	360
12" Pine	TN	1	8.0	9.00.0	240.00	1,000	0.00	900	0.00	0
Subtotal	114	,	0.0	0.U	240.90	1,927	0.00		120.00	960
03010181						10,191		900		1,320

Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
LP Heater Steam Piping:										
18" Pipe	TN	1	4.0	4.0	240.90	964	0.00	0	120.00	480
24" Pipe	TN	1	9.0	9.0	240.90	2,168	0.00	0	120.00	1.080
Insulation	CY	1	100.0	100.0	73.00	7,300	9.00	900	0.00	. 0
26" Pipe	TN	1	5.0	5.0	240.90	1,205	0.00	0	120.00	600
30" Pipe	TN	1	11.0	11.0	240.90	2,650	0.00	0	120.00	1,320
36" Pipe	TN	1	12.0	12.0	240,90	2,891	0.00	0	120.00	1,440
42" Pipe	TN	1	12.0	12.0	240.90	2,891	0.00	0	120.00	1,440
54" Pipe	TN	1	10.0	10.0	240.90	2,409	0.00	0	120.00	1,200
Subtotal						22,478		900		7,560
Soot Blower Stearn Piping:					2					
Less than 4" Pipe	TN	1	2.0	2.0	321.20	642	0.00	0	120.00	240
Insulation	CY	1	100.0	100.0	73.00	7,300	9.00	900	0.00	0
4" Pipe	TN	1	21.0	21.0	321.20	6,745	0.00	0	120.00	2,520
6" Pipe	TN	1	7.0	7.0	321.20	2,248	0.00	0	120.00	840
Sublotal					- 	16,935		900		3,600
Air Heater Stearn Piping:										
Less than 4" Pipe	TN	1	1.0	1.0	321.20	321	0.00	0	120.00	120
Insulation	CY	1	100.0	100.0	73.00	7,300	9.00	900	0.00	0
6" Pipe	TN	1	2.0	2.0	321.20	642	0.00	0	120.00	240
10" Pipe	TN	1	9.0	9.0	240.90	2,168	0.00	0	120.00	1,080
Subtotal						10,431		900		1,440
Deaerator Steam Piping:										
18" Pipe	TN	1	12,0	12.0	240.90	2,891	0.00	0	120.00	1,440
Insulation	CY	1	50.0	50.0	73.00	3,650	9.00	450	0.00	0
24" Pipe	TN	1	3.0	3.0	240.90	723	0.00	0	120.00	360
. Subtotal						7,264		450		1,800
Turbine Gland Seal System Piping:										
Less than 4" Pipe	TN	1	1.0	1.0	321,20	321	0.00	0	120.00	120
4" Pipe	TN	1	4.0	4.0	321.20	1,285	0.00	0	120.00	480
Insulation	ĊY	1	50.0	50.0	73.00	3,650	9.00	450	0.00	0
18" Pipe	TN	1	12.0	12.0	240.90	2,891	0.00	0	120.00	1,440
24" Pipe	TN	1	3.0	3.0	240.90	723	0.00	0	120.00	360
Subtotal						8,870		450		2,400
Vent & Drain Systems										
Boiler Vent Piping:										
Less than 4" Pipe	TN	1	41.0	41.0	321.20	13,169	0.00	0	120.00	4,920
Insulation	CY	1	75.0	75.0	73.00	5,475	9.00	675	0.00	0
6" Pipe	TN	1	24.0	24.0	321.20	7,709	0.00	0	120.00	2,880
10" Pipe	TN	1	8.0	8.0	240.90	1,927	0.00	0	120.00	960
12" Pipe	TN	1	4.0	4.0	240.90	964	0.00	0	120.00	480
16" Pipe	TN	1	42.0	42.0	240.90	10,118	0.00	0	120.00	5,040
18" Pipe	TN	1	14.0	14.0	240.90	3,373	0.00	0	120.00	1,680
	TN	1	50.0	50.0	240.90	12,045	0.00	0	120.00	6,000
30° Pipe	TN	1	5.0	5.0	240.90	1,205	0.00	0	120.00	600
Subtotal						55,985		675		22,560

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Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
High Pressure Heater Vent & Drain System:	- TN	4	70	7.0	004.00	0.010				
Subtotal	FIN	1	7.0	7.0	321.20	2,248	0.00	0	120.00	
Low Pressure Heater Vent & Drain System:		f						1		
Less than 4" Pipe	TN	1	27.0	27.0	321.20	8.672	0.00	0	120.00	3 240
Insulation	CY	1	75.0	75.0	73.00	5.475	9.00	675	0.00	0,240
6" Pipe	TN	1	4.0	4.0	321.20	1,285	0.00	0	120.00	480
8" Pipe	TN	1	3.0	3.0	321.20	964	0.00	0	120,00	360
10" Pipe	TN	1	4.0	4.0	240.90	964	0.00	0	120.00	480
12" Pipe	TN	1	17.0	17.0	240.90	4,095	0.00	0	120.00	2,040
Subtotal						21,455		675		6,600
Steam Vent And Drain System										
Steam Vent	TN	3	6.0	18.0	321.20	5,782	0.00	0	120.00	2,160
Subtotal						5,782		0		2,160
Condensate Vent & Drain System										
Condensate Vent Pipe - 6" [& 18"]	TN	1	7.0	7.0	321.20	2,248	0.00	0	120.00	840
Subtotal						2,248		0		840
Condensate System:										
Less than 4" Pipe	' TN	1	11.0	11.0	321.20	3,533	0.00	0	120.00	1.320
6" Pipe	TN	1	32.0	32.0	321,20	10,278	0.00	0	120.00	3,840
10" Pipe	TN	1	2.0	2.0	240.90	482	0.00	0	120.00	240
14" Pipe	TN	1	4.0	4.0	240.90	964	0.00	o	120.00	480
16" Pipe	TN	1	59.0	59.0	240,90	14,213	0.00	0	120.00	7,080
20" Pipe	TN	1	29.0	29.0	240.90	6,986	0.00	0	120.00	3,480
24" Pipe	TN	1	2.0	2.0	240.90	482	0.00	0	120.00	240
36" Pipe	TN	1	5.0	5.0	240.90	1,205	0.00	0	120.00	600
Subtotal						38,143		0		17,280
Boiler Plant Piping System Insulation	CY	1	45	45,0	73.00	3,285	9.00	405	0.00	0
Low Pressure Heaters, Condensate System										i
Low Pressure Heaters	TN	4	39.3	157.2	321.20	50,493	0.00	0	120.00	18,864
Subtotal			•			50,493		0		18,864
Deaerator & Tank, Condensate System										
Deaerator	TN	1	9.0	9.0	321.20	2,891	0.00	0	120.00	1.080
Steel	TN	1	6.0	6.0	321.20	1,927	0.00	0	120.00	720
Deserator Storage Tank	TN	1	78.0	78.0	321.20	25,054	0.00	0	120.00	9,360
Steel	TN	1	8.0	8.0	321.20	2,570	0.00	o	120.00	960
Insulation & Lagging	CY	1	8.0	8.0	73.00	584	9.00	72	0.00	0
Subtotal						33,026		72		12,120
Condensate Pumps & Drives						1				
Condensate Pump	TN	3	8.0	24.0	321.20	7,709	0.00	0	120.00	2,880
Condensate Motor	TN	3	8.0	24.0	321.20	7,709	0.00	ő	120.00	2,000
Subtotal						15,418		0		5,760
Condensate Auxiliary Systems										
Chemical Feed System Pump	TN	8	0.3	2.4	321.20	771	0.00	0	120.00	289
Subtotal						771		0	120.00	288

Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Chemical Feed Pining										
Less than 4" Pipe	TN	1	34.0	34.0	321.20	10.921	0.00	0	120.00	4,080
10" Pipe	TN	1	55.0	55.0	240.90	13,250	0.00	0	120.00	6,600
12" Pipe	TN	1	42.0	42.0	240.90	10,118	0.00	0	120.00	5,040
Subtotal						34,289		0		15,720
Spray Water System Piping:										
6" Pipe	TN	1	5.0	5.0	321.20	1,606	0.00	0	120.00	600
8" Pipe	TN	1	4.0	4.0	321.20	1,285	0.00	0	120.00	480
12" Pipe	TN	1	6.0	6.0	240.90	1,445	0.00	0	120.00	720
14" Pipe	TN	1	5.0	5.0	240.90	1,205	0.00	0	120.00	600
Subtotal						5,541		0		2,400
Feedwater System										
Feedwater Piping:										
12" Pipe	TN	1	3.0	3.0	240.90	723	0.00	0	120.00	360
16" Pipe	TN	1	23.0	23.0	240.90	5,541	0.00	0	120.00	2,760
18" Pipe	TN	1	19.0	19.0	240.90	4,577	0,00	0	120.00	2,280
20" Pipe	TN	1	4.0	4.0	240.90	964	0.00	0	120.00	480
28" Pipe	TN	1	11.0	11.0	240.90	2,650	0.00	0	120.00	1,320
Insulation	CY	1	50.0	50.0	73.00	3,650	9.00	450	0.00	0
Subtotal						18,105		450		7,200
High Pressure Heaters, Feedwater System										
High Pressure Heater	TN	4	55.0	220.0	321.20	70,664	0.00	0	120.00	26,400
Subtotal						70,664		0		26,400
Feedwater Pumps & Drives, Feedwater Syster					-			1		
Feedwater Pump	TN	1	15.0	15.0	240.90	3,614	0.00	0	120.00	1,800
Turbine Drives	TN	2	[~] 55.5	111.0	240.90	26,740	0.00	0	120.00	13,320
Subtotal					Į	30,354		0		15,120
Feedwater Auxiliary System										
4" Pine	TN	1	3.0	3.0	321.20	964	0.00	0	120.00	360
8" Pine	TN	1	11.0	11.0	321.20	3.533	0.00	0	120.00	1.320
Subtotal		•				4,497		0		1,680
Feedwater System Insulation	СҮ	1	35.0	35.0	73.00	2,555	9.00	315	0.00	0
Lube Oil Surtem										
Dinion - Less than A"	TN	1	60	60	321 20	1 0 7 7	0.00	0	120.00	720
	TN	2	4.5	9.0	321 20	7,821 2 801	0.00	0	120.00	1 080
Funp	TN	2	4.0	80	321 20	2,091	0.00	0	120.00	060
Subtotol		2	4.0	0.0	. 021.20	7 399	0.00	0	12.0.00	2 760
Subblai						7,300		0		2,700
Feedwater Pmp Turb Oil Sys, Lube Oil Systen										
Fdwtr Pump Turb Oil Pipe - Less than 4*	TN	1	1.0	1.0	321.20	321	0.00	0	120.00	120

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Removal, Disposal & Salvage	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Nitrogen System	-									
Less Than 4" Pipe	TN	1	3.0	3.0	321.20	964	0.00	0	120.00	360
10" Pipe	TN	1	2.0	2.0	240.90	482	0.00	0	120.00	240
Subtotal						1,446		0		600
Total Account 312						11,892,386		353,434		5,026,784
FERC Account 314										
Turbogenerator Units										
Turbine Generator System										
Foundation - Concrete	CY	1	3,435.0	3,435.0	93.60	321,516	87.00	298,845	0.00	0
Subtotal						321,516		298,845		0
Turbine Generator										
Section Casing or Shell	TN	1	815.0	815.0	182.50	148,738	0.00	0	120.00	97,800
Generator Copper	TN	1	127.6	127.6	715.40	91,285	0.00	0	5,000.00	638,000
Turbine System Insulation	CY	1	10.0	10.0	73.00	730	9.00	90	0.00	0
Subtotal						240,753		90		735,800
Turbino Dimin Suntamy										
Less then d [#] Dine	ты	1	20	2.0	224.20	064	0.00		400.00	
Subtotal		I	3.0	3.0	321.20	904	0.00	0	120.00	360
Sustain						904		U U		360
Generator Cooling & Purge System										
Generator Purge Piping - less than 4"	. TN	1	41.0	41.0	321.20	13,169	0.00	0	120.00	4 920
Subtotal		-				13,169		<u>0</u>	120.00	4,920
						,		-		
Condensing System										
Condenser Casing	NT	1	756.0	756.0	321.20	242,827	0.00	0	120.00	90,720
Subtotal						242,827		0		90,720
										i i i i i i i i i i i i i i i i i i i
Condenser Connections Piping:	·									.
6" Pipe	TN	1	3.0	3.0	321.20	964	0.00	0	120.00	360
	IN	1	4.0	4.0	321.20	1,285	0.00	0	120.00	480
	IN	1	6.0	6.0	240,90	1,445	0.00	0	120.00	720
24 Pipe Subtatal	IN	1	, 2.0	2.0	240.90	482	0.00	0	120.00	240
Subiotal						4,170		U		1,800
Vacuum System Pining:										
8* Pipe	TN	1	50	50	321 20	1 606	0.00	0	120.00	800
10" Pipe	TN	1	7.0	7.0	240.90	1 686	0.00	ő	120.00	840
Vacuum System Pump	TN	3	11.7	35.1	240.90	8,456	0.00	ŏ	120.00	4 212
Vacuum System Motor	TN	3	5.2	15.6	240.90	3,758	0.00	ő	120.00	1 872
Subtotal						15,506		0		7.524
Cooling Water Pumps & Drives										,,
Cooling Water Pumps	TN	2	6.5	13.0	240.90	3,132	0.00	0	120.00	1,560
Cooling Water Motors	TN	2	25.7	51.4	240.90	12,382	0.00	ō	120.00	6,168
Foundation Concrete C W Pumps & Drives	CY	1	23.0	23.0	93.60	2,153	87.00	2,001	0.00	0
Subtotal						17,667		2,001		7,728

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Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Tofal Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Cooling Tower										
Substructure Concrete - Reinf	CY	1	14,924.3	14,924.3	93.60	1,396,911	87.00	1,298,411	0.00	0
Asbestos in Transite Panels for Fill	CY	1	6,432.1	6,432.1	1,250.00	8,040,175	100.00	643,214		
Concrete	CY	1	6,499.8	6,499.8	37.44	243,353	87.00	565,484	0.00	0
Subtotal				i		9,680,439		2,507,109		0
Cooling Tower Equipment	_									
Piping:								-		(
16" Pipe	IN	1	13.0	13.0	240.90	3,132	0.00	0	120.00	1,560
36" Pipe	IN	1	219.0	219.0	240.90	52,757	0.00		120.00	26,280
Subtotal						55,889		0		27,840
Lube Oil System:										
Turbine Generator Oil Fitrng Unit	TN TN	1	40.0	40.0	321.20	12,848	0.00	0	120.00	4,800
Lube Oil Piping - less than 4"	TN	1	2.0	2.0	518.30	1,037	0.00	0	120.00	240
Lube Oil Piping - 4" Pipe	TN	1	6.0	6.0	321.20	1,927	0.00	0	120.00	720
Lube Oil Pump	TN	3	3.3	9.9	321.20	3,180	0.00	0	120.00	1,188
Lube Oil Piping Insulation	CY	1	20.0	20.0	73.00	1,460	9.00	180	0.00	0
Subtotal						20,452		180		6,948
Total Account 314						10,613,358		2,808,225		883,640
EEPC Account 315										
Accessory Fler Fourin	-									
Cable	-					ļ				
Power/Control/Lighting Cable	- TN	1	297.9	297.9	876.00	260,960	0.00	o	2,100.00	625.590
Raceway Conduit - Aluminum	TN	1	141.5	141.5	518.30	73,339	0.00	o.	1.340.00	189.610
Cabletray - Aluminum	TN	1	30.5	30.5	518.30	15.808	0.00	0	1.340.00	40.870
Subtotal						350,107		0	-1	856,070
Bus Eqpmnt & Suppts, Gener Bus Sys	_				1					
Bus	TN	1	9.2	9.2	240.90	2,218	0.00	0	120.00	1,104
Subtotal						2,216		0		1,104
A.C. System - 120/208v:	-									
Distribution Panel	TN	28	1.0	28.0	518.30	14,512	0.00	0	120.00	3,360
Distribution Switchgear	TN	4	2.5	10.0	518.30	5,183	0.00	0	120.00	1,200
Subtotal						19,695		0		4,560
A.C. System - 480v										
Motor Control Center	TN	3	2.5	7.5	321.20	2,409	0.00	0	120.00	900
Panel	TN	1	0.5	0.5	321.20	161	0.00	0	120.00	60
Switchgear	TN	3	10.0	30.0	240.90	7,227	0.00	0	120,00	3,600
Subtotal						9,797		0		4,560
Transformer System										
Transformer - Power/Lighting	TN	20	1.0	20.0	240.90	4,818	0.00	0	120.00	2.400
Copper	TN	1	5.6	5.6	540.20	3.025	0.00	0	5,000.00	28.000
Subtotal						7,843		0		30,400
Distribution System AC System - 277/480v	_									
Circuit Breaker - AC System 277/480v	TN	1	1.2	1.2	321.20	385	0.00	0	120.00	144
Switchgear - AC System 277/480v	TN	1	3.0	3.0	240.90	723	0.00	0	120.00	360
Subtotal						1,108		0		504

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Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
A.C. System - 4kv										
Distribution Switchgear										
Transformer - Station Service	 TN	2	50.4	100.8	240.90	24 283	0.00	0	120.00	12.006
Transformer Copper	TN	2	35.4	70.8	540.20	38 246	0.00	0	5 000 00	354,000
Transformer - Startup Station Service	TN	1	59.7	59.7	240,90	14.382	0.00	ő	120.00	7 164
Transformer Copper	TN	1	41.6	41.6	540.20	22.472	0.00	0	5 000 00	208,000
Subtotal						99,383		0	-,	581,260
										,
A.C. System - 6.9kv:										
Bus Section - Station Service Bus	TN	1	12.5	12.5	876.00	10,950	0.00	0	120.00	1,500
Switchgear Frame	TN	1	100.0	100.0	240.90	24,090	0.00	0	120.00	12,000
Transformer - Startup Station Service	TN	1	39.0	39.0	240.90	9,395	0.00	0	120.00	4,680
Transformer Copper	TN	1	27.0	27.0	540.20	14,585	0.00	0	5,000.00	135,000
Subtotal						59,020		0		153,180
Total Account 315						549,169		0		1,631,638
FERC Account 316										
Misc Plant Equip										
Central Vacuum Cleaning System										
Pump	TN	2	3.5	7.0	321.20	2,248	0.00	0	120.00	840
Less than 4" Pipe	TN	1	5.0	5.0	321.20	1,606	0.00	0	120.00	600
4" Pipe	TN	1	23.0	23.0	321.20	7,388	0.00	0	120.00	2,760
8" Pipe	TN	1	10.0	10.0	321.20	3,212	0.00	0	120.00	1,200
Total Account 316						14,454		0		5,400
TOTAL SCHERER UNIT 4						24,225,437		3,359,953		7,916,882
GRAND TOTAL SCHERER						33,822,271		11,136,144		8,660,945

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St. Johns River Plant

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St. Johns River Power Park

The St. Johns River Power Park (SJRPP) Plant is jointly owned by the Jacksonville Electric Authority, 80% ownership share and Florida Power & Light Company, 20% ownership share. The site is located in the northeast section of the City of Jacksonville in Duvall County, Florida. Both Units No. 1 and No. 2 are coal fired units arranged for semi-outdoor operation. A common unloading bay is located between and joins the Unit No. 1 and Unit No. 2 turbine buildings. The control building, a five (5) story common facility, is located between Units No. 1 and 2. The two units have a combined maximum generator nameplate rating of 1,358 megawatts. Units No. 1 and 2 went into commercial operation during 1987 and 1988, respectively. For purposes of this dismantlement study, the estimated retirement dates for these units are as follows:

<u>Unit</u>	<u>Year</u>
Unit 1	2028
Unit 2	2028
Common	2028
Gypsum & Ash Handling Equipment	2028
Coal & Limestone Handling Equipment	2028

The dismantlement of the plants is assumed to require 2 years beginning in 2033.

Two hyperbolic natural draft cooling towers, one for each unit, are located northeast of the Unit No. 2 turbine building. The coal handling system includes a rotary rail car dumper equipped with a static weight scale, a train positioner, a type 410 stainless steel receiving bin, four short belt feeders, a cross conveyor, two series arranged elevating conveyors, a belt scale, and two magnetic separators.

The 20% ownership share noted above has been used to determine Florida Power & Light Company's share of the responsibility for the cost of dismantlement of the St. Johns River Power Park Units.

Florida Power & Light Company last requested and received approval for a change in dismantlement accruals for the St. Johns River Power Park Units (including Common and Gypsum and Fly Ash Handling Facilities) in Docket No. 070378-EI, Order No. PSC-08-0095-PAA-EI issued on February 14, 2008. These rates became effective as of January 1, 2007.

ST. JOHNS RIVER POWER PARK SUMMARY OF DISMANTLEMENT COSTS

		Removal	Removal	Disposal	Disposal	Salvage	Salvage		FPL's 20%
FERC		Cost	Cost at	Cost	Cost at	Value	Value at	Total	Portion
Account	Description	_(A)	20%	(B)	20%	(C)	20%	(D)=(A + B - C)	(E)=(D) * .2
	SJRPP Common Plant								
211	Production Plant	2 470 007	004.045						
212	Roller Plant Environment	3,170,227	634,045	2,520,441	504,088	627,803	125,561	5,062,865	1,012,573
315	Accessoor Electrical Equipment	1,727,200	345,403	2,206,941	441,388	49,966	9,993	3,884,241	776,848
316	Misc. Power Plant Equipment	933,300	100,073	191,016	38,323	1,849,224	369,845	(724,241)	(144,848)
	Subiotal	5 871 074	1 174 305	4 018 008	U	20,443	4,089	20,672	4,134
	CUDUDE	3,071,974	1,174,335	4,910,990	903,800	2,047,430	209,487	8,243,536	1,648,707
	Other Site Costs:								
	Site Management Expenses	1,129,968	225,994					1 129 968	225 994
	Special Waste	188,700	37,740					188 700	37 740
	Intake & Discharge Backfill	44,128	8,826					44,128	8,826
	Grading & Seeding	24,840,315	4,968,063					24.840.315	4 968 063
	Subtotal	26,203,111	5,240,622	0	0	0	0	26,203,111	5,240,622
	Total	32,075,085	6,415,017	4,918,998	983,800	2,547,436	509,487	34,446,647	6,889,329
	Contingency - 16%	5,132,014	1,026,403	787,040	157,408			5,919,053	1,183,811
	Total SJRPP Common Excluding Unusable M8	37,207,099	7,441,420	5,706,037	1,141,207	2,547,436	509,487	40,365,701	8,073,140
	Linuxable MRS investory	16 500 000	2 200 000						
	Total S IRPP Common Including Unusable M81	63 707 000	10 741 420	5 708 027	1 4 44 007	1,650,000	330,000	14,850,000	2,970,000
	Total Gara T. Garanon measuring chastic men	30,707,000	10,141,420	0,700,007	1,141,207	4,197,430	039,407	00,215,701	11,043,140
	SJRPP Units 1 & 2		-						{
311	Improvements to Site	5,639,163	1,127,833	3,758,003	751,601	934.841	186,968	8.462.326	1 692 465
312	Boiler Plant Equipment	22,006,577	4,401,315	4,048,252	809,650	8,293,810	1.658,762	17,761,019	3 552 204
314	Turbogenerator Units	9,759,172	1,951,834	6,310,813	1,262,163	1,901,466	380,293	14.168.518	2,833,704
315	Accessory Electrical Equipment	4,589,259	917,852	1,465,056	293,011	7,436,134	1,487,227	(1,381,819)	(276,364)
316	Misc. Power Plant Equipment	73,569	14,714	34,560	6,912	15,859	3,172	92,270	18,454
353	Switchyard	0	0	0	0	σ	0	0	0
	Subtotal	42,067,740	8,413,548	15,616,684	3,123,337	18,582,111	3,716,422	39,102,314	7,820,463
	Contingency - 16%	6,730,838	1,346,168	2,498,669	499,734		·	9,229,508	1,845,902
	Total SJRPP Units 1 & 2	48,798,579	9,759,716	18,115,354	3,623,071	18,582,111	3,718,422	48,331,822	9,666,364
	CIDDD Colored Sector of Dev With								
244	SJRPP Coal and Limestone Handling	050.040	400 500						
311	Improvements to Site	652,949	130,590	618,054	123,611	28,768	5,754	1,242,235	248,447
312	Boller Plant Equipment	/,89/,514	1,579,503	3,564,546	/12,909	2,115,598	423,120	9,346,463	1,869,293
315	Accessory Electrical Equipment	0 184 252	122,700	2,949	590	369,661	73,932	247,088	49,418
L	Castingangy 18%	3,104,203	1,032,000	4,100,049	637,110	2,514,027	502,805	10,835,785	2,167,157
	Total S IRPP Coal and Limestone Handling	10 630 546	2 1 26 100	4 855 237	071.047	0.514.007	500.005	2,135,970	427,194
	Total OSTATE COAL and Linestone Handling	10,030,340	2,120,109	4,000,207	971,047	2,314,027	502,805	12,971,755	2,594,351
	SJRPP Ash and Gypsum Handling								
312	Boiler Plant Equipment	1,849,204	369,841	1,379,701	275,940	239 183	47 837	2 989 722	507 044
	Contingency - 16%	295,873	59 175	220,752	44,150	200,100	100,11	516 625	102 325
	Total SJRPP Ash and Gypsum Handling	2,145,077	429,015	1,600,453	320,091	239,183	47.837	3,506 347	701 260
			· · · · · · · · · · · · · · · · · · ·				,/	-,,,	101,203
	Total Dismantiement Costs	115,281,300	23,056,260	30,277,080	6,055,416	25,532,756	5,106,551	120,025,625	24,005,125
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ST. JOHNS RIVER POWER PARK

DISMANTLEMENT COST FOR INFLATION PROJECTION

	Labor	Material & Equipment	Burial	Salvage	Total
Description	(A)	(B)	(C)	(D)	(A) + (B) + (C) - (D)
SJRPP Common - FPL's Partion	4,464,852	6,276,568	1,141,207	839,487	11,043,140
SJRPP Units 1 & 2	5,855,829	3,903,886	3,623,071	3,716,422	9,666,364
SJRPP Coal & Limestone Handling	1,275,665	850,444	971,047	502,805	2,594,351
SJRPP Gypsum & Ash Handling	257,409	171,606	320,091	47,837	701,269
Total	11,853,756	11,202,504	6,055,416	5,106,551	24,005,125

Labor is 60% of Removal Cost from Summary of Dismantlement Costs. Material & Equipment is 40% of Removal Cost from Summary of Dismantlement Costs. Burial is 100% of Disposal Cost from Summary of Dismantlement Costs. Salvage is 100% of Salvage from Summary of Dismantlement Costs.

ST JOHNS RIVER POWER PARK DISMANTLEMENT ASSUMPTIONS

FPL and the Jacksonville Electric Authority (JEA) are joint owners of St. Johns River Power Park Units 1 and 2 and related Common Facilities. Contractually each co-owner is responsible for his share of all dismantlement costs.

FPL will provide management personnel for the dismantlement effort.

FPL will prepare the request for proposal package and solicit bids for the dismantlement effort.

FPL will provide site security during the dismantlement.

FPL will hire a demolition contractor to perform the actual dismantling work. This contractor will have the salvage rights to all plant equipment and structural material.

The land will be made available for future use.

All dismantling work will be done in accordance with OSHA regulations.

The lube oil storage tanks will be cleaned and their contents disposed of according to the requirements of current regulations.

The following items will be removed:

- a. All structures, equipment, and concrete pads, pedestals, foundations, etc;
- b. All underground gas, oil, sewer and water piping and electrical conduits;
- c. All hazardous and contaminated materials, e.g., acid filled lead batteries, oil tank residue.

Discussions with FPL's Power Generation Division (PGD) indicate that the return of the site to a green field condition entails removal of all structures above the wood pilings and steel-encased concrete pilings. The removal of the pilings would be unfeasible and, therefore, will remain in place.

Scrap will be unprepared, i.e., cut only to the extent required to load the pieces on scrap dealers' trailers. Trucking costs for removal are paid by the scrap dealer and are reflected in the salvage value paid.

The estimate does not reflect land value or its resale.

The productivity factors employed are assumed valid for purposes of this study.

A contingency of 16% has been applied to the total removal and disposal costs. This contingency percentage covers costs associated with delays occurring after dismantlement begins, due to such causes as equipment failure and weather delays.

The costs of such overhead items as project management, site security, etc., have been estimated by FPL's Construction and Corporate Services Department. These costs are listed on the cost summary pages for each site's dismantlement study.

All materials and equipment are assumed to be either fully salvageable or to be disposed of completely. The availability of powerful cutting shears makes possible the cutting of even the heaviest steel to a size that permits salvage as scrap. Any unusable materials and supplies inventory will be sold as scrap. Estimated balances of such inventory (with related salvage value) have been included on the cost summary pages for each site's dismantlement study.

St Johns River Power Park's railroad spur will be removed. However, line items for removal, disposal and salvage of rail, cross-ties, etc. are not included in this study. Contractors that perform track removal will generally take up the track, dispose of the cross-ties and keep the rails, spikes and other salvageable material as payment.

ST JOHNS RIVER POWER PARK DISMANTLEMENT ASSUMPTIONS (continued)

The coal and limestone yards are lined with impermeable vinyl to prevent any seepage into the ground soil; further, it is assumed that coal and limestone stockpiles will have been consumed virtually in their entirety at the termination of power generation; plant operations personnel will dispose of any coal, limestone, gypsum or ash that may remain.

A 30% swell factor is used to compute the disposal cost per cubic yard of concrete. One cubic yard of concrete becomes 1.3 cubic yards of concrete rubble after demolition.

The switchyard and ancillary equipment (FERC account 353) will remain in place with the exception of the main power transformers, oil circuit breakers, superstructures, and foundations associated with the tie-in of plant generated power in the switchyard. However the dismantlement cost of the substation equipment is not included in this study so as to avoid duplicating recovery of costs already included in the net salvage factors of the substation plant accounts' depreciation rates.

An expandable grout will be used to dismantle the turbine pedestals. The chimneys and hyperbolic cooling towers will be control-blasted.

It is assumed that dismantlement activity at St. Johns River will begin five years after end of service. The end of service dates used for this assumption conform to the economic recovery period ending dates used in the St. Johns River Power Park depreciation study submitted in March, 2005 using actual and estimated plant and reserve data as of December 31, 2005. This study was accepted as part of the stipulation and settlement agreement that resolved the 2005 rate case and was approved by the Florida Public Service Commission in Docket Number 050188-EI, Order Number PSC-05-0902-S-EI on September 14, 2005. The economic recovery dates used for this assumption are as follows:

Unit	Economic Recovery Date
Common	2028
Unit 1	2028
Unit 2	2028
Coal & Limestone Handling Equipment	2028
Gypsum & Ash Handling Equipment	2028

St. Johns River Power Park Units 1 and 2 and all common facilities are asbestos free.

DISMANTLING ACTIVITIES: COAL FIRED PLANTS

- Remove loose equipment, furniture, and spare parts.
- Drain liquids, drum-up, and dispose of drums.
- Remove solid and liquid waste from waste treatment processing areas landfilled material, precipitated material in ponds and tanks, contaminated resins and reactants.
- Strip all insulation and covering, package and remove to acceptable landfill.
- Collapse circulating water lines. Remove underground piping and backfill all trenches.
- Remove main steam, hot and cold piping, downcomers, valves and supports, pumps, motors, generator auxiliary equipment, feedwater heaters, soot blowers, and condensers.
- Remove makeup structure, equipment, pumps, piping and valves.
- Remove systems that must be completed prior to the start of the boiler removal, including lube oil pumps, all piping, instrument and electrical systems.
- Remove forced drafts and induced draft ductwork, air heaters and fans.
- Remove hoppers, burners, upper and lower headers, manways, and waterwalls.
- Remove heavy steel structures and above ground steel precut key members, lower and cut at ground level.
- Remove fire protection, building heating, compressors, air dryers, control equipment and electrical systems.
- Disassemble crane, boiler feed pumps, and turbine generator.
- Separate scrap metals, and remove to scrap yard.
- Remove and dispose of miscellaneous rubble.
- Remove turbine pedestals, foundations, and heavy concrete structures and buildings, stack foundations, equipment foundations, and substructures. Remove to landfill.
- Install environmental monitoring equipment, for example, at wells.
- Cut off piles and remove pile caps. Remove concrete encased duct banks and underground piping.
- Remove railroad tracks.
- Test and remove contaminated soil/bases all areas.

DISMANTLING ACTIVITIES: COAL FIRED PLANTS (Continued)

- Remove or improve remaining site facilities such as buildings, fences, parking areas in accordance with local code and regulations.
- Install/modify existing site storm water runoff system.

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- Remove gas supply metering site, valve stations, underground distribution system.
- Remove marine facilities such as fuel unloading docks, equipment, bridges, and dams.
- Cut and remove oil tanks, piping, valves, and supports.
- Remove top soil/gravel, backfill, and remove barrier wall foundation.
- Backfill, site grading, seeding and mulching.

ST. JOHNS RIVER POWER PARK DISMANTLEMENT STUDY

DEVELOPMENT OF COST FACTORS

Cost factors have been developed to compute the net salvage value of the demolition of the St. Johns River Units. The net salvage value of the demolition is the net of: the removal and disposal cost and the salvage value of equipment and steel not disposed of. These factors provide a unit cost or value for removal, disposal and salvage of a given unit of measure of the component materials of which a power plant is constructed. The assumption is that the cost or value per unit of a given component can be multiplied by the quantity of that component in the plant to calculate a total cost or value for removal, disposal, or salvage of that component.

REMOVAL COST FACTORS

The removal cost factors developed for this study have two elements: a burdened labor rate and productivity factor. The burdened labor rate multiplied by the productivity factor yields the removal cost factor. The labor rates used in this study are from R.S. Means Construction Data. The crew rate per man-hour is for a crew consisting of six journeymen laborers, one outside foreman and one heavy equipment operator - a typical crew for demolition work. The rate includes the cost per man-hour of a crane, an excavator, and a front end loader. The equipment cost is also from R.S. Means, and both equipment and labor are adjusted by the appropriate R.S. Means City Cost Index. (Means provides national average rates for labor and equipment which are then adjusted by City Cost Indexes to arrive at the appropriate rate for a given region.) The productivity factors employed, e.g., the number of man-hours required to remove a given unit of measure of concrete, were developed by an engineering consulting firm. These factors are assumed valid for purposes of this study.

<u>Labor Rate</u>

Labor rates are for non-union crews and the per crew hour rate is based on a forty hour week.

Labor	\$38.73	Х	6	= `	\$232.39
Foreman	\$49.17	Х	1	=	\$49.17
Heavy Equipment Operator	\$46.86	Х	1	=	\$46.86
Total Cost per hour of 8 man crew					\$328.43
Cost per man hour		\$328.43	7	8 =	\$41.05

Equipment Rate

The equipment rate is based on the following equipment:

Crane/Excavator Front End Loader Cutting Equipment				34,370.00 6,824.90 231.75
Total per month				41,426.65
\$41,427	1	176	hours per month =	235.38
Cost per man hour Plus: amount for small tools			\$235.38 / 8 =	\$29.42 1.00
Total Cost per man hour				\$30.42

Equipment & Labor Summary

Labor Equipment Total	\$41.05 30.42 \$71.48
Rounded to nearest dollar	\$71.00
For Concrete demolition add \$5.00 per hour additional equipment charge.	\$76.00

The Removal Cost Factor is the product of the productivity factor for removal of a particular component multiplied by the total burdened hourly labor rate. The removal cost factors for all materials to be removed from FPL's sites are as follows:

<u>Components</u>	<u>Hourly Rate</u>	Productivity Factor	<u>Removal Factor</u>
Extra Heavy Steel (1)	\$71.00	2.50 MH / Ton	\$177.50 / Ton
Heavy Steel (2)	\$71.00	3.30 MH / Ton	\$234.30 / Ton
General Steel	\$71.00	4.40 MH / Ton	\$312.40 / Ton
Light Steel	\$71.00	7.10 MH / Ton	\$504.10 / Ton
Concrete	\$76.00	0.48 MH / CY	\$36.48 / CY
Reinforced Concrete	\$76.00	1.20 MH / CY	\$91.20 / CY
Copper-Elect. Cable &			
Generator Leads	\$71.00	12.00 MH / Ton	\$852.00 / Ton
Copper - Generator	\$71.00	9.80	\$695.80 / Ton
Copper - Transformer	\$71.00	7.40	\$525.40 / Ton
General Insulation	\$71.00	1.00 MH / CY	\$71.00 / CY
Inground Pipe-Metal(3)	\$71.00	6.00 MH / Ton	\$426.00 / Ton
Concrete Pipe	\$76.00	4.60 MH / Ton	\$349.60 / CY

(1) Includes turbine generator.

(2) Includes parts of the steam generator, pipe larger than 8 inches.

(3) Includes cost to backfill the trenches.

DISPOSAL COST FACTORS

Three cost factors were developed to compute the cost of disposal of non-hazardous wastes at Southland Waste Systems Landfill near SJRPP. Concrete and non-asbestos insulation are non-hazardous wastes. The tipping fee is \$38/ton. The dumpster cost, including driver, is \$182.00 per haul for a 20 cubic yard and \$201 per haul for a 30 cubic yard dumpster.

Cost factors were also developed to compute the cost of removal and disposal of oil tanks, including the cost of related soil remediation. Such costs are computed for each tank in FPL's system, and are located appropriately in the detailed spreadsheet.

ST. JOHNS RIVER POWER PARK DISMANTLEMENT STUDY

Concrete

One cubic yard of concrete in place weighs 3,950 pounds. One cubic yard becomes 1.3 cubic yards after demolition. Each load will contain 15.4 cubic yards (20 cu. yds./1.3) of in place concrete. 15.4 cubic yards weighs 61,000 pounds or 30.50 tons.

Truck Cost	\$182.00	/ haul		1 haul	=	182.00
Tipping Fees	\$38.00	/ ton	Х	30.5 tons	=	1,159.00
Total Cost per round Trip					-	\$1,341.00
Cost per Cubic Yard	\$1,341.00	/ 15.4 c	ubic yards	=		\$87.08
Plus 10% contractor profit					_	8.71
Total Cost per Cubic Yard					=	\$95.79
Rounded Cost per Cubic Yard					_	\$96.00

Insulation - Calcium Silicate (Non-Hazardous)

A trailer with a 30 cubic yard capacity is used for insulation because of its lighter weight. For purposes of this computation the dumpster is assumed to be 90% full (although the tipping fee is based on the assumption of 100% full truck - i.e., the weight to volume conversion uses 30 cubic yards - the full volume of the dumpster). A cubic yard of calcium silicate insulation weighs 121.5 pounds or .060750 tons. 30 cubic yards times .060750 tons/cubic yard = 1.82 tons.

Truck Cost	\$201.00	/ haul	Х	1	haul	=	201.00
Tipping Fees	\$38.00	/ ton	х	1.82 t	ons	=	69.16
Total Cost per round Trip						-	\$270.16
Cost per Cubic Yard	\$270.16	/ 27 cub	ic yards =				\$10.01
Plus 10% contractor profit							1.00
Total Cost per Cubic Yard						=	\$11.01
Rounded Cost per Cubic Yard						=	\$11.00

SALVAGE VALUE FACTORS

The salvage value factors, presented in dollars per ton, were provided by scrap metals dealers. The list covers all salvageable materials recovered from FPL sites.

Iron & Steel	\$120 / ton
Stainless Steel	\$2,000 / ton
Aluminum (Sheet Metal)	\$1,340 / ton
Wire & Cable:	
- Insulated Copper	\$2,100 / ton
- Insulated Aluminum	\$1,020 / ton
Copper	\$5,000 / ton
Nickel Alloys	
- 70/30 Cupro-Nickel	\$4,000 / ton
- 80/20 Cupro-Nickel	\$6,000 / ton
- Monel	\$10,000 / ton
Admiralty Brass	\$3,600 / ton
Aluminum Brass	\$2,800 / ton
Titanium	\$4,000 / ton

OTHER SITE COSTS

Site Management Expenses

Site management expenses refer to FPL's management costs and contractors' expenses associated with the dismantlement project. The cost factors provided by FPL's Power Generation Division (PGD) and updated by Construction Estimating are: FPL expenses of \$21,134 per month, both office and site and contractor's expenses of \$25,948 per month for site indirect costs. These expenses are to be incurred over the 24 month dismantlement period for St. Johns Plant. FPL's management costs include administration, engineering, permit costs and various other costs. Contractor's expenses include field management, supervision, security and other costs.

Site Management Expenses per month	\$47,082
Number of months	24
Total Site Management Expenses	\$1,129,968

Intake & Discharge Backfill

FPL's PGD developed this cost factor on the basis of a typical such structure for FPL's production plants. The assumption is that a volume of 1,600 cubic yards for the intake and 1,120 cubic yards for the discharge will need to be filled. The cost to back-fill the Intake is \$44,128; to back-fill the discharge is \$35,115. (St. Johns uses cooling towers and thus has no discharge.) The backfill cost has been updated by Construction Estimating as follows:

	Cost/Unit	Quantity	
Intake	\$44,128	1	\$44,128
Discharge	\$35,115	0	\$0
			\$44,128

ST. JOHNS RIVER POWER PARK DISMANTLEMENT STUDY

Grading and Seeding

This cost refers to the restoration of the dismantled area to a green field area. The land is filled with sand, spread with topsoil and then seeded. The cost factor provided by PGD and updated by Construction Estimating is \$63,579 per acre. The acreage was determined for each site by reviewing engineering drawings to determine the areas requiring this effort. Assumptions underlying this factor include 2,000 cubic yards per acre to be backfilled and 968 cubic yards per acre of topsoil to be spread and seeded.

St. John's Acreage to be graded and seeded	390.70
Cost Factor	\$63,579
Total Grading and Seeding Expense	\$24,840,315

Other Site Contamination & Special Waste

Florida Power & Light's Environmental Department has provided the following information about certain environmental related costs at the company's generating stations. At St Johns River, the following cost estimates have been identified.

Description	Amount
Asbestos	\$0
Lead in paint	900
Basins Clean Out/Material	70,000
Special Waste	23,000
Tanks/Washwater	60,000
Soil/Other Contamination	34,800
Total	\$188,700

ST. JOHNS RIVER POWER PARK

		Number	Units of		Removal		Disposal		Salvage	
n		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Disposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
FERC Account 314										
Improvements to Site										
Yard Structures										
Roads (asphalt 81,290 sv)	CY	1	4 512 00	4 512 00	36.48	164 508	06.00	422 452	0.00	
Parking (asphait 1,945 sy)	CY	1	107.00	107.00	36.48	3 903	96.00	433,132	0.00	0
Yard Lighting Foundations - Reinf Concrete	CY	1	253.00	253.00	91.20	23.074	96.00	24 288	0.00	0
Yard Light Poles (180) - Aluminum	TN	1	45,00	45.00	504.10	22,685	0.00	24,200	1.340.00	60.300
Railroad Crossover Walkway - Struc Steel	TN	1	12.00	12.00	234.30	2,812	0.00	0	120.00	1,440
RR Crossover Walkway - Handrailing, Platforms	TN	1	2.00	2.00	504.10	1,008	0.00	0	120.00	240
Bulk Gas Storage Foundation - Reinf Conc	CY	1	18.00	18.00	91.20	1,642	96.00	1,728	0.00	0
Bulk Gas Storage - Support Steel & Tanks	TN	1	14.67	14.67	312.40	4,583	0.00	0	120.00	1,760
Bulk Gas Piping, Vivs Under 4" - Steel	TN	1	9.53	9.53	504.10	4,805	0.00	0	120.00	1,144
Pipe Rack Foundations - Reinforced Concrete	ÇY	1	525.00	525.00	91.20	47,880	96.00	50,400	0.00	0
Hydrazine Storage Tank - Steel	TN	1	4.19	4.19	312.40	1,310	0.00	0	120.00	503
New Lube Oil Storage Tank - Steel	TN	1	3.57	3.57	312.40	1,115	0.00	0	120.00	428
Used Lube Oil Storage Tank - Steel	IN	1	4.99	4.99	312.40	1,559	0.00	0	120.00	599
Lube Oil Storage Shed Foundation - Reinr Conc	CY	1	20.07	20.07	91.20	1,830	96.00	1,927	0.00	0
Lube Oil Storage Shed - Steel Siding	TM	4	1.00	1.00	234.30	1,640	0.00	0	120.00	840
Sewage Treatment Plant - Steel Plate	TN	1	6.73	6.73	312.40	312	0.00	0	120.00	120
Sewage Treatment Plant Endation - Reinf Conc	CY	1	44 44	44 44	91.20	2,702	0.00	4 266	120,00	808
Subtotal		•			01.20	290,910	80.00	526 033	0.00	68 182
					-	,_,		020,000		00,102
Waste Water Treatment Area										
Waste Water Treatment Area - Structural Steel	TN	1	21.00	21.00	234.30	4,920	0.00	0	120.00	2,520
Wwwi Bidg Siding/ Roofing - Steel (11,400 st)	TN	1	14.25	14.25	312.40	4,452	0.00	0	120.00	1,710
WWT Amp. Tank Wolkway Distance Lodder	IN TN	1	24.00	24.00	504.10	12,098	0.00	0	120.00	2,880
WWT Area/ Bida Foundatione - Reinf Concrete		1	30.00	30.00	504,10	15,123	0.00	0	120.00	3,600
WWT Bidg Interior Walls - Concrete Block	CY	1	2,704.00	2,704.00	91.20	201,105	96.00	264,384	0.00	0
WWT Building - Flacoress Unit	TN	2	7.60	15.20	312 40	409	96.00	1,209	120.00	· · · · · · · · · · · · · · · · · · ·
WWT Building - Flocpress Unit Conveyor	TN	1	2.00	2.00	312.40	825	0.00	0	120.00	1,624
Lime Storage Silo - Steel	TN	1	14.22	14.22	234.30	3 332	0.00	0	120.00	1 706
Lime Handling Equipment - Steel	TN	1	5.00	5.00	312.40	1.562	0.00	0	120.00	600
Reaction Tank/ Agitator - Steel	TN	2	8.92	17.84	312.40	5.573	0.00	0	120.00	2.141
Influent Distrib Structure/ I-beam Supports	TN	1	5.95	5.95	312.40	1,859	0.00	ō	120.00	714
Reactor Clarifier Tank/ Agitator - Steel	TN	2	35.80	71.60	234.30	16,776	0.00	0	120.00	8,592
Clarifier Underflow Pump/ Motor	TN	3	1.77	5.30	312.40	1,654	0.00	0	120.00	635
Clarifier Overflow Pump/ Motor	TN	3	1.22	3.66	312.40	1,143	0.00	0	120.00	439
Gravity Filter Tank - Steel	TN	4	10.40	41.60	234.30	9,747	0.00	0	120.00	4,992
Sit/dge Thickener Tank/ Agitator - Steel	TN	2	18.09	36.18	234.30	8,477	0.00	0	120.00	4,342
Hydropneumatic Tank - Steel	IN TN	2	2.00	4,00	312.40	1,250	0.00	0	120.00	480
Backwash Waste Pump/ Motor	TN	2	3,23	3.25	312.40	1,015	0.00	0	120.00	390
Thickener Underflow Pump/ Motor	TN	3	1.47	3.00	312.40	1,370	0.00	0	120.00	528
Flocpress Tank/ Pump System (skid-mounted)	TN	2	4.00	8.00	312.40	1,240	0.00	0	120.00	479
Concentrated Sulfuric Acid Stro Tank - Steel	TN	1	7.03	7.03	312.40	2 196	0.00	ő	120,00	900
Caustic Storage Tank - Steel	TN	1	5.12	5.12	312.40	1,599	0.00	0	120,00	614
pH Attenuation/ Adjustment Tank - Reinf Conc	CY	1	45.77	45,77	91.20	4,174	96.00	4.394	0.00	0,4
pH Attenuation/ Adjustment Tank Agitators	TN	1	1.00	1.00	504.10	504.	0.00	0	120.00	120
Final Effluent Discharge Pump/ Motor	TN	2	1.22	2.44	312.40	762	0.00	0	120.00	293
Caustic Tank/ Pump System (skid-mounted)	TN	1	2.00	2.00	312.40	625	0.00	0	120.00	240
Acid Tank/ Pump System (skid-mounted)	TN	1	2.00	2.00	312.40	625	0.00	O	120.00	240

ST. JOHNS RIVER POWER PARK

		Number	Units of		Removal		Disposal		Salvage	
Demound Discound & Selving	11.04.07	of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Cost Washinkast	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Waste Witz Pumping Station Endine - Paint Cone	Measure	nents	Component 772.00	Measure	Measure	Cost	Measure	Cost	Measure	Value
Fiberolass reinforced Biolog (SPR)	CY CY	1	772.00	772.00	91.20	70,406	96.00	/4,112	0.00	0
Piping Valves Under 4" - Steel		4	3.43	3.43	50.40 504.10	120	90.00	329	0.00	0
Subtotal	114	1	3.06	3.00	504.10	1,043	0.00	244.429	120.00	42 401
						400,000		044,420		42,481
Yard Fire Protection System										
Motor-driven Firepump 350 hp	TN	1	3.00	3.00	312.40	937	0.00	0	120.00	360
Engine-driven Firepump 400 hp Cummins	TN	1	3,25	3.25	312.40	1.015	0.00	0	120.00	390
Firepump Building Foundation - Reinf Concrete	CY	1	14.88	14.88	91.20	1,357	96.00	1,428	0.00	0
Firepump Bldg Walls & Roof - Reinf Concrete	CY	1	34.93	34.93	91.20	3,186	96.00	3,353	0.00	0
Piping, Valves Over 8" - Steel	TN	1	4.86	4.86	234.30	1,138	0.00	0	120.00	583
Subtotal						7,633		4,782		1,333
Domestic Water System		_								
Potable Water Pump/ Motor (Peerless)	TN	2	1.00	2.00	312.40	625	0.00	0	120.00	240
Piping, Valves Under 4" - Steel	IN	1	9.23	9.23	504.10	4,655	0.00	0	120.00	1,108
Piping, valves 4" to 8" - Steel	IN Th	1	31.53	31.53	312.40	9,849	0.00	0	120.00	3,783
Fiping, valves Over 6 - Steel	1 [%	1	1.49	1.49	234,30	348	0.00	0	120.00	178
Sebiotal						10,477		U		5,310
Water Treatment System Area										
Well Water Pump/ Motor/ Accessories	TN	3	5.00	15.00	312.40	4 686	0.00	0	120.00	1 800
Service Water Pump/ Motor	TN	5	3.22	16.09	312.40	5.026	0.00	0	120.00	1,030
Carbon Filter Tank - Steel	TN	3	7.70	23.10	312.40	7,216	0.00	ő	120.00	2 772
Weak Cation Exchange Tank - Steel	TN	2	4.50	9.00	312.40	2.812	0.00	ů,	120.00	1.080
Strong Cation Exchange Tank - Steel	TN	2	5.18	10.36	312.40	3,236	0.00	0	120.00	1.243
Weak Anion Exchange Tank - Steel	TN	2	4.60	9.20	312.40	2,874	0.00	0	120.00	1,104
Strong Anion Exchange Tank - Steel	TN	2	5.40	10.80	312.40	3,374	0.00	0	120.00	1,296
Mixed Bed Exchange Tank - Steel	TN	2	3.40	6.80	312.40	2,124	0.00	0	120.00	816
Degassifier Storage Tank - Steel	TN	2	4.64	9.27	312.40	2,896	0.00	0	120.00	1,112
Well Water Storage Tank - Steel	TN	2	96.38	192.75	312.40	60,215	0.00	0	120.00	23,130
Well Wtr Storage Tank Foundation - Reinf Conc	CY	1	108.00	216.00	91.20	19,699	96.00	20,736	0.00	. 0
Waste Water Neutralization Tank - Steel	TN	2	14.27	28.54	234.30	6,686	0.00	0	120.00	3,424
Waste Wtr Neutr Tank Foundation - Reinf Conc	CY	1	57.00	114.00	91.20	10,397	96.00	10,944	0.00	0
Caustic Storage Tank - Steel		1	7.76	7.76	312.40	2,424	0.00	0	120.00	931
Acid Storage Tank - Steel	N TN	1	6.71 0.85	6.71	312.40	2,095	0.00	0	120.00	805
Sodium Hunochloride Storage Tank Steel	TN	1	8.00	9.00	312.40	3,015	0,00	U	120.00	1,158
Storage Tank - Steel (unmarked)	TN	1	5.99	5.99	312.40	1,240	0.00	U	120.00	479
Well Water Aerator w/ Fans (aluminum)	TN	2	6.25	12.50	312.40	3,002	0.00	0	120.00	1 600
Well Water Aerator Platform - Struc Steel	TN	1	35.00	35.00	234.30	8 201	0.00	0	120.00	4 200
Aerator Platform - Stairs, Railing, Platforms	TN	1	6 75	6 75	504 10	3 403	0.00	0	120.00	-,200
Aerator Platform Foundation - Reinf Concrete	CY	1	42.00	42.00	91.20	3 830	96.00	4 032	0.00	0.0
Pipe Supports - Steel	TN	1	15.00	15.00	312.40	4,686	0.00	1,002	120.00	1 800
Pipe Support Foundations - Reinf Concrete	CY	1	30.00	30.00	91.20	2,736	96.00	2.880	0.00	0
Water Treatment Bidg Foundation - Reinf Conc	CY	1	124.07	124.07	91.20	11,315	96.00	11,911	0.00	0
Water Treatment Bldg Roof - Reinf Concrete	ÇY	1	92.59	92.59	91,20	8,444	96.00	8,889	0.00	0
Water Treatment Bldg Walls - Concrete Block	CY	1	107.20	107.20	36.48	3,911	96.00	10,291	0.00	o
Water Treatment Building - HVAC	TN	1	1.00	1.00	312.40	312	0.00	0	120.00	120
Water Treatment Control Console (indoor)	TN	1	2.00	2.00	312.40	625	0.00	0	120.00	240
Piping, Valves Under 4* - Steel	TN	1	31.27	31.27	504.10	15,765	0.00	0	120.00	3,753
Piping, Valves 4" to 8" - Steel	TN	1	56.92	56.92	312.40	17,783	0.00	0	120.00	6,831
Piping, Valves Over 8" - Steel	TN	1	101.49	101.49	234.30	23,778	0.00	0	120.00	12,178
Subtotal						250,277		69,683		75,113
				1						
		Number	Units of		Removal		Disposal		Salvage	
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		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Disposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Cooling Tower Make-up Area - JEA Northside Station										
Make-up Structure & Flume - Reinf Concrete	CY	1	1,163.00	1,163.00	91.20	106,066	96.00	111,648	0.00	0
Support Steel	TN	1	15.00	15.00	312.40	4,686	0.00	0	120.00	1,800
Miscellaneous Steel	TN	1	2.50	2.50	504.10	1,260	0.00	0	120.00	300
Make-up Pump/ Motor	TN	3	8.21	24.64	312.40	7,697	0.00	0	120.00	2,957
Rotary Strainer w/ Motor	TN	2	35.00	70.00	234.30	16,401	0.00	0	120.00	8,400
ChlorMaster Control Console	TN	1	1.50	1.50	312.40	469	0.00	0	120.00	180
Chlorine Generator (skid-mounted)	TN	4	2.97	11.88	312.40	3,712	0.00	0	120.00	1,426
Miscellaneous Pumps and Equipment	TN	1	1.50	1.50	504.10	756	0.00	0	120.00	180
FRP Piping - 48" Make-up & 42" Blowdown	CY	1	657.06	657.06	36.48	23,970	96.00	63,078	0.00	0
Subtotal						165,016		174,726		15,242
Cooling Tower Electrical Building										
Foundation - Reinforced Concrete	CY	1	2,829.00	2,829.00	91.20	258,005	96.00	271,584	0.00	0
Roof - Reinforced Concrete	CY	1	11.11	11.11	91.20	1,013	96.00	1,067	0.00	0
Walls - Concrete Block	CY	1	28.59	28.59	36.48	1,043	96,00	2,745	0.00	0
HVAC	TN	1	1.50	1.50	312.40	469	0.00	0	120.00	180
Subtotal						260,530		275,395		180
Cooling Tower Chloringtion System										
Foundation - Reinforced Concrete	CY	4	185.00	185.00	91.20	16 872	96.00	17,760	0.00	Ô
Sulfunc Acid Tank - Steel	TN	1	6 71	6 71	312.40	2 095	0.00	0	120.00	805
Miscellaneous Pumps and Equipment	TN	1	2.00	2.00	504 10	1 008	0.00	ů n	120.00	240
Subtotal		•	2.00	2.00	001.10	19 975	0.00	17 760	120.00	1 045
						,				10.0
Station Structure Buildings/ Yard Area Piping										
Structural Steel	ΤN	1	1,779.00	1,779.00	234.30	416,820	0.00	0	120.00	213,480
Miscellaneous Steel	TN	1	3.00	3.00	504.10	1,512	0.00	0	120.00	360
Grating - Steel (445 sf)	TN	1	2.40	2.40	504.10	1,211	0.00	0	120.00	288
Checkerplate - Steel (139 sf)	TN	1	1.04	1.04	504.10	526	0.00	0	120.00	125
Handrailing - Steel (188 If)	TN	1	1.00	1.00	504.10	504	0.00	0	120.00	120
Ladders/ Stairs - Steel	TN	1	19.00	19.00	504.10	9,578	D.00	0	120.00	· 2,280
Footings, Columns & Piers - Reinf Concrete	CY	1	1,007.00	1,007.00	91.20	91,838	96.00	96,672	0.00	0
Grade Floors - Reinforced Concrete	CY	1	2,694.00	2,694.00	91.20	245,693	96.00	258,624	00.0	0
Walls - Concrete Block (180,310 sf)	CY	1	2,982.90	2,982.90	36.48	108,816	96.00	286,358	0.00	0
Floor Stabs - Reinforced Concrete	CY	1	2,672.00	2,672.00	91.20	243,686	96.00	256,512	0.00	0
Misc. Foundations - Reinforced Concrete	CY	1	958.00	958.00	91.20	87,370	96.00	91,968	0.00	0
Steel Siding/ Roofing (36,285 sf)	TN	1	49.89	49.89	312.40	15,586	0.00	0	120.00	5,987
Built-up Roofing (52,500 sf)	CY	1	37.22	37.22	36.48	1,358	96.00	3,573	0.00	0
Steel Roof Decking (5,700 sf)	TN	1	8.55	8.55	504.10	4,310	0.00	0	120,00	1,026
HVAC Ductwork - Steel	TN	1	59.95	59.95	312.40	18,728	0.00	0	120.00	7,194
HVAC Piping - Steel	TN	1	800.00	800.00	234.30	187,440	0.00	0	120.00	96,000
Svc Bldg Cranes & I-beam Supports (total)	TN	1	20.00	20.00	312.40	6,248	0.00	0	120.00	2,400
100-ton Gantry Crane	TN	1	140.00	140.00	234.30	32,802	0.00	0	120,00	16,800
Gantry Crane Rail (135#/yd @ 1,020 lf)	TN	1	22.95	22.95	504.10	11,569	0.00	0	120.00	2,754
AQCS Building Elevator	TN	1	8.20	8.20	234.30	1,921	0.00	0	120,00	984
Copper Tubing	TN	1	1.47	1.47	504.10	742	0,00	0	5,000.00	7,356
Piping, Valves Under 4" - Steel	TN	1	1.62	1.62	504.10	818	0.00	0	120.00	195
Piping, Valves 4" to 8" - Steel	TN	1	3.23	3.23	312.40	1,008	0.00	0	120,00	387
Piping, Valves Under 4" - Cast Iron	TN	1	9.18	9.18	504.10	4,628	0.00	0	120.00	1,102
Piping, Valves 4" to 8" - Cast Iron	TN	1	39.48	39.48	312.40	12,333	0.00	0	120,00	4,737
Piping, Valves Over 8" - Cast Iron	TN	1	4.12	4.12	234.30	965	0.00	0	120.00	494
Piping, Valves - Cast Iron (underground)	TN	1	21.40	21.40	210.00	4,494	0.00	0	120.00	2,568
Oily Waste Piping, VIvs 4" to 8" - Cast Iron	TN	1	3.26	3.26	312.40	1,019	0.00	0	120.00	391
PVC Piping (above ground)	CY	1	15.60	15.60	36.48	569	96.00	1,498	0.00	0

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		Number	Units of		Removal		Disposal		Salvage	
		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Disposal & Saivage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
PVC Piping (below grade)	CY	1	17.32	17.32	36.48	632	96.00	1 663	0.00	0
Fiberglass-reinforced Piping (FRP)	CY	1	116.82	116.82	36.48	4,261	96.00	11 214	0.00	ů O
Subtotal						1,518,986		1,008,082	0.00	367,029
Warehouse Structures										
Foundations - Reinforced Concrete	CY	1	1,037.00	1,037.00	91.20	94,574	96.00	99.552	0.00	0
Structural Steel	TN	1	280.00	280.00	234.30	65,604	0.00	0	120.00	33.600
Siding/ Roofing - Steel	TN	1	139.32	139.32	312.40	43,524	0.00	o	120.00	16.718
HVAC Equipment & Ducting	TN	1	13.00	13.00	312.40	4.061	0.00	o	120.00	1.560
Subtotal						207,763		99,552		51,878
Total Account 311						3,170,227		2,520,441		627,803
FERC Account 312										
Boiler Plant Service Equipment										
Auxillary Boiler System										
Boiler	TN	2	53.21	106.42	234.30	24,934	0.00	0	120.00	12.770
Economizer	TN	2	7.66	15.33	312.40	4,788	0.00	0	120.00	1.839
Forced Draft Fan/ Motor	TN	2	2.96	5.93	312.40	1,852	0.00	0	120.00	711
Flues, Ductwork & Stack	TN	1	31,61	31.61	312.40	9,875	0.00	0	120.00	3,793
Deaerator & Boiler Feed Pump Package	TN	1	17.75	17.75	312.40	5,545	0.00	0	120.00	2.130
Miscellaneous Steel	TN	1	11.25	11.25	504.10	5,669	0.00	o	120.00	1.349
Piping, Valves 4" to 8" - Steel	TN	1	3.06	3.06	504.10	1,544	0.00	0	120.00	368
Subtotal						54,206		0		22,961
Chimney										
Foundation - Reinforced Concrete	CY	1	6,795.00	6,795.00	91.20	619,704	96,00	652,320	0.00	0
Structure - Reinforced Concrete	CY	1	6,394.00	6,394.00	91.20	583,133	96.00	613,824	0.00	0
Floor Slabs - Reinforced Concrete	CY	1	60.00	60.00	91.20	5,472	96.00	5,760	0.00	0
Brick Liner	CY	2	4,759.40	9,518.80	36.48	347,246	96.00	913,805	0.00	0
Ladders - Steel (625 If)	TN	1	8.25	8.25	504.10	4,159	0.00	0	120.00	990
Platforms - Steel (3,840 sf)	τN	1	20.74	20.74	504.10	10,453	0.00	0	120.00	. 2,488
Roof Deck - Steel (2,601 sf)	TN	1	3.90	3.90	504.10	1,967	0.00	0	120.00	468
Subtotal						1,572,133		2,185,709		3,947
Light Oil Service								[
Light Oil Storage Tank - Steel	TN	1	73.05	73.05	234.30	17,116	0.00	0	120.00	8,768
Light Oil Storage Tank - Demolition	TN	1	73.00	73.00	n/a	12,500	0.00	0	120.00	8,760
Tank/ Pump Foundations - Reinforced Concrete	CY	1	164.00	164.00	n/a	25,883	96.00	15,744	0.00	0
Soil Remediation	CY	1	n/a	0.00	n/a	10,619	0.00	0	0.00	0
Tank Retainer Wall - Concrete Block	CY	1	57.17	57.17	36.48	2,086	96.00	5,488	0.00	0
Miscellaneous Pumps/ Motors	TN	1	1.50	1.50	504.10	756	0.00	0	120.00	180
Miscellaneous Steel/ Walkways	TN	1	4.00	4.00	504.10	2,016	0.00	0	120.00	480
Piping, Valves Under 4" - Steel	TN	1	22.25	22.25	504.10	11,217	0.00	0	120.00	2,670
Piping, Valves 4" to 8" - Steel	TN	1	18.35	18.35	312.40	5,734	0.00	0	120.00	2,203
Clean Light Oil Strg Tank	EA	1	n/a	n/a	n/a	13,000	0.00	o	0.00	0
Subtotal			•			100,927		21,232		23,059
Total Account 312						1,727,266		2,206,941		49,966
FERC Account 315										
Accessory Electrical Equinment										
Power Conversion Equipment										
Start-up Transformer Shell, Tank, Fittings	TN	2	33.31	66 62	234 30	15 608	0.00		120.00	7 004
Start-up Transformer Copper	TN	1	81.69	81.69	525.40	42,917	0.00	0	5 000 00	408 425

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		Number	Units of	_	Removal		Disposal		Salvage	
Remark Disc. 10.0 /		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Disposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Start-up Transformer Foundation Reist Cone	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Cham Transformer Foundation - Keini Conc		1	324.00	324.00	91.20	29,549	96.00	31,104	0.00	0
Chemical Treatment Area - Station SVC Transformer	TN	2	1.00	2.00	312.40	625	0.00	0	120.00	240
480V Power Control Centers (Intal)	TN	2	1.22	2.44	525.40	1,282	0.00	0	5,000.00	12,200
480V Motor Control Centers	TN	10	31.82	31.92	312.40	9,972	0.00	0	120.00	3,830
Cooling Tower Chlor System - AC/DC Rectifier	TN	2	12.40	24.00	224.20	7,490 5 659	0.00	0	120.00	2,000
JEA Northside - Station Service Transformer	TN	2	1.00	20.00	204.00	0,000	0.00	0	120.00	3,000
JEA Northside - Transformer Cooper	TN	1	2.48	2.00	525.40	1 303	0.00	0	F 000 00	12 400
JEA Northside - AC/DC Rectifier	TN	1	12.50	12.50	234.30	2 929	0.00	ů n	120.00	1 500
JEA Northside - Gould 480V Switchgear	TN	1	3.00	3.00	312.40	937	0.00	0	120.00	360
Emergency Diesel Generator - Plant	TN	1	69.64	69.64	234.30	16.317	0.00	0	120.00	8 357
Emerg Dsl Gen Fuel Tank Endation - Reinf Conc	CY	1	17.00	17.00	91.20	1,550	96.00	1 632	0.00	0,00,
Emergency Diesel Generator - FGDS	TN	1	21.80	21.80	234.30	5,107	0.00	0	120.00	2 6 1 6
Conduit - Steel	TN	1	122.66	122.66	504.10	61.831	0.00	o	120.00	14 719
Cable Tray - Steel	TN	1	76.47	76.47	504.10	38.546	0.00	o	120.00	9,176
Cable Tray Support Steel	TN	1	26,70	26,70	312.40	8.342	0.00	0	120.00	3,204
Insulated Copper Wiring	TN	1	607.53	607.53	852.00	517,618	0.00	o	2.100.00	1.275.818
Bare Copper Wiring	TN	1	16.45	16.45	852.00	14,018	0.00	0	5.000.00	82.265
Conduit Ductbank - Reinforced Concrete	CY	1	1,655.00	1,655.00	91.20	150,936	96.00	158,880	0.00	o
Total Account 315						933,366		191,616		1,849,224
FERC Account 316]				
Miscellaneous Power Plant Equipment										
Personnel Elevator	TN	1	6.36	6 36	312.40	1 987	0.00	0	120.00	763
Freight Elevator	TN	1	9.00	9.00	312.40	2.812	0.00	ő	120.00	1 080
Elevator Framing - Steel	TN	1	155.00	155.00	234.30	36,317	0.00	o	120.00	18.600
Total Account 316						41,115		0		20,443
TOTAL SITE COMMON						5,871,974		4,918,998		2,547,436
ST. JOHNS UNITS 1 & 2										
FERC Account 311										
Improvements to Site										
Site - General										
Above Ground Pipe Racks - Structural Steel	TN	1	1,405.00	1,405.00	234.30	329,192	0.00	0	120.00	168,600
Above Ground Pipe Rack Fndtions - Reinf Conc	CY	1	4,196.00	4,196.00	91.20	382,675	96.00	402,816	0.00	0
Pipe Sleepers - Structural Steel	TN	1	30.00	30.00	234,30	7,029	0.00	0	120.00	3,600
Pipe Sleeper Foundations - Reinf Concrete	CY	1	461.00	461.00	91.20	42,043	96.00	44,256	0.00	0
Subtotal						760,939		447,072		172,200
Station Structures										
Turbine Gen Bldg Columns, Footings, Piers	CY	1	7,216.00	7,216.00	91.20	658,099	96.00	692,736	0.00	0
Turbine Gen Bldg Foundation Wall & Trench	CY	1	100.00	100.00	91.20	9,120	96.00	9,600	0.00	o
Turbine Gen Bldg Misc Fndations - Reinf Conc	CY	1	726.00	726.00	91.20	66,211	96.00	69,696	0.00	o
Turbine Gen Bldg Grade Floor - Reinf Concrete	CY	1	1,934.00	1,934.00	91.20	176,381	96.00	185,664	0.00	0
Turbine Gen Bldg Floor Slabs - Reinf Concrete	CY	1	2,567.00	2,567.00	91.20	234,110	96.00	246,432	0.00	0
Turbine Generator Bldg - Structural Steel	TN	1	3,926.00	3,926.00	234.30	919,862	0.00	0	120.00	471,120
Turbine Gen Bldg - Deck Grating (25,070 sf)	TN	1	135.38	135.38	504.10	68,244	0.00	0	120.00	16,245
Turbine Gen Bldg - Handrails (1,960 lf)	TN	1	9.80	9.80	504.10	4,940	0.00	o	120.00	1,176
Turbine Generator Bldg - Ladders & Stairs	TN	1	110.00	110.00	504.10	55,451	0.00	0	120.00	13,200
Turbine Gen Bldg - Checkerplate (63,502 sf)	TN	1	476.27	476.27	504.10	240,085	0.00	D	120.00	57,152
Turbine Gen Bldg - Concrete Block (27,144 sf)	CY	1	449.00	449.00	36.48	16,380	96.00	43,104	0.00	0
I-G Bldg - Steel Siding (167,687 sf)	TN	1	209.61	209.61	312.40	65,482	0,00	0	120.00	25,153
T-G Bldg - Built-up Roofing (63,700 sf)	CY	1	45.15	45.15	36.48	1,647	96.00	4,335	0.00	0.
I urbine Generator Building - HVAC Ductwork	TN	1	93.01	93.01	312.40	29,056	0,00	0	120.00	11,161

		Number	[Inite of		Bomoval		D:			
		of	Measure	Total	Cost por	Tatal	Disposal		Salvage	
Removal, Disposal & Salvage	Unit of	Comno-	neasore	ilnite of	Unit of	Iotal	Cost per	Total	Value per	Total
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Unit of	Disposal	Unit of	Salvage
Turbine Generator Building - HVAC Piping	TN	1	60.00	60.00	312 40	18 744	0.00	Cost	120.00	Vasue
Bir Area Columns, Footings, Piers - Reinf Conc	CY	1	1.111.00	1.111.00	91.20	10,744	0.00	106.656	120.00	7,200
Boiler Area Foundations - Reinforced Concrete	CY	1	15,492.00	15.492.00	91.20	1 412 870	96.00	1 497 222	0.00	9
Boiler Area Fndtn Wall & Trench - Reinf Conc	CY	1	51.00	51.00	91.20	4 651	96.00	1,407,232	0.00	
Boiler Area Misc. Foundations - Reinf Conc	CY	1	711.00	711.00	91.20	64 843	96.00	4,090	0.00	0
Boiler Area Ash Hopper Fndation -Reinf Conc	CY	1	540.00	540.00	91.20	49 248	96.00	51.840	0.00	0
Boiler Area Grade Floor - Reinforced Concrete	CY	1	1,311.00	1.311.00	91.20	119.563	96.00	125 856	0.00	0
Boiler Area Suspended Floor - Reinf Concrete	CY	1	752.00	752.00	91.20	68 582	96.00	72 102	0.00	
Boiler Area Column Encasement - Reinf Conc	CY	1	350.00	350.00	91.20	31,920	96.00	33 600	0.00	0
Boiler Area Walls - Concrete Block(18,290 sf)	CY	1	302.58	302.58	36.48	11.038	96.00	20.048	0.00	
Boiler Area - Steel Siding (98,790 sf)	TN	1	123.49	123,49	312.40	38,577	0.00	20,040	120.00	14 910
Boiler Area - Built-up Roofing (40,190 sf)	CY	1	28.49	28.49	36.48	1.039	96.00	2 735	0.00	14,018
Boiler Area - Roof Plating (37,400 sf)	TN	1	56.10	56.10	504.10	28,280	0.00	2,735	120.00	e 722
Boiler Area - HVAC Ductwork	TN	1	208,95	208,95	312.40	65 276	0.00		120.00	0,732
Boiler Area - Deck Grating (700 sf)	TN	1	3.78	3.78	504.10	1 905	0.00	, al	120.00	20,074
Boiler Area - Checkerplate (450 sf)	TN	1	3.38	3.38	504.10	1 701	0.00		120.00	404
Boiler Area - Miscellaneous Steel	TN	1	60.00	60.00	504.10	30 246	0.00		120.00	405
Heater Bay - Structural Steel	TN	1	650.00	650.00	234.30	152 295	0.00	0	120.00	7,200
FD/ID Fan Building Foundations - Reinf Conc	CY	1	279.16	279.16	91 20	25 459	96.00	26 700	120.00	78,000
FD/ID Fan Buildings Roofs - Reinf Concrete	CY	1	279.16	279.16	91.20	25,459	96.00	20,799	0.00	0
FD/ID Fan Bidgs - Concrete Block Walls	CY	1	242.30	242.30	36.48	8 839	96.00	20,799	0.00	0
FD/ID Fan Bidgs - Structural Steel	TN	1	30.00	30.00	234 30	7 029	0.00	23,201	120.00	2 600
FD/ID Fan Bldgs - Ladders/ Guardrailing	TN	1	4.00	4.00	504 10	2 018	0.00		120.00	3,600
FD/ID Fan Bldgs - HVAC & Ducting	TN	1	31.70	31.70	312 40	9,903	0.00		120.00	480
Fiberglass-reinforced Piping (FRP)	TN	1	2.03	2.03	91.20	185	96.00	104	120.00	3,804
Piping, Valves Under 4" - Steel	TN	1	4.12	4.12	504 10	2 079	0.00	184	120.00	
Piping, Valves 4" to 8" - Steel	TN	1	9.61	9.61	312.40	3 001	0.00		120.00	495
Piping, Valves Under 4" - Cast Iron	TN	1	17.19	17.19	504.10	8 665	0.00	U O	120.00	1,153
Piping, Valves 4" to 8"- Cast Iron	TN	1	74.01	74.01	312.40	23 122	0.00	0	120.00	2,003
Piping, Valves Over 8" - Cast Iron	TN	1	51,23	51.23	234.30	12 003	0.00	0	120.00	0,082
Piping (underground) - Cast Iron	TN	1	7.72	7.72	426.00	3 290	0.00	0	120.00	0,148
Subtotal						4 878 224	0.00	3 310 031	120.00	927
						4,010,224		3,310,931		/02,041
Total Account 311						5,639,163		3 758 003		024.944
								0,700,000		834,041
FERC Account 312										
Boiler Plant Service Equipment			•							
Boiler Plant Equipment										
Boiler Structural Steel	TN	1	7.414.00	7.414.00	234 30	1 737 100	0.00		100.00	
Boiler Top Steel	TN	1	3.300.00	3,300.00	234.30	773 100	0.00	ů	120.00	689,680
Grating, Checkerplate, Handrailing	TN	1	836.00	836.00	504 10	421 428	0.00	S S	120.00	396,000
Buckstays	TN	1	917.10	917.10	504.10	482 310	0.00	0	120.00	100,320
Flues & Ducts	TN	1	1.809.08	1,809.08	312.40	565 157	0.00	0	120.00	110,052
APH Support Steel	TN	1	1.094.00	1.094.00	312.40	341 768	0.00	0.	120.00	217,090
Coal Conduit - Steel	TN	1	1.008.00	1.008.00	312.40	314 800	0.00	U	120,00	131,280
Steam Generation Unit - including:		•	1,000.00	1,000.00	512.40	314,089	0.00	U	120.00	120,960
Steam Drum (Drum, Internals, Supports)	TN	2	443.55	887 10	234 30	207 848	0.00		100.00	
Burner Area	TN	1	879.00	879.00	234 30	207,040	0.00	0	120.00	106,452
Penthouse Area	TN	1	434.00	434.00	234 30	200,800	0.00	0	120.00	105,480
Heat Recovery Area	TN	1	2,935,00	2 935 00	234.30	101,000	0.00	0	120.00	52,080
Hopper Area	TN	1	1.921 00	1,921 00	234 30	450,000	0.00	0	120.00	352,200
Water Walls/ Headers	TN	1	2 056 00	2 056 00	234.30	450,090	0.00	0	120.00	230,520
Downcomers	TN	1	858.00	858.00	234 30	401,721	0.00	0	120.00	246,720
Air Preheater/ Steam Coil Heater	TN	2	1.455.00	2 910 00	234.30	201,029	0.00	0	120.00	102,960
Superheater	TN	2	294.00	588.00	234 30	127 760	0.00	0	120.00	349,200
		-	201.00	000.00	2.04.00	137,700	0.00	0	120.00	70.560

		Number	línite of		Removal		Disnocal		Salvane	
		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Disposal & Salvage	Unit of	Comno-	ner	Unite of	linit of	Removal	Linit of	Disnosal	Unit of	Salvane
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Reheater	TN	2	1,102.50	2,205.00	234.30	516,632	0.00	0	120,00	264,600
Economizer	TN	2	492.20	984.40	234.30	230,645	0,00	0	120.00	118,128
Dampers	TN	1	440.54	440.54	234.30	103,219	0.00	0	120.00	52,865
Speed Reducers	τN	1	295,00	295.00	312.40	92,158	0.00	0	120.00	35,400
Steam Sampling System	TN	2	1.50	3.00	312.40	937	0.00	0	120.00	360
Bir Setting Insulation	CY	1	8,148.00	8,148.00	71.00	578,508	11.00	89,628	0.00	0
Soot Blower	TN	116	1.88	217.50	312.40	67,947	0.00	0	120.00	26,100
Soot Blower Supports	TN	1	40.00	40.00	312.40	12,496	0.00	0	120.00	4,800
Safety/ Relief Valves & Silencers	TN	1	21.00	21.00	312.40	6,560	0.00	0	120.00	2,520
Instrument Air Compressor/ Coolers	TN	4	11.15	44.60	234.30	10,450	0.00	0	120.00	5,352
Instrument Air Compressor Motor	TN	4	6,16	24.64	312.40	7,696	0.00	0	120.00	2,956
Instrument Air Dryer	TN	2	1.65	3.30	312.40	1,031	0.00	0	120.00	396
Instrument Air Receiver	ŤN	2	3.85	7.70	312.40	2,405	0.00	0	120.00	924
Instrument Air Piping, Vivs Under 4* - Steel	TN	1	154.41	154.41	504.10	77,837	0.00	0	120.00	18,529
Instrument Air Piping, VIvs 4" to 8" - Steel	TN	1	5.82	5.82	312.40	1,819	0.00	0	120.00	699
Instrument Air Piping, Valves Over 8" - Steel	TN	1	2.98	2.98	234.30	699	0.00	٥	120.00	358
Instr Air Compressor Foundations - Reinf Conc	CY	1	360.00	360.00	91.20	32,832	96.00	34,560	0.00	이
F/D & Primary Air Fans, Blowers & Accessories	TN	2	452.50	905.00	234.30	212,042	0.00	0	120.00	108,600
Forced Draft/ Prmry Air Fan Fndtns - Rnf Conc	CY	1	1,772.00	1,772.00	91.20	161,606	96.00	170,112	0.00	0
HVAC Ductwork	TN	1	165.60	165.60	312.40	51,733	0.00	0	120.00	19,872
Subtotal						9,940,677		294,300		4,244,012
Balles Direct Availlance										
Boner Plant Auxilianes										
#1 Eachuster Heater UD	Th	~	400 SE	070 50	004.00	DE DED	0.00		400.00	20,400
#1 Feedwater Hoster HD	TN	2	139.20	278.00	234.30	00,203	0.00	U	120.00	33,420
#2 Feedwater Heater ID	TN	2	20.25	200.00	234.30	49,420	0.00	0	120.00	32,016
#4 Fooductor Deportor Vector	TN	2	39.35	170.24	234.30	20,439	0.00	0	120.00	9,444
#5 Feedwater Deatrator - LD	TN	2	21 30	42.60	234.30	0.081	0.00	0	120.00	20,429
#6 Feedwater Heater - LP	TN	2	21.00	57.40	234.30	13 440	0.00	0	120.00	5,112
#7 Feedwater Heater A&B - i P	TN	2	41 70	83.40	234.30	19,445	0.00	0	120.00	10,008
#8 Feedwater Heater A&B - 1 P	TN	2	26.00	52.00	234.30	12 184	0.00	ů N	120.00	6 240
Boiler Feed Purnt/ Basenlate	TN	4	21.50	86.00	234.30	20 150	0.00	0	120.00	10 320
Boiler Feed Pump Turbine	TN	4	53.50	214.00	234 30	50,140	0.00	0	120.00	25 680
Turbine Control Console	TN	4	2.25	9.00	312.40	2.812	0.00	0	120.00	1.080
Turbine L/O System Tank, HP VIv, Cooler, etc.	TN	4	8.09	32.34	312.40	10,103	0.00	Ő	120.00	3 881
Turbine I P Ston Valve	TN	4	7.70	30.80	312.40	9.622	0.00	Ő	120.00	3 696
Boiler Feed Pump/ Tron Pedestal - Reinf Conc	CY	1	1,706.00	1.706.00	91.20	155.587	96.00	163,776	0.00	0,000
Boiler Feed Booster Pump/ Speed Changer	TN	4	5.45	21.80	312.40	6.810	0.00	0	120.00	2.616
Heater Drain Pump	TN	2	6.89	13.78	312.40	4,304	0.00	0	120.00	1 653
Heater Drain Pump Motor	TN	2	2.50	4.99	312.40	1.559	0.00	0	120.00	599
LP Heater Drain Tank - Steel	TN	2	6.66	13.32	312,40	4,161	0.00	0	120.00	1,598
Steam Coil Air Heater Drain Tank	TN	2	1.80	3.60	312.40	1,125	0.00	ñ	120.00	432
Boiler Cold Fill Pump w/ Motor	TN	2	3.06	6.13	312.40	1,913	0.00	0	120.00	735
Condensate Storage Tank - Steel	TN	2	81.60	163.20	234.30	38,238	0.00	0	120.00	19 584
Condensate Strg Tank Foundation - Reinf Conc	CY	1	216.00	216.00	91,20	19,699	96.00	20,736	0.00	0
Steam & Water Sample Analysis Cabinet - Steel	TN	2	3.40	6.80	312.40	2,124	0.00	0	120.00	816
Steam & Wtr Sample Analysis Monitoring Board	TN	2	1.90	3.80	312.40	1,187	0.00	0	120.00	456
Hydrazine System - tanks, pumps, skid (steel)	TN	2	2.50	5.00	312.40	1.562	0.00	0	120.00	003
Ammonia System - tanks, pumps, skid (steel)	TN	2	2.50	5.00	312.40	1.562	0.00	0	120.00	600
Phosphate System - tanks, pumps, skid (steel)	TN	2	2.75	5.50	312.40	1,718	0.00	0	120.00	660
Ammonium Hydroxide Storage Tank - Steel	TN	2	2.75	5,50	312.40	1,718	0.00	0	120.00	660
Piping, Vlvs Under 4" - Steel	TN	1	10,92	10.92	504.10	5,507	0.00	0	120.00	1,311
Piping, Vivs 4" to 8" - Steel	TN	1	47.75	47,75	312.40	14,917	0.00	0	120.00	5,730
Piping, Vivs Over 8" - Steel	TN	1	246.54	246,54	234.30	57,765	0.00	0	120.00	29,585

l		Number	Unite of		Removal		Dienoral		Sahraga	
]		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Disposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
System Insulation	CY	1	91.39	91,39	71.00	6,489	11.00	1,005	0.00	0
Subtotal						662,018		185,517		235,849
Boiler Plant Piping - All Systems										
Piping, VIvs Under 4" - Steel	TN	1	115.82	115.82	504.10	58,383	0.00	0	120.00	13,898
Piping, Vivs 4" to 8" - Steel	TN	1	159.23	159.23	312.40	49,745	0.00	0	120.00	19,108
Piping, Vivs Over 8" - Steel	TN	1	1,047.09	1,047.09	234.30	245,333	0.00	0	120.00	125,651
System Insulation	CY	1	103,94	103,94	71.00	7,380	11.00	1,143	0.00	0
Subtotal						360,840		1,143		158,657
Induced Draft Equipment										
Induced Draft Fan/ Hydraulic Coupling	TN	8	82.15	657.20	234.30	153,982	0.00	0	120.00	78,864
Induced Draft Fan Motor	TN	8	15.00	120.00	234.30	28,116	0.00	0	120.00	14,400
Induced Draft Fan Lube Oil Supply Unit	TN	8	1.15	9,20	312.40	2,874	0.00	0	120.00	1,104
ID Fan/ Motor Foundations - Reinf Concrete	CY	1	4,285.00	4,285.00	91.20	390,792	96.00	411,360	0.00	0
System Insulation	CY	1	135,60	135,60	71.00	9,628	11.00	1,492	0.00	0
Subtotal						585,392		412,852		94,368
Electrostatic Precipitator										
Precipitator Foundations - Reinf Conc	CY	1	9,621.00	9,621.00	91.20	877,435	96.00	923,616	0.00	0
Assembled Precipitator - Steel	TN	2	5,581.30	11,162.60	234.30	2,615,397	0.00	0	120.00	1,339,512
Precipitator Support Steel	TN	1	1,002.50	1,002.50	234.30	234,886	0.00	0	120.00	120,300
Ductwork - Steel	TN	1	1,666.00	1,666.00	234.30	390,344	0.00	0	120.00	199,920
Ductwork Support Steel	TN	1	625.60	625.60	312.40	195,437	0.00	0	120.00	75,072
Platforms, Stairs & Walkways - Steel	TN	1	391.60	391,60	504.10	197,406	0.00	0	120.00	46,992
Subtotal	IN	1	167.80	167.80	312.40	4,563,326	0.00	923,616	120.00	1.801.932
Flue Gas Desulfurization System (FGDS)										
FDGS Foundations - Reinforced Concrete	CY	1	16,004.00	16,004.00	91.20	1,459,565	96.00	1,536,384	0.00	0
Absorber Tower - Steel	IN	6	314.67	1,888,00	234.30	442,358	0.00	0	120.00	226,560
Absorber Tower Agitator/ Motor		30	1.00	44,91	312.40	14,030	0.00	U	120.00	· 5,389
Absorber Tower Damper		14	20.00	260,00	234.30	120,004	0.00	0	120.00	33,000
Absorber Feed Pump/ Motor	TN	24	13.30	310.20	234.30	74 789	0.00	0	120.00	20,120
Absorber Feed Tank Anitator/ Motor	TN	27 8	7.37	44 23	312.40	13,705	0.00	0	120.00	5 307
Absorber Feed Hydroclopes	TN	1	5 70	5 70	504.10	2 873	0.00	0 0	120,00	684
Quencher Hydroclones	TN	1	9.60	9.60	504.10	4,839	0.00	o o	120.00	1,152
Quencher Hydrocione Pump/ Motor	TN	12	12.40	148.80	234.30	34,864	0.00	o	120.00	17.856
Well Water Tank	TN	2	19.00	38.00	234.30	8,903	0.00	0	120.00	4,560
Well Water Deluge Pump/ Motor	TN	6	2.05	12.32	312.40	3,847	0.00	o	120.00	1,478
Waste Slurry Storage Tank	TN	2	77.50	155.00	234.30	36,317	0.00	0	120.00	18,600
Waste Slurry Tank Agitator/ Motor	TN	4	4.35	17.40	312.40	5,436	0.00	o	120.00	2,088
Oxidation Air Compressor/ Motor	TN	5	14.97	74.86	234.30	17,540	0.00	0	120.00	8,984
Waste Transfer Tank	TN	6	4.50	27.00	312.40	8,435	0.00	0	120.00	3,240
Waste Transfer Pump/ Motor & Agitator/ Motor	TN	6	1.28	7,66	312.40	2,392	0.00	0	120.00	919
Flues	TN	1	1,652.00	1,652.00	234.30	387,064	0.00	0	120.00	198,240
Reheater System Support Steel	TN	1	1,254.00	1,254.00	234.30	293,812	0.00	0	120.00	150,480
Reheater	TN	2	28.33	56,66	234.30	13,276	0.00	0	120.00	6,799
Reneater Fan	EN	4	27.85	111.40	234.30	26,101	0.00	0	120.00	13,368
Reneater han Motor - 350 fip	IN Th	4	3.85	15,40	312.40	4,811	0.00	0	120.00	1,848
Reneater Accessories	TN	2	6.25	12 50	204.00	153,467	0.00	0	120.00	78,600
Expansion loints	TN	1	20.88	20.88	312.40	3,900	0.00	0	120.00	1,500
Pipe Racks & Cable Travs Support Steel	TN	1	289.00	289.00	312.40	90,284	0.00	0	120.00	34,680

		Number	Units of		Removal		Disposal		Salvage	
		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Disposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
FGDS Control Board - Steel	TN	2	1.75	3.50	312.40	1,093	0.00	0	120.00	420
FGDS Waste Disposal Control Console - Steel	TN	2	1.00	2.00	312.40	625	0.00	0	120.00	240
Stack Emission Monitoring Cabinet - Steel	TN	2	1.00	2.00	312.40	625	0.00	0	120.00	240
Fiberglass-reinforced Piping	TN	1	23.36	23.36	504.10	11,776	0.00	0	120.00	2,803
Piping, Vivs Under 4" - Steel	TN	1	27.88	27.88	504.10	14,053	0.00	0	120.00	3,345
Piping, VIvs 4"-8" - Steel	TN	1	64.21	64.21	312.40	20,060	0.00	0	120.00	7,705
Piping, Vlvs Over 8" - Steel	TN	1	330.31	330.31	234.30	77,392	0.00	0	120.00	39,638
Subtotal						3,429,567		1,536,384		977,251
Ash Handling Area										
Foundations - Reinforced Concrete	CY	1	3,999.00	3,999.00	91.20	364,709	96.00	383,904	0.00	0
Structural Steel	TN	1	100.00	100.00	234.30	23,430	0.00	0	120.00	12,000
Space Heater Control Panel/Fan Isolator Panel	TN	2	3.86	7.72	312.40	2,412	0.00	0	120.00	926
Forced Draft Fan Control Panel	TN	6	3.48	20.85	312.40	6,514	0.00	0	120.00	2,502
Induced Draft Fan Control Panel	TN	16	4.45	71.14	312.40	22,223	0.00	0	120.00	8.536
Bottom Ash Control Board	TN	2	5.00	10.00	312.40	3,124	0.00	o	120.00	1,200
Fly Ash Control Board/ Pedestal	TN	2	2.13	4.25	312.40	1,328	0.00	0	120.00	510
Fly Ash Master Logic Cabinet/ Pedestal	TN	2	4.00	8.00	312.40	2,499	0.00	o	120.00	960
Fly Ash Handling System 1A/2A Logic Cabinet	TN	2	1.75	3.50	312.40	1,093	0,00	0	120.00	420
Fly Ash Handling System 1B/2B Logic Cabinet	TN	2	1.75	3.50	312.40	1,093	0.00	0	120.00	420
Fly Ash Handling System 1C/2C Logic Cabinet	TN	2	1.50	3.00	312.40	937	0.00	0	120.00	360
Mill Reject Tanks - Steel (total)	TN	1	73.21	73.21	234.30	17,152	0.00	0	120.00	8.785
Ash Hoppers - Steel (total)	TN	<u> </u>	206,24	206.24	234.30	48,322	0.00	0	120.00	24,749
Adaptor/ Slide Plates - Steel	TN	1	7.30	7.30	504.10	3,677	0.00	0	120.00	875
Nonsaleable Ash Conveyor Blower/ Motor	TN	4	1.87	7.46	312.40	2,331	0.00	0	120.00	895
Nonsaleable Ash Fluidizing Blower/ Motor	TN	4	3.41	13,63	312.40	4,259	0.00	0	120.00	1,636
Fly Ash Precipitator Fluidizing Blower/ Motor	TN	4	2.98	11.90	312.40	3,718	0.00	o	120.00	1,428
Fly Ash Precipitator Conveyor Blower/ Motor	TN	6	8.93	53.55	312.40	16,729	0.00	0	120.00	6,426
Silo Conveying Blower/ Motor	TN	6	1.87	11.19	312.40	3,496	0.00	0	120.00	1,343
Bottom Ash Slurry Pump/ Motor	TN	4	6.06	24.25	312.40	7,576	0.00	0	120.00	2,910
Bottom Ash Collection Conveyor	TN	2	8.33	16.67	312.40	5,207	0.00	0	120.00	2.000
Pyrites Collection Conveyor	TN	2	8.33	16.67	312.40	5,207	0.00	0	120.00	2.000
Clinker Grinder	TN	8	3.54	28.36	312.40	8,858	0.00	0	120.00	3,403
Flanged Tees - Steel	TN	1	34.64	34.64	504.10	17,460	0.00	0	120.00	4,156
Idlers - Steel	TN	1	6.03	6.03	504.10	3,037	0.00	0	120.00	723
Air Lock Assembly - Steel	TN	178	1.00	178.00	312.40	55,607	0.00	0	120.00	21.360
Exhaust Silencers - Steel	TN	1	8.70	8.70	504.10	4,383	0.00	o	120.00	1.043
Refractory	CY	1	194.43	194,43	36.48	7,093	96.00	18.665	0.00	0
Bottom Ash Area Sump Pump/ Motor	TN	6	2.29	13.74	312.40	4,292	0.00	, o	120.00	1 649
Economizer Hopper Pressurized Ash Fdr (total)	TN	1	10.20	10,20	312.40	3,186	0.00	0	120.00	1 224
Air Preheater Hopper Press Ash Feeder (total)	TN	1	13.60	13.60	312.40	4,249	0.00	0	120.00	1,632
Precip Hopper Pressurized Ash Feeder (total)	TN	1	151.20	151.20	312.40	47,235	0.00	0	120.00	18 144
Precip Ash Strg Silo Pressurized Ash Feeder	TN	16	1.20	19,20	312.40	5,998	0.00	0	120.00	2 304
Nonsaleable Ash Strg Silo Pressurized Ash Fdr	TN	8	1.20	9,60	312.40	2,999	0.00	0	120.00	1 152
Stairs, Ladders, Handrailing, Walkways	TN	1	79.21	79.21	504.10	39,930	0.00	0	120.00	9 505
Piping, Vivs 4" to 8" - Steel	TN	1	791.72	791.72	312.40	247.334	0.00	0	120.00	95,007
Piping, Vivs Over 8" - Steel	TN	1	639.05	639.05	234.30	149,729	0.00	ů O	120.00	76 696
Subtotal						1,148,426		402,569	120.00	318,870
Coal Silo Bavs						1				
Structural Steel	TN	1	3,281.00	3,281.00	234.30	768,738	0.00	0	120.00	393 720
Deck Grating - Steel (2,885 sf)	TN	1	15.58	15.58	504.10	7.853	0.00	0	120.00	1 869
Handrailing - Steel (2,190 lf)	TN	1	10.95	10.95	504.10	5,520	0.00	0	120.00	1,314
Ladders/ Stairs - Steel	TN	1	74.00	74.00	504.10	37,303	0.00	Ő	120.00	8 880
Grade Floor - Reinforced Concrete	CY	1	257.00	257.00	91.20	23,438	96.00	24,672	0.00	0

		Number	Units of		Removal		Disposal		Salvage	
		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Disposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Elect Sigh Deletered Concerts	Measure	nents	Component	Measure	Measure	LOST	Measure	Cost	Measure	Value
Sheel Ciding (22, 400 an)	CY Th	1	545.00	545,00	91.20	49,704	96.00	52,320	0.00	0
Steel Siding (32,466 st)	IN	1	40.58	40.58	312.40	12,678	0.00	0	120.00	4,870
Built-up Rooting (19,100 st)	CY	1	26.74	26.74	36,48	975	96.00	2,567	0.00	0
Root Plating (18,620 st)	TN	1	27.93	27.93	504.10	14,080	0.00	0	120.00	3,352
Walls - Conc Block (700 sf)	CY	1	11.58	11.58	36.48	422	96.00	1,112	0.00	0
HVAC Ductwork - Steel	TN	1	53.74	53.74	312.40	16,788	0.00	0	120.00	6,449
Silo Bay Misc. Foundations - Reinf Conc	CY	1	2,200.00	2,200.00	91.20	200,640	96.00	211,200	0.00	0
Subtotal						1,138,141		291,871		420,454
Miscellaneous Equipment & Steel	TN	1	353,48	353.48	504.10	178,189	0.00	o	120.00	42,418
Total Account 312						22,006,577		4,048,252		8,293,810
FERC Account 314										
<u>1urbogenerator Unit</u>										
Turbogenerator Equipment										
Turbine Pedestal - Reinforced Concrete	CY	1	6,252.00	6,252.00	91.20	570,182	96.00	600,192	0.00	0
Turbine Generator	TN	2	487.77	975.55	177.50	173,160	0.00	0	120.00	117,066
Exciter	TN	2	28.36	56.72	234.30	13,289	0.00	0	120.00	6,806
Generator Copper	TN	1	41.63	41.63	695.80	28,968	0.00	0	5,000.00	208,160
Main Lube Oil Cooler	TN	4	5.00	20,00	312.40	6,248	0.00	0	120.00	2,400
Lube Oil Conditioning System - Steel	TN	2	4.50	9.00	312.40	2,812	0.00	o	120.00	1,080
Lube Oil Batch Tank - Steel	TN	2	4.12	8.24	312.40	2,574	0.00	o	120.00	989
Piping, Vivs Under 4" - Steel	TN	1	12.68	12.68	504.10	6,392	0.00	0	120.00	1.522
Piping, Vivs 4" to 8" - Steel	TN	1	12.39	12.39	312.40	3,869	0.00	o	120.00	1 486
Piping, Vivs Over 8" - Steel	TN	1	9 02	9.02	234.30	2,114	0.00	0	120.00	1 083
System Insulation	CY	1	14.33	14.33	71.00	1 017	11.00	158	0.00	.,
Subtotal	-					810,625		600,350		340,591
Condenser										
Condenser Shell - Steel	TN	2	506,70	1.013.40	312.40	316,586	0.00	0	120.00	121.608
Condenser Tubes - Titanium	TN	1	324 40	324 40	504.10	163,530	0.00	0	4 000 00	1 297 600
Subtotal		•	021.10	024.40	001110	480,116	0.00	0	4,000.00	1,419,208
Circulating Water System										
Circ Water Pumo/ Baseplate	TN	4	15.22	60.88	234.30	14.264	0.00	0	120.00	7.306
Circ Water Pump Motor	TN	4	15.50	62.00	234.30	14.527	0.00	0	120.00	7 440
Circ Water Booster Pump/ Motor	TN	4	3.90	15.60	312.40	4.873	0.00	ů O	120.00	1 872
Circ Water Pioing/ Fibows - 108* Concrete	TN	1	7 684 31	7 684 31	349.60	2 686 435	0.00	ů	0.00	1,012
Pining Vive 4"-8" - Steel	TN	i	3.58	3.58	312.40	1 120	0.00	0	120.00	430
Piping, Vive Over 8" - Steel	TN	1	51 74	51 24	234 30	12 005	0.00	0	120.00	
Subtotal		•	51.24	51.24	2.04,00	2,733,224	0.00	0	120.00	23,196
Auvilian Environant						ļ				
Condenente Rumo	7 11	£ .	15.00	20.09	724.20	71 097	0.00	~	100.00	40 700
Condensate Fump	TN	ů c	10.00	09.98	234.30	21,063	0.00	0	120.00	10,798
Condensate Pump Motor	IN	0	4./0	28.65	312.40	8,950	0.00	0	120.00	3,438
Concensate Proprietor Foundation - Reint Conc	CY		1,014.00	1,014.00	91.20	92,477	96.00	97,344	0.00	0
Mechanical Vacuum Pump/ Motor	(N	6	3,00	18.00	312.40	5,623	0.00	0	120.00	2,160
Condenser Exhauster (skid-mounted)	TN	2	7.50	15.00	312.40	4,686	0.00	0	120.00	1,800
Steam Packing Exhauster	TN	2	5.45	10.90	312.40	3,405	0.00	0	120.00	1,308
Piping, Vivs Under 4" - Steel	TN	1	21.51	21.51	504.10	10,841	0.00	0	120.00	2,581
Piping, Vlvs 4"-8" - Steel	TN	1	30.30	30.30	312.40	9,465	0.00	0	120.00	3,636
Piping, Vivs Over 8" - Steel	TN	1	220.16	220.16	234.30	51,584	0.00	0	120.00	26,419
Piping Insulation	CY	1	50.17	50.17	71.00	3,562	11.00	552	0.00	0
Subtotal						211,677		97,896		52,140

		Number	Linits of		Removal		Disposal		Salvago	
		of	Messure	Total	Cost per	Total	Cost per	Total	Jaivaye Value per	Total
Removal, Disposal & Salvage	Unit of	Compos	ner	Units of	Unit of	Removal	Unit of	Disposali	Unit of	Salvana
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure_	Cost	Measure	Value
Closed Cooling Water System										
Closed Coolino Water Pump/ Basenlate	TN	я	3.05	24 40	312.40	7 623	0.00	n	120.00	2 928
Closed Cooling Water Pump Motor	TN	8	6.43	51 44	312.40	16 070	0.00	0	120.00	6 173
Closed Cooling Water Heat Exchanger	TN	6	13.35	80 10	234.30	18,767	0.00	0	120.00	9.612
Closed Cooling Water Heater Drain Tank	TN	2	1.85	3,70	312.40	1,156	0.00	o	120.00	444
Piping, Vivs Under 4" - Steel	TN	1	13.87	13.87	504.10	6,992	0.00	0	120.00	1.664
Piping, Vivs 4" to 8" - Steel	TN	1	52.17	52.17	312.40	16,299	0.00	0	120.00	6.261
Piping, Vivs Over 8" - Steel	TN	1	82.17	82.17	234.30	19,253	0.00	0	120,00	9,861
Subtotal						86,160		0		36,943
Cooling Tower										
Foundation - Reinf Conc	CY	1	15,916.00	15,916.00	91.20	1,451,539	96.00	1,527,936	0.00	0
Diagonal Columns - Reinf Conc	CY	1	2,419.00	2,419.00	91.20	220,613	96.00	232,224	0.00	0
Misc Structures - Reinf Conc	CY	1	220.00	220.00	91,20	20,064	96.00	21,120	0.00	0
Veil - Reinf Conc	CY	1	24,767.00	24,767.00	91.20	2,258,750	96.00	2,377,632	0.00	0
Thrust Blocks - Reinf Conc	CY	1	200.00	200.00	91.20	18,240	96.00	19,200	0.00	0
Fill Support & Flume - Reinf Conc	CY	1	5,896.00	5,896.00	91.20	537,715	96.00	566,016	0.00	0
Precast Fabrication - Reinf Conc	CY	1	4,654.00	4,654.00	91.20	424,445	96.00	446,784	0.00	0
PVC Fill (652,000 cf)	CY	1	3,340.00	3,340.00	91.20	304,608	96.00	320,640	0.00	0
Blowdown Pump/ Motor	TN	4	2.83	11.30	312.40	3,530	0.00	0	120.00	1,356
Blowdown Pump Pit/Thrust Blocks - Reinf Conc	CY	1	1,044.00	1,044.00	91.20	95,213	96.00	100,224	0.00	0
Blowdown Pump Area - Misc. Steel	TN	1	105.00	105.00	504.10	52,931	0.00	0	120.00	12,600
Interior Walkway (1,350 lf)	TN	2	20.25	40.50	312.40	12,652	0.00	0	120.00	4,860
Exterior Vertical Caged Ladder	TN	2	4,99	9.98	312.40	3,118	0.00	0	120.00	1,198
Subtotal						5,403,418		5,611,776		20,014
Cooling Tower Chlorination System								[1
Liquid Chiller Unit	TN	2	4.00	8.00	312.40	2,499	0.00	0	120.00	960
Chlorine Generator (skid-mounted)	TN	4	2.97	11.88	312.40	3,712	0.00	0	120.00	1,426
ChlorMaster Console Console	TN	2	5.00	10.00	312.40	3,124	0.00	0	120.00	1,200
Storage Tank - Fiberglass	CY	8	1.03	8.24	36.48		96.00	791	0.00	· <u> </u>
Subtotal						9,636		791		3,586
Miscellaneous Equipment & Steel	TN	1	48.24	48.24	504.10	24,316	0.00	0	120.00	5,788
Total Account 314			•			9,759,172		6,310,813		1,901,466
FERC Account 315										
Accessory Electrical Equipment					l					
Power Conversion Equipment										
6900V Metal Clad Switchgear	ŤN	2	128.40	256.81	234.30	60,170	0.00	0	120.00	30,817
6900V Non-segregated Phase Bus	TN	1	126.17	126.17	852.00	107,498	0.00	0	5,000.00	630,856
480V Power Control Centers (total)	TN	1	175.49	175.49	312.40	54,823	0.00	0	120.00	21,059
480V Motor Control Center	TN	30	2.40	72.00	312.40	22,493	0.00	0	120.00	8,640
Auxillary Transformer Shell, Tank, Fittings	TN	4	26.20	104.78	234.30	24,550	0.00	0	120.00	12,574
Auxillary Transformer Copper	TN	1	198.22	198.22	525.40	104,145	0.00	0	5,000.00	991,100
Isolated Phase Bus Duct (aluminum)	TN	1	566.00	566.00	852.00	482,232	0.00	0	1,340.00	758,440
AC/DC Rectifier - Cooling Tower Chlorination	TN	2	5.00	10.00	312.40	3,124	0.00	0	120.00	1,200
Electrostatic Precipitator Electrical Eqpmnt	TN	1	750.00	750.00	312.40	234,300	0.00	0	120.00	90,000
Batteries (total)	TN	1	36.00	36.00	504.10	18,148	0.00	0	0.00	0
Battery Chargers (total)	IN	1	3.60	3.60	504.10	1,815	0.00	0	120.00	432
Conduit (avaged) Stort		2	23.21	40,04	504.40	14,539	0.00	0	120.00	5,585
Conduit (exposed) - Steel	CV	1	15 261 00	15 261 00	91.20	1 201 9/2	0.00	1 465 056	120,00	40,536
SANDON DUBLICATION & INFORMATION		1	10.201.00	V.201.00	91.20	.38 .003	80.00	1.400.0001	0.00	

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		Number	Units of		Removal		Disposal		Salvade	
		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Disposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Cable Tray - Steel	TN	1	274.05	274.05	504.10	138,149	0.00	0	120.00	32,886
Cable Tray Support Steel	ΤN	1	109.62	109.62	312.40	34,245	0.00	0	120.00	13,154
Insulated Copper Wiring	TN	1	1,822.60	1,822.60	852.00	1,552,853	0.00	D	2,100.00	3,827,454
Ground Wire - Bare Copper	TN	1	1 05.6 3	105.63	852.00	89,997	0.00	0	5,000.00	528,153
FD/ID Fan Bidg - Transformer Shell, Tank, Fiting	TN	4	3.50	13.99	312.40	4,372	0.00	D	120.00	1,679
FD/ID Fan Bidg - Transformer Shell, Tank, Fiting	TN	2	3.44	6.88	312.40	2,149	0.00	D	120.00	826
FD/ID Fan Bidg - Transformer Shell, Tank, Fttng	TN	8	5.04	40.32	234,30	9,447	0.00	0	120.00	4,838
FD/ID Fan Bldg - Transformer Copper	TN	1	85.39	85.39	525.40	44,866	0.00	0	5,000.00	426,972
FD/ID Fan Bidg - FD Fan Reactor	TN	6	3.28	19.65	312.40	6,139	0.00	Q	120.00	2,358
FD/ID Fan Bldg - ID Fan Reactor	TN	8	6.85	54.80	312.40		0.00	0	120.00	6,576
Total Account 315						4,589,259		1,465,056		7,436,134
FERC Account 316										
Misc. Power Plant Equipment										
Station Air Compressor/ Coolers	TN	4	11,15	44.60	234.30	10,450	0,00	0	120.00	5,352
Station Air Compressor Motor	TN	4	6.16	24.64	312.40	7,696	0,00	D	120.00	2,956
Station Air Receiver	TN	2	3.85	7.70	312.40	2,405	0,00	0	120.00	924
Station Air Foundation - Reinf Conc	CY	1	360.00	360.00	91.20	32,832	96.00	34,560	0.00	0
Piping, Vlvs Under 4" - Steel	TN	1	18.96	18,96	504.10	9,558	0.00	0	120.00	2,275
Piping, Vivs 4" to 8" - Steel	TN	1	27.29	27.29	312.40	8,526	0.00	0	120.00	3,275
Piping, Vlvs Over 8" - Steel	TN	1	8.97	8.97	234.30	2,101	0.00	0	120.00	1,076
Total Account 316						73,569		34,560		15,859
TOTAL ST. JOHNS UNITS 1 & 2						42,067,740		15,616,684		18,582,111
COAL & LIMESTONE FACILITIES FERC Account 311										
Cool Taminal Cooose								l l		
Coal Terminal - General	~		447.00	117.00	20.40	4.069	00.00	14.000	0.00	
Roads (asphall) - 10,960 st	CY CY	1	117.00	22.00	30.40	4,200	96.00	11,232	0.00	0
Valks, Parking (aspnalt) - 5,376 st			33.00	33.00	30.40	1,204	90.00	3,100	0.00	U
Source Dising DVC (6" 1 540 (0	CY CY	1	30.00	30.00	91.20	3,203	90.00 De 00	3,400	0.00	· 0
Eiromain Diving - EVC (0 -1,340 II)	CY	4	4.24	7.02	36.40	280	90.00	760	0.00	0
Firemain Piping - CVC (10 -1, 100 if)	TN	4	7.3Z 8.80	8.80	426.00	3 787	0.00	,	120.00	1 067
Patable Water Roos Vilve _ RVC (6" 1 100 M	CY	1	2.03	3.03	36.48	110	0.00	200	120.00	1,007
Service Water Pining, Vivs - FVC (0 -1,100 II)	TN	4	1 15	1 15	426.00	401	0.00	200	120.00	120
Enging (4.600 IR) Steel	TN	4	11.50	11.50	504 10	5 707	0.00	0	120.00	1 280
Misc. Pump & Tank Foundations - Reinf Conc.	CY	1	20.00	20.00	91 20	1 824	96.00	1 920	0.00	1,300
Subtotal	01	,	20.00	20.00	01.20	21,208	50.00	21,233	0.00	2,585
Coal Terminal - Service Building										
Foundation - Reinforced Concrete	CY	1	219,00	219.00	91.20	19.973	96.00	21.024	0.00	0
Structural Steel	TN	1	27.00	27.00	234,30	6.326	0.00	0	120.00	3 240
Partitions - Concrete Block (1.500 sf)	CY	1	24.81	24.81	36.48	905	96,00	2,382	0.00	0
Steel Siding (9.600 sf)	TN	1	14.40	14.40	312.40	4,499	0.00	0	120.00	1 728
Overhead Crane	TN	1	3.00	3.00	312.40	937	0.00	0	120.00	360
HVAC	TN	1	2.50	2.50	312.40	781	0.00	0	120.00	300
Subtotal						33,421		23,406		5,628
Coat Terminal - Dock & Trestle										
Structure - Reinforced Concrete	CY	1	5421.00	5421.00	91.20	494,395	96.00	520,416	0.00	0
Rails - Steel (1,252 lf @ 175#/yd)	TN	1	36.52	36.52	504.10	18,408	0.00	0	120.00	4,382
Coal Ship Unloader Power Track/ Support Steel	TN	1	15.63	15.63	312.40	4,881	0.00	0	120.00	1,875
Handrailing - Steel (945 lf)	TN	1	4.73	4.73	504.10	2,382	0.00	0	120.00	567

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		Number	Units of		Removal		Disposal		Salvage	
		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Disposal & Salvage	Unit of	Compo-	рег	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Concrete Planks (132)	CY	1	44.00	44.00	36.48	1,605	96,00	4,224	0.00	0
Bollards - Steel	TN	13	1.50	19.50	312.40	6,092	0.00	0	120.00	2,340
Pier Fender Assembly (buckstays/chain/fender)	TN	11	5.00	55.00	312.40	17,182	0.00	0	120.00	6,600
Beams - 12"x 12" (2,836 lf)	CY	1	51.05	51.05	36.48	1,862	96.00	4,901	0.00	0
Subtotal						546,807		529,541		15,764
Power Park - Coal/ Limestone Handling Structures										-
CH/LH Switchgear Bldg Foundation - Reinf Conc	CY	1	316.00	316.00	91.20	28,819	96.00	30,336	0.00	o
Coal/Limestone Hnding Swgr Bldg - Struc Steel	TN	1	25.80	25.80	234.30	6,045	0.00	0	120.00	3,096
CH/LH Swgr Bldg - Steel Siding (4,100 sf)	TN	1	5.13	5.13	312.40	1,601	0.00	o	120.00	615
Coal Hndig Admin Bidg Foundation - Reinf Conc	CY	1	50.81	50.81	91.20	4,634	96.00	4,878	0.00	0
Coal Handling Admin Bldg Walls - Reinf Conc	CY	1	42.88	42.88	91.20	3,911	96.00	4,116	0.00	0
Coal Handling Admin Bldg Roof - Reinf Conc	CY	1	21.33	21.33	91.20	1,945	96.00	2,048	0.00	0
Coal Handling Admin Bldg - Structural Steel	TN	1	8.00	8.00	234.30	1,874	0.00	0	120.00	960
Coal Handling Admin Bldg - Steel Siding	TN	1	1.00	1.00	312.40	312	0.00	0	120.00	120
Refuel Station Foundation - Reinf Concrete	CY	1	26,00	26.00	91.20	2,371	96.00	2,496	0.00	0
Subtotal						51,513		43,874		4,791
Total Account 311						652,949		618,054		28,768
FERC Account 312										
Boiler Plant Service Equipment										
Coal Terminal - Conveyer System										
Coal Ship Unloader	TN	1	1652 87	1652 87	234.30	387 267	0.00		120.00	100.044
Trusses & Galleries	TN	1	2609.80	2609.80	234.30	611 476	0.00		120.00	198,344
Transfer Stations	TN	1	275.50	275.50	234.30	64,550	0.00	ő	120.00	313,170
Mechanical Components	TN	1	635.00	635.00	312.40	198.374	0.00	ő	120.00	76 200
Platework - Steel	TN	1	34,50	34.50	312.40	10,778	0.00	0	120.00	4 140
Fire Protection System/ Piping	TN	1	98,00	98.00	312.40	30,615	0.00	0	120.00	11 760
Vacuum Cleaning System/ Piping	TN	1	60,00	60,00	312.40	18,744	0.00	0	120.00	7 200
Conveyor Tower Foundations - Reinf Conc	CY	1	1897.00	1897.00	91.20	173,006	96.00	182,112	0.00	0
Transfer Station Foundations - Reinf Conc	CY	1	181.00	181.00	91.20	16,507	96.00	17,376	0.00	. 0
Subtotal						1,511,317		199,488		643,880
Stacker & Reclaimer/ Runway										
Coal Stacker	TN	1	50.94	50.94	504.10	25,677	0.00	0	120.00	6 112
Coal Reclaimer	TN	1	50.94	50.94	504.10	25,677	0.00	o	120.00	6 112
Foundations - Reinforced Concrete	CY	1	50.94	50.94	91.20	4,645	96.00	o	0.00	0,112
Pre-cast Girders (1,714 If)	CY	1	50,94	50.94	91.20	4,645	96.00	0	0.00	0
Rails - Steel (1,756 lf)	TN	1	50,94	50.94	504.10	25,677	0.00	o	120.00	6.112
Subtotal						86,320		0		18,337
Coal/ Limestone Handling (Dumper) Building										
Structural Steel	TN	1	832.50	832.50	234.30	195,055	0.00	n	120.00	90 900
Deck Grating - Steel (932 sf)	ΤN	1	5.03	5.03	504.10	2,537	0.00	0	120.00	604
Handrailing (809 lf)	TN	1	4.05	4.05	504.10	2,039	0.00	0	120.00	485
Steel Siding/ Roofing (48,800 lf)	TN	1	61.00	61.00	312.40	19,056	0.00	o	120.00	7 320
Structure & Foundation - Reinforced Concrete	CY	1	14116.00	14116.00	91.20	1,287,379	96,00	1,355,136	0.00	0
Car Positioner & Drive Shed - Reinf Concrete	CY	1	586.00	586.00	91.20	53,443	96.00	56,256	0.00	0
Car Clamp, Rotation Drive, Wheel Clamp Assembly	TN	1	23.80	23.80	234.30	5,576	0.00	0	120.00	2.856
Rotary Car Dumper Platen/ End Rings - Steel	TN	1	65.39	65.39	234.30	15,320	0.00	0	120.00	7.846
Rotary Car Dumper Hauling Cable	TN	1	2.64	2.64	504.10	1,330	0.00	o	120.00	317
Rotary Car Dumper Trunnion Assemblies	TN	1	5.00	5.00	312.40	1,562	0.00	0,	120.00	600
riyoraulic Car Mover Motor - 125 hp	TN	1	1.29	1.29	312.40	404	0.00	0	120.00	155
10-ton Take-up Winch/ Frames	IN	1	11.30	11.30	234.30	2,648	0.00	0	120.00	1.356

		Number	Units of		Removal		Disposal		Salvage	
		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Disposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Unloading System Logic Cabinets - Steel	TN	1	1.50	1.50	312.40	469	0.00	0	120.00	180
Dust Suppression System Tank/ Pump/ Motor-Sti	TN	1	1.50	1.50	312.40	469	0.00	0	120.00	180
Rotary Car Dump Pit Sump Pump/ Motor	TN	1	1.73	1.73	312.40	540	0.00	C	120.00	208
Bottom Car Dump Pit Sump Pump/ Motor	TN	1	1.73	1.73	312.40	540	0.00	D	120.00	208
Coal Handling Control Board	TN	1	2.50	2.50	312.40	781	0.00	0	120.00	300
Coal Unloading Control Console	TN	1	1.50	1,50	312.40	469	0.00	0	120.00	180
Limestone Handling Control Console	TN	1	1.50	1.50	312.40	469	0.00	0	120.00	180
Tripper Interface Logic Cabinet	TN	1	1.50	1.50	312.40	469	0.00	0	120.00	180
Limestone Rail Car Mover - Mechanical	TN	1	15.25	15.25	312.40	4,764	0.00	0	120.00	1,830
Limestone Rail Car Mover - Hydraulic Unit	TN	1	1.25	1.25	312.40	391	0.00	0	120.00	150
Limestone Feeder	TN	3	3,05	9.14	312.40	2,854	0.00	0	120.00	1,096
Subtotal						1,598,562		1,411,392		126,131
Coal Conveyor System										
Coal Stacker-Rectaimer	TN	1	320.00	320.00	234.30	74 976	0.00	n	120.00	38.400
Coal Stacker-Reclaimer Rails - Steel	TN	1	51 30	51.30	504 10	25 860	0.00	ň	120.00	6 156
Coal Stacker-Reclaimer Foundation - Rof Conc	CY	1	3360.00	3360.00	91.20	306 432	96.00	322 560	0.00	0,100
Coal Stacker-Reclaimer Aux/ Auto Panel	TN	1	1.00	1.00	312.40	312	0.00	000,000	120.00	120
Crivyr Bents/ Take-up Twr Endins - Reinf Conc	CY	1	4711.00	4711.00	91.20	429 643	96.00	452 256	0.00	120
Emergency Reclaim Foundation - Reinf Concrete	CY	1	2957.00	2957.00	91.20	269.678	96.00	283 872	0.00	ő
Lowering Well Stackout Endation - Reinf Conc	CY	1	496.00	496.00	91.20	45 235	96.00	47 616	0.00	0
Conveyor Tunnel - Reinforced Concrete	CY	1	3380.00	3380.00	91.20	308 256	96.00	324 480	0.00	ő
Coal Crusher Floor - Reinforced Concrete	CY	4	100.00	100.00	91.20	9 120	96.00	9.600	0.00	ő
Head House Floor - Reinforced Concrete	CY	1	77.00	77.00	91.20	7 022	96.00	7 392	0.00	ő
Coal Crusher/ Handling Bldg - Reinf Concrete	CY	1	1054.00	1054 00	91.20	96,1251	96.00	101 184	0.00	
Conveyor Belting - Rubber w/ Steel Cord	TN	1	146.33	146.33	36.48	5.338	96.00	14.048	0.00	0
CD Magnetic Separator - Magnet	TN	1	8.65	8.65	312.40	2,702	0.00	0	120.00	1 038
CD Magnetic Separator - Separator Unit	TN	1	10.65	10.65	234.30	2,495	0.00	0	120.00	1 278
C-2 Magnetic Separator - Magnet	TN	1	3.90	3.90	312.40	1,218	0.00	0	120.00	468
C-2 Magnetic Separator - Separator Unit	TN	1	5.45	5.45	312.40	1.703	0.00	0	120.00	654
C-3 Magnetic Separator - Magnet	TN	1	2.75	2.75	312.40	859	0.00	ů.	120.00	330
C-3 Magnetic Separator - Separator Unit	TN	1	3.30	3.30	312.40	1.031	0.00	0	120.00	. 396
C-4 Magnetic Separator - Magnet	TN	1	6.15	6.15	312.40	1,921	0.00	0	120.00	738
C-4 Magnetic Separator - Separator Unit	TN	1	7.00	7.00	312.40	2.187	0.00	ő	120.00	840
C-1. C-2. C-3. C-4 Conveyor Motors	TN	5	5.10	25.50	312.40	7.966	0.00	0	120.00	3 060
C-5 Conveyor Motor	TN	1	2.04	2.04	312.40	637	0.00	o o	120.00	245
C-6 Conveyor Motor	TN	1	1.28	1.28	312.40	398	0.00	ő	120.00	153
C-7. C-8 Conveyor Motors	TN	2	3.06	6.12	312.40	1,912	0.00	0	120.00	734
Conveyor System Pulleys	TN	1	164.65	164.65	312.40	51,436	0.00	0	120.00	10 758
Conveyor System Counterweights	TN	i	47.76	47.76	312.40	14,921	0.00	0	120.00	5 732
Conveyor System Speed Reducers/ Countings	TN	1	54.20	54 20	312.40	16 932	0.00	ů	120.00	8 504
Coal Dust Collector System - Plant	TN	i	10.35	10.35	312.40	3 233	0.00	0	120.00	1 242
Coal Dust Collector/ Fan Mtr - Unloading Area	TN	1	4 85	4 85	312.40	1 515	0.00	ő	120.00	502
Coal Dust Collector/ Fan Motor - Tower "C"	ŤN	1	4 73	4 73	312.40	1 476	0.00	0	120.00	502
Coal Dust Collector/ Fan Mitra Crusher House	TN	1	7.65	7.65	312.40	2 300	0.00	0	120.00	04.8
Vacuum Cleaning Exhauster/ Motor - Steel	TN	5	1.00	5.00	504.10	2,000	0.00	°,	120.00	810
Coal Sampling System	TN	1	15.00	15.00	234.30	3.515	0.00	0	120.00	1 800
Coal Sampling Bucket Flevator	TN	2	8 75	17.50	312.40	5,515	0.00	0	120.00	7,800
Mill & Chemical Motors	TN	1	3 60	3 00	504 10	2,107	0.00	0	120.00	2,100
Chain Adjuster Assembly	TN	1	1 67	1.67	312.40	522	0.00	0	120.00	479
Structural Steel	TN	1	2505 90	2505.90	234.30	587 132	0.00	0	120.00	200
Bents & Galleries - Steel	TN	1	1577.50	1577.50	234.30	369 608	0.00	0	120.00	300,708
Handrailing - Steel (12 370 10	TN	1	61.85	81.85	504.10	31 170	0.00	0	120.00	189,300
Deck Grating - Steel (17 616 st	TN	1	95.13	95.13	504.10	47,953	0.00	ő	120.00	11 445
Steel Roofing/ Siding (246,400 sf)	TN	1	308.00	308.00	312.40	96,219	0.00	0	120.00	36,960

		Number	Units of		Removal		Disposal	7-64	Salvage Value and	Total
Barrand Dimension School		of	Measure	Total	Cost per	Total	Cost per	Lotal	value per	
Cost Worksheet	Unit of Measure	Compo-	per Component	Units of Measure	Unit of Mongure	Cost	Measure	Cost	Measure	Value
HVAC Ducting - Steel	TN	1	36.78	36 78	312.40	11,490	0.00	0	120.00	4,414
Hoppers/ Feeders - Steel	TN	1	424,70	424.70	234.30	99,507	0.00	0	120.00	50,964
Emergency Reclaim Pit Sump Pump/ Motor	TN	1	1.61	1.61	312.40	504	0.00	0	120.00	194
Coal Crusher - Steel	TN	2	6.74	13.48	312.40	4,210	0.00	0	120.00	1,617
Coal Crusher Motor - 500 hp	TN	2	5.70	11.40	312.40	3,561	0.00	0	120.00	1,368
Tripper Deck Car	TN	2	5.00	10.00	312.40	3,124	0.00	0	120.00	1,200
Tripper Deck Car Speed Reducers	TN	1	1.30	1.30	504.10	655	0.00	0	120.00	156
Tripper Car Pulleys	TN	1	3.63	3.63	504.10	1,830	0.00	0	120.00	436
Tripper Car Rail (60#/yd)	TN	1	32.40	32.40	504.10	16,333	0.00	0	120.00	3,888
Coal Silo - Steel	TN	14	44,79	627.06	234.30	146,920	0.00	0	120.00	75,247
Coal Pulverizer - Steel	TN	14	192.43	2694.00	234.30	631,204	0.00	0	120.00	323,280
Coal Pulverizer Motor	TN	14	6.43	90.02	312.40	28,122	0.00	0	120.00	10,802
Interface Logic Cabinet - Steel	TN	1	2.50	2.50	312.40	781	0.00	U	120.00	300
Fuel Mgmt System Logic Cabinet - Steel	TN	1	2.63	2.63	312.40	820	0.00	4 563 008	120.00	1 115 078
Subtotal						3,790,123		1,563,000		1,113,010
Limestere Conveyer System & Descent Area										
Limestone Conveyor System & Reagent Area	TM	. 4	103.80	102 80	224.20	45 172	0.00	n	120.00	23.136
Structural Steel	TN	-	90.00	192.00	234.30	45,175	0.00	0	120.00	9,600
Handrailing (1.664.10	TN	1	8 3 2	8 32	504.10	4 194	0.00	o o	120.00	998
Beck Grating - Steel /2 545 st	TN	1	13 74	13.74	504.10	6 928	0.00	0	120.00	1,649
Boofing/Siding - Steel (13 900 sf)	TM	1	17.38	17.38	312.40	5 428	0.00	ō	120.00	2,085
Honners/ Feeders - Steel	TN	1	96.90	98.90	234.30	22 704	0.00	ō	120.00	11,628
Conveyor Belting - Rubber w/ Steel Cord	CY	1	8.59	8.59	36.48	313	96.00	825	0.00	0
LD Magnetic Separator - Magnet	TN	1	4.65	4.65	312.40	1,453	0.00	0	120.00	558
LD Magnetic Separator - Separator Unit	TN	1	5.40	5.40	312.40	1,687	0.00	0	120.00	648
Limestone Transfer House - Reinf Concrete	CY	1	517.00	517.00	91,20	47,150	96.00	49,632	0.00	0
L-1 Conveyor Motor	TN	1	3.06	3.06	312.40	956	0.00	0	120.00	367
L-2 Conveyor Motor	TN	1	1.53	1.53	312.40	478	0.00	0	120.00	184
Conveyor System Pulleys	TN	1	19.06	19.06	312.40	5,953	0.00	0	120.00	2,287
Conveyor System Counterweights	TN	1	7.12	7.12	312.40	2,224	0.00	0	120.00	854
Conveyor System Speed Reducers/ Couplings	TN	1	10.74	10.74	312.40	3,356	0.00	0	120.00	· 1,289
Limestone Slewing Stacker Reducer- Boom Crivyr	TN	1	3.25	3,25	312.40	1,015	0.00	0	120.00	390
Limestone Slewing Stacker Reducer - Slew	TN	1	7.50	7.50	312.40	2,343	0.00	0	120.00	900
Limestone Slewing Stacker Reducer - Luffing	TN	1	3.00	3.00	312.40	937	0.00	0	120.00	360
Limestone Reclaim Pit & Tunnel - Reinf Conc	CY	1	1335.00	1335.00	91.20	121,752	96.00	128,160	0.00	0
Limestone Conveyor Tunnel - Reinf Concrete	CY	1	2015.00	2015.00	91.20	183,768	96.00	193,440	0.00	0
Limestone Ball Mill	TN	2	67.36	134.73	234.30	31,566	0.00	0	120.00	16,167
Limestone Ball Mill Motor	TN	2	3.05	6.10	312.40	1,906	0.00	0	120.00	732
Limestone Dust Collector/ Fan Mtr - Unloading	TN	1	4.85	4.85	312.40	1,515	0.00	0	120.00	582
Limestone Dust Collector/ Fan Mtr - Tower "L"	TN	1	4.30	4.30	312.40	1,343	0.00	0	120.00	516
Limestone Silo - Steel	TN	2	41.50	83.00	234.30	19,447	0.00	0	120.00	9,960
Ball Mill Sturry Sump Tank/ Agitator/ Motor	TN	2	3.24	6.48	312.40	2,025	0.00	0	120.00	778
Reagent Prep Enclosure Foundation - Rnf Conc	CY	1	191.27	191.27	91.20	17,444	96.00	18,362	0.00	U 10 001
Reagent Preparation Enclosure - Struc Steel	TN	1	165.26	165.26	234.30	38,720	0,00	0	120.00	19,831
Reagent Prep Enclosure Roofing/Siding - Steel	TN	1	7.70	7.70	312.40	2,405	0,00	0	120.00	924
Reagent Preparation Enclosure - Misc. Steel	TN	1	19.12	19.12	504.10	9,638	0.00	U	120.00	2,294
Reagent Feed Tank - Steel	TN	4	49.50	198.00	234.30	46,391	0.00	U Q	120.00	23,700
Reagent Feed Agitator/ Motor	TN	4	2.00	8.00	312,40	2,499	0,00	200.419	120.00	133 438
Subtotal						001,457		390,418		133,430
Dumper Bida/ Conveyor Systems Miss liens										
Conveyor Idlers - Steel	TN	1	247 85	247 85	504 10	124 943	0.00	0	120.00	29.742
Conveyor Backetone - Steel	TN	1	2.51	2.47.00	504 10	1 287	0.00	0	120.00	302
Gates/ Gate Operators - Steel	TN	1	16.50	16.50	312.40	5,155	0.00	0	120.00	1,980

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		Number	Units of	T . (.)	Removal	Total	Disposal	Total	Salvage Volue per	Total
Bemovel Dispessel & Salvaga	I India of	or	measure	I Otal	Cost per	I Otal Removal	Light of	Dienosal	Value per	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Belt Scales - Steel	TN	1	16.10	16.10	312.40	5,029	0.00	0	120.00	1,932
Belt Plows & Cleaners - Steel	TN	1	4.53	4.53	504.10	2,282	0.00	o	120.00	543
Hoists & Trolleys	TN	1	15.34	15.34	504.10	7,733	0.00	0	120.00	1,841
Power Tracks - Steel	TN	1	9.21	9.21	312.40	2,876	0.00	o	120.00	1,105
Conveyor Soft Starters - Steel	TN	1	5.20	5.20	312.40	1,624	0.00	0	120.00	624
Piping, Valves Under 4" - Steel	TN	1	14,95	14.95	504.10	7,538	0.00	0	120.00	1,794
Piping, Valves 4" to 8" - Steel	TN	1	323.93	323,93	312.40	101,198	0.00	0	120.00	38,872
Fiberglass-reinforced Piping (FRP)	TN	1	2.50	2.50	36,48	91	96.00	240	0.00	0
Subtotal						259,733		240		78,734
Total Account 312						7,897,514		3,564,546		2,115,598
FERC Account 315										
Accessory Electrical Equipment					ľ					
Coal Terminal										
Transformer Shell - Distribution Yard	TN	1	2.30	2.30	312.40	719	0.00	0	120.00	276
Transformer Shell - Distribution Yard	TN	1	1.00	1.00	312.40	312	0.00	0	120.00	120
Transformer Copper	TN	1	3.96	3.96	525.40	2,081	0.00	0	5,000.00	19,800
Conveyor Electrical Equipment	TN	1	97.00	97.00	312.40	30,303	0.00	0	120.00	11,640
Copper Wiring - Bare (37,568 lf)	TN	1	9.39	9.39	852.00	8,002	0.00	0	5,000.00	46,960
Distribution Yard Bidgs & Misc. Steel	TN	1	3.00	3.00	504.10	1,512	0.00	0	120.00	360
Distribution Yard Electrical Equipment	TN	1	4.00	4.00	504.10	2,016	0.00	0	120.00	480
Distribution Yard Foundations - Reinf Conc	CY	1	20.00	20.00	91.20	1,824	96.00	1,920	0.00	0
Coal/Limestone Handling Trnsfrmer - 7,500 kva	TN	2	6.38	12.76	312.40	3,986	0.00	0	120.00	1,531
Coal/Limestone Handling Transformer Copper	TN	1	17.63	17.63	525.40	9,264	0.00	0	5,000.00	88,160
Transf Foundtns/ Retainer Walls - Reinf Conc	CY	1	10.72	10,72	91.20	978	96.00	1,029	0.00	0
Dumper Bldg - Power Control Center	TN	2	7.15	14.31	312.40	4,470	0.00	0	120.00	1,717
Dumper Bidg - Motor Control Center	TN	2	2.40	4.80	312.40	1,500	0.00	0	120.00	576
Dumper Bldg - GE Adj Speed Drive Cabinets	TN	1	3.00	3.00	504.10	1,512	0.00	0	120.00	360
Copper Wiring - Insulated	TN	1	27.19	27.19	852.00	23,168	0.00	0	2,100.00	57,104
Copper Wiring - Bare	ŤN	1	3.39	3.39	852.00	2,891	0.00	0	5,000.00	16,968
Conduit - Steel	TN	1	1024.56	1024.56	504.10	516,480	0.00	0	120.00	122,947
Cable Tray - Steel	TN	1	5.52	5,52	504.10	2,783	0.00	0	120.00	662
Total Account 315					:	613,800		2,949		369,661
TOTAL COAL & LIMESTONE FACILITY						9,164,263		4,185,549		2,514,027
GYPSUM & ASH HANDLING										
Petto Account 312										
Boner Plant Service Equipment										
File Gas Desulturization (FGD) - Dewatering Area	-		400.00	400.00	224.20	25 204	0.00		120.00	12 060
Structural Steel		1	108.00	106.00	234.30	20,304	0.00	0	120.00	12,500
Ladders/Handrailing/Platform Walkway - Steel	IN	1	5.40	5.40	504,10	2,722	0.00	0	120.00	040
Siding/ Rooting - Steel	IN	1	20.79	20.79	312.40	6,495	0.00		120.00	2,490
Return Water Tank - Steel	IN	2	13.50	27.00	234.30	6,326	0.00	U	120.00	3,240
Resiurry Tank - Steel	IN	2	4.50	9.00	312.40	2,812	0.00	, in the second s	120.00	1,000
Reslurry Tank Agitator/ Motor	IN	2	1.35	2.70	312.40	843	0.00	, in the second s	120.00	324
Reslurry Pump/ Motor	IN	4	1.01	4.05	312.40	1,265	0.00	0	120.00	460
Compressant Water Tank - Steel	TN	4	2.30	9.20	312.40	2,874	0.00	0	120.00	1,104
Filtrate Return Pump/ Motor	TN	16	1.08	17.24	312.40	5,386	0.00	. 0	120.00	2,069
Return Water Pump/ Motor	TN	4	1.08	4.31	312.40	1,346	0.00	0	120.00	517
Vacuum Filter Pump/ Motor	TN	8	4.52	36.17	312.40	11,299	0.00	0	120.00	4,340
1st Stage Vacuum Filter Drum - Steel	TN	4	15.50	62.00	234.30	14,527	0.00	0	120.00	7,440
2nd Stage Vacuum Filter Drum - Steel	TN	4	15.50	62.00	234.30	14,527	0.00	0	120.00	7,440
Portable Gypsum Conveyor	TN	1	12.00	12.00	234.30	2,812	0.00	0	120.00	1,440

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		Number	11-145		Domoscol		Disessel		Cabiana	
		number	Measure	Total	Cost per	Total	Cost per	Total	Sarvage Value per	Total
Removal, Disposal & Salvage	Unit of	Comno-	ner	Units of	Link of	Removal	Unit of	Disnosali	Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Overhead Crane/ I-beam Support	TN	1	3.00	3.00	312.40	937	0.00	0	120.00	360
Dewatering Control Console - Steel	TN	1	2.00	2.00	312.40	625	0.00	0	120.00	240
Piping, Valves Under 4" - Steel	TN	1	3.26	3.26	504.10	1,642	0.00	0	120.00	391
Piping, Valves 4" to 8" - Steel	TN	1	30.22	30.22	312.40	9,441	0.00	0	120.00	3,627
Piping, Valves Over 8" - Steel	TN	1	6.57	6.57	234.30	1,539	0.00	0	120.00	788
Fiberglass-reinforced Piping (FRP)	CY	1	25.11	25.11	36.48	916	96.00	2,410	0.00	0
Subtotal						113,637		2,410		50,988
Gypsum Conveyor System & Storage Area										
Gypsum Conveyor	TN	1	22.00	22.00	234.30	5,155	0.00	o	120.00	2,640
Gypsum Conveyor/ Tower Fndtion - Reinf Conc	CY	1	638,00	638.00	91,20	58,186	96.00	61,248	0.00	0
Gypsum Conveyor Pulleys	TN	1	4.52	4.52	504.10	2,277	0.00	0	120.00	542
Gypsum Conveyor Counterweights	TN	1	3.95	3.95	504.10	1,991	0.00	0	120.00	474
Gypsum Conveyor Speed Reducers/ Drives	TN	1	7.03	7.03	504.10	3,545	0.00	0	120.00	844
Storage Area Fndtn/Retainer Wall - Reinf Conc	CY	1	1893.00	1893.00	91.20	172,642	96,00	181,728	0.00	0
Storage Area Structural Steel	TN	1	270.00	270.00	234.30	63,261	0.00	0	120.00	32,400
Storage Area Siding/ Roofing - Steel	TN	1	81.00	81.00	312.40	25,304	0.00	o	120.00	9,720
Pre-sedimentation Basin - Reinforced Concrete	CY	1	4745.00	4745.00	91.20	432,744	96.00	455,520	0.00	o
Subtotal				1		765,104		698,496		46,620
Ash Storage Area Buildinos (Solid Waste Area)										
Foundations - Reinforced Concrete	CY	1	3601.00	3601.00	91.20	328 411	96.00	345 696	0.00	0
Walls - Reinforced Concrete	CY	1	125.07	125.07	91.20	11 406	96.00	12 007	0.00	ő
Roofs - Reinforced Concrete	CY	1	240 16	240 16	91.20	21 903	98.00	23.055	0.00	ő
Built-up Roofing	CY	1	6.81	6.81	36.48	248	96.00	653	0.00	ŏ
Walls - Concrete Block	CY	1	112.92	112.92	36.48	4,119	96.00	10.840	0.00	0
Support Steel (Solid Waste Handlo Admin Bldo)	TN	1	10.00	10.00	312.40	3,124	0.00	0	120.00	1.200
HVAC	TN	1	8.00	8.00	312.40	2,499	0.00	ō	120.00	960
Overhead Crane/ Rail	TN	1	1.00	1.00	312.40	312	0.00	ō	120.00	120
Subtotal						372,023		392,252		2,280
Ash Storage Area (Solid Waste Area)										
Nonsaleable Ash Storage Silg - Reinf Conc	CY	2	229.07	458 14	91 20	41 782	96.00	43 981	0.00	n
Precipitator Ash Storage Silo - Reinf Conc	CY	4	631 67	2526.68	91 20	230 433	96.00	242 561	0.00	0
Ash Silos - Steel (total)	TN	1	139 64	139 64	234 30	32,717	0.00	0	120.00	16,756
Hydrobins - Steel (total)	TN	1	290 27	290.27	234.30	68.011	0.00	0	120.00	34,833
Hydrobin Gate Assembly - Steel	TN	30	2 89	86 70	312.40	27 085	0.00	0	120.00	10,404
Hydrobin Bar Screens/ Solash Pans	TN	1	3.66	3.66	504.10	1.845	0.00	o	120.00	439
Stationary & Floating Decanters - Steel	TN	1	16.90	16.90	504,10	8,519	0.00	0	120.00	2.028
Fly Ash Wetting Pump/ Motor	TN	8	1.54	12.34	312.40	3,855	0.00	o	120.00	1,481
Intermittent HP Ash Water Pump/ Motor	TN	4	3.62	14.49	312.40	4,527	0.00	0	120.00	1,739
Intermittent LP Ash Water Pump/ Motor	TN	4	1.52	6.06	312.40	1.893	0.00	o	120.00	727
Loadout Tower - Steel	TN	2	7.51	15.03	312.40	4,694	0.00	o	120.00	1.803
Ash Water Surge Tank - Steel	TN	2	108.66	217.33	234.30	50,919	0.00	o	120.00	26,079
Ash Water Settling Tank - Steel	TN	2	74.94	149.89	234.30	35,119	0.00	0	120.00	17,986
Air Compressor	TN	1	2.00	2.00	312.40	625	0.00	o	120.00	240
Storage Silo Control Cabinet	TN	2	2.00	4.00	312.40	1,250	0,00	o	120.00	480
Dewatering Bin Control Cabinet	TN	2	2.00	4.00	312.40	1,250	0.00	0	120.00	480
Fly Ash Storage Silo Control/ Logic Cabinet	TN	1	2.00	2.00	312.40	625	0.00	0	120.00	240
Fly Ash Loadout Silo Control Cabinet	TN	1	1.50	1.50	312.40	469	0.00	0	120.00	180
Expansion Joints - Steel	TN	1	11.41	11.41	504.10	5,754	0.00	0	120.00	1,370
Truck/ Track Scales - Structural Steel	TN	1	4.88	4.88	234.30	1,144	0.00	0	120.00	586
Jib Crane Arms (9 total)	TN	1	11.07	11.07	312.40	3,457	0.00	0	120.00	1,328
Handrailing, Walkways, Ladders, Grating	TN	1	102.90	102.90	504.10	51,871	0.00	0	120.00	12,348
Dust Collector System	TN	1	5.50	5.50	312.40	1,718	0.00	0	120.00	660

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Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Manhole Frames & Covers - Steel	TN	1	1.96	1.96	504.10	988	0.00	0	120.00	235
Filtering Plenum - Steel	TN	2	5.50	11.00	312.40	3,436	0.00	0	120.00	1,320
Piping, Valves 4" to 8" - Steel	TN	1	36.27	36.27	312.40	11,331	0.00	0	120.00	4,352
Piping Supports/ Braces - Steel	TN	1	10.00	10.00	312.40	3,124	0.00	0	120.00	1,200
Subtotal						598,440		286,543		139,294
Total Account 312						1,849,204		1,379,701		239,183
TOTAL GYPSUM & ASH HANDLING						1,849,204		1,379,701		239,183
GRAND TOTAL SJRPP						58,953,182		26,100,931		23,882,756

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Turkey Point Plant

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Turkey Point Fossil and Combined Cycle

The Turkey Point Power Plant is located on a 12,700 acre site on Biscayne Bay in Dade County, approximately thirteen miles south of Miami, Florida. There are two fossil generating units (Units 1 & 2), two nuclear generating units (Units 3 & 4), and a large network of water cooling canals at the site. The nuclear generating units and the water cooling canals are excluded from this dismantlement study.

The original design of Turkey Point Fossil Units was for natural gas or oil-fired operation with provisions for future conversion to coal. Both units currently operate on natural gas with #6 heavy oil as an alternative fuel. The two units have a combined maximum generator name plate rating of 804 megawatts. The Units No. 1 & 2 went into commercial operation in 1967 and 1968, respectively. For purposes of this dismantlement study, the economic recovery dates for the Turkey Point units are as follows:

<u>Unit</u>	<u>Year</u>
Unit 1	2020
Unit 2	2020
Common	2032
Unit 5	2032

The dismantlement of the plants is assumed to require 2 years beginning five years after these dates.

Combined Cycle Unit 5 is a new unit located on the existing Turkey Point site. It went into commercial operation in May of 2007. The combined cycle technology maximizes the beneficial use of the site while minimizing environmental, land use and cost impacts otherwise associated with development of a nominal 1,150-MW power plant. Unit 5 utilizes a number of common facilities. It increases the generating capacity of the site without increasing the overall size of the site.

Unit 5 consists of four nominal 170-MW GE "F" Class Advanced Combustion Turbines (CT) with DLN combustors and four Heat Recovery Steam Generators, which utilizes waste heat from the CT to produce steam to drive a new steam turbine generator.

There are two #6 heavy oil tanks on site supplied via Biscayne Bay primarily by the use of barges. The fuel gas is transported by a pipeline connected to the Florida Gas Transmission System.

Florida Power & Light Company last requested and received approval for a change in dismantlement rates for the Turkey Point site in Docket No. 070378-EI, Order No. PSC-08-0095-PAA-EI issued on February 14, 2008. These accruals became effective as of January 1, 2007.

TURKEY POINT FOSSIL SUMMARY OF DISMANTLEMENT COSTS

FERC		Removal Cost	Disposal Cost	Salvage Value	Total
Account	Description	(A)	(B)	(C)	(D)=(A + B - C)
	Turkey Point Common				
	Deadwating Direct				
211	Production Plant	900 594	0 500 770		
313	Structures and improvements Reiter Plant Equipment	802,381	2,535,776	399,839	2,939,518
314	Turbogenerator Units	19,441	103,025	5,460	117,006
315	Accessory Electrical Equipment	25 989	0	90,920	(64 031)
316	Miscellaneous Equipment	10,000	0	30,320	(04,831)
0.0	Subtotal	848.011	2 639 801	496 219	2 001 502
		040,011	2,000,001	400,210	2,881,080
	Other Site Costs:				
	Site Management Expenses	847,476			847,476
	Asbestos Abatement Costs	838,000			838,000
	Special Waste	118,435			118,435
	Intake & Discharge Backfill	79,243			79,243
	Grading & Seeding	1,945,517			1,945,517
	Subtotal	3,828,671	0	0	3,828,671
		4,676,683	2,639,801	496,219	6,820,265
	Contragency 16%	748,269	422,368		1,170,637
	Total Turkey Point Continon	5,424,952	3,062,169	496,219	7,990,902
	Total Unusable M&S Inventory	1 813 357		181 336	1 632 021
		7.238.309	3,062,169	677 555	9 622 923
			-,		0,020,020
	Turkey Point Units 1 & 2				
311	Structures and Improvements	1,950,672	2,183,396	270,317	3,863,751
312	Boiler Plant Equipment	4,731,363	955,112	2,240,981	3,445,494
314	Turbogenerator Units	1,603,318	477,934	2,194,585	(113,333)
315	Accessory Electrical Equipment	591,154	261,300	1,230,515	(378,061)
310	Miscellaneous Equipment	10,849	0	3,732	7,117
		8,887,356	3,877,742	5,940,130	6,824,969
	Total Turkey Point Units 4 B 2	1,421,977	620,439		2,042,416
	rotal Turkey Point Units 1 & 2	10,309,333	4,498,181	5,940,130	8,867,384
	Turkey Point Unit 5				
341	Structures and Improvements	1.278.272	677 469	371 514	1 584 227
342	Fuel Holder Equipment	44.019	0	21.006	23 013
343	Prime Movers	3,555,109	1.029.084	2,547,408	2.036.785
344	Turbogenerator Units	1,138,447	358,225	808,560	688,112
345	Accessory Electrical Equipment	801,302	604,869	642,121	764.050
346	Miscellaneous Equipment	18,400	0	7,966	10,435
	Subtotal	6,835,550	2,669,647	4,398,574	5,106,622
	Contingency 16%	1,093,688	427,143		1,520,831
	Total Turkey Point Unit 5	7,929,238	3,096,790	4,398,574	6,627,454
	Total Dismantlement Cost:	25.476.880	10.657.140	11.016.258	25 117 781
					20,117,701

TURKEY POINT FOSSIL

DISMANTLEMENT COST FOR INFLATION PROJECTION

Description	Labor (A)	Material & Equipment (B)	Burial (C)	Salvage (D)	Total (A) + (B) + (C) - (D)
Turkey Point Common	3,254,971	3,983,338	3,062,169	677,555	9,622,923
Turkey Point Units 1 & 2	6,185,600	4,123,733	4,498,181	5,940,130	8,867,384
Turkey Point Unit 5	4,757,543	3,171,695	3,096,790	4,398,574	6,627,454
Total	14,198,114	11,278,766	10,657,140	11,016,258	25,117,761

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Labor is 60% of Removal Cost from Summary of Dismantlement Costs. Material & Equipment is 40% of Removal Cost from Summary of Dismantlement Costs. Burial is 100% of Disposal Cost from Summary of Dismantlement Costs. Salvage is 100% of Salvage from Summary of Dismantlement Costs.

TURKEY POINT FOSSIL DISMANTLEMENT ASSUMPTIONS

FPL will provide management personnel for the dismantlement effort.

FPL will prepare the request for proposal package and solicit bids for the dismantlement effort.

FPL will provide site security during the dismantlement.

FPL will hire a demolition contractor to perform the actual dismantling work. This contractor will have the salvage rights to all plant equipment and structural material.

The land will be made available for future use.

All dismantling work will be done in accordance with OSHA regulations.

The fuel oil storage tanks will be cleaned and their contents disposed of according to the requirements of current regulations.

The following items will be removed:

- a. All structures, equipment, and concrete pads, pedestals, foundations, etc;
- b. All underground gas, oil, sewer and water piping and electrical conduits.
- c. All hazardous and contaminated materials, e.g., acid filled lead batteries, oil tank residue.

Discussions with FPL's Power Generation Division (PGD) indicate that the return of the site to a green field condition entails removal of all structures above the wood pilings and steel-encased concrete pilings. The removal of the pilings would be unfeasible and, therefore, will remain in place.

Scrap will be unprepared, i.e., cut only to the extent required to load the pieces on scrap dealers' trailers. Trucking costs for removal are paid by the scrap dealer and are reflected in the salvage value paid.

The estimate does not reflect land value or its resale.

The productivity factors employed are assumed valid for purposes of this study.

A contingency of 16% has been applied to the total removal and disposal costs. This contingency percentage covers costs associated with delays occurring after dismantlement begins due to such causes as equipment failure and weather delays.

The costs of such overhead items as project management, site security, etc., have been estimated by FPL's Corporate Services Department. These costs are listed on the cost summary pages for each site's dismantlement study.

All materials and equipment are assumed to be either fully salvageable or to be disposed of completely. The availability of powerful cutting shears makes possible the cutting of even the heaviest steel to a size that permits salvage as scrap. Any unusable materials and supplies inventory will be sold as scrap. Estimated balances of such inventory (with related salvage value) have been included on the cost summary pages for each site's dismantlement study.

A 30% swell factor is used to compute the disposal cost per cubic yard of concrete. One cubic yard of concrete becomes 1.3 cubic yards of concrete rubble after demolition.

TURKEY POINT FOSSIL DISMANTLEMENT ASSUMPTIONS (continued)

The switchyard and ancillary equipment (FERC account 353) will remain in place with the exception of the main power transformers, oil circuit breakers, superstructures, and foundations associated with the tie-in of plant generated power in the switchyard. However the dismantlement cost of the substation equipment is not included in this study so as to avoid duplicating recovery of costs already included in the net salvage factors of the substation equipment accounts' depreciation rates.

An expandable grout will be used to dismantle the turbine pedestals. The chimneys will be control-blasted.

It is assumed that dismantlement activity at Turkey Point will begin five years after end of service. The economic recovery dates used for this assumption are as follows:

<u>Unit</u>	Economic Recovery Date
Common	2032
Unit 1	2020
Unit 2	2020
Unit 5	2032

Asbestos at Turkey Point plant has been almost completely abated. FPL's Environmental Department recently had a survey done of asbestos at our production plants. It was determined that some asbestos insulation is in use at Turkey Point. It is estimated that the cost of abating the remaining asbestos at Turkey Point is \$838,000.

DISMANTLING ACTIVITIES: OIL & GAS AND OTHER PRODUCTION PLANTS

- Remove loose equipment, furniture, and spare parts.
- Drain liquids, drum-up, and dispose of drums.
- Remove hazardous materials; i.e., leads (alkaline), acids, solvents, lubricants, oils, chemicals, and gasses.
- Strip all insulation and covering, package and remove to acceptable landfill.
- Collapse circulating water lines and backfill trenches.
- Remove main steam, hot and cold piping, downcomers, valves, and supports, pumps, motors, generator auxiliary equipment, feedwater heaters, soot blowers, and condensers.
- Remove intake and discharge structures, equipment pumps, piping and valves.
- Remove systems that must be completed prior to the start of the boiler removal including lube oil pumps, all piping, instrument and electrical systems.
- Remove forced drafts and induced draft ductwork, air heaters and fans.
- Remove hoppers, burners, upper and lower headers, manways, and waterwalls.
- Remove heavy steel structures and above ground steel precut key members, lower and cut at ground level.
- Disassemble crane, boiler feed pumps, and turbine generator.
- Separate scrap metals, and remove to scrap yard.
- Remove and dispose of miscellaneous rubble.
- Remove turbine pedestal, foundation, and heavy concrete structures and building, stack foundations, equipment foundations, substructures, support buildings and stacks. Remove to landfill.
- S Cut off piles and remove pile caps. Remove concrete encased duct banks and underground piping.
- Remove septic tank and backfill.
- Remove underground storage tanks.
- Test and remove contaminated soil/bases all areas.
- Install environmental monitoring equipment, for example, at wells.
- Remove or improve remaining site facilities such as buildings, fences, parking areas in accordance with local code and regulations.
- Install/modify existing site storm water runoff system.

DISMANTLING ACTIVITIES: OIL & GAS AND OTHER PRODUCTION PLANTS (Continued)

- Remove gas supply metering site, valve stations, underground distribution system.
- Remove solid and liquid wastes from waste treatment processing areas landfilled material, precipitated material in ponds and tanks, contaminated resins and reactants.
- Remove marine facilities such as fuel unloading docks, equipment, bridges, and dams.
- Cut and remove fuel oil tanks, piping, valves, and supports.
- Remove top soil/gravel, backfill, and remove barrier wall foundation.
- Backfill, site grading, seeding and mulching.

DEVELOPMENT OF COST FACTORS

Cost factors have been developed to compute the net salvage value of the demolition of the Turkey Point Plant. The net salvage value of the demolition is the net of: the removal and disposal cost and the salvage value of equipment and steel not disposed of. These factors provide a unit cost or value for removal, disposal and salvage of a given unit of measure of the component materials of which a power plant is constructed. The assumption is that the cost or value per unit of a given component can be multiplied by the quantity of that component the plant to calculate a total cost or value for removal, disposal, or salvage of that component.

REMOVAL COST FACTORS

The removal cost factors developed for this study have two elements: a burdened labor rate and productivity factor. The burdened labor rate multiplied by the productivity factor yields the removal cost factor. The labor rates used in this study are from R.S. Means Construction Data. The crew rate per man-hour is for a crew consisting of six journeymen laborers, one outside foreman and one heavy equipment operator - a typical crew for demolition work. The rate includes the cost per man-hour of a crane, an excavator, and a front end loader. The The equipment cost is also from R.S. Means, and both equipment and labor are adjusted by the appropriate R.S. Means City Cost Index. (Means provides national average rates for labor and equipment which are then adjusted by City Cost Indexes to arrive at the appropriate rate for a given city or region.) The productivity factors employed, e.g., the number of man-hours required to remove a given unit of measure of concrete, were developed by an engineering consulting firm. These factors are assumed valid for purposes of this study.

Labor Rate

Labor rates are for non-union crews and the per crew hour rate is based on a forty hour week.

Labor	\$33.05	Х	6	=	* \$198.33
Foreman	\$41.96	Х	1	=	\$41.96
Heavy Equipment Operator	\$39.99	Х	1	=	\$39.99
Total Cost per hour of 8 man crew					\$280.28
Cost per man hour		\$280.28	1	8 =	\$35.04

Equipment Rate

The equipment rate is based on the following equipment:

Crane/Excavator Front End Loader Cutting Equipment				31,395.00 6,234.15 231.75
Total per month				37,860.90
37,860.90	1	176	hours per month =	215.12
Cost per man hour Plus: amount for small tools Total Cost per man hour			\$215.12 / 8 =	\$26.89

Equipment & Labor Summary

Labor Equipment Total	\$35.04
Rounded	\$63.00
For Concrete demolition add \$5.00 per hour additional equipment charge.	\$68.00

The Removal Cost Factor is the product of the productivity factor for removal of a particular component multiplied by the total burdened hourly labor rate. The removal cost factors for all materials to be removed from FPL's sites are as follows:

<u>Components</u>	<u>Hourly Rate</u>	Productivity Factor	Removal Factor
Extra Heavy Steel (1)	\$63.00	2.50 MH / Ton	\$157.50 / Ton
Heavy Steel (2)	\$63.00	3.30 MH / Ton	\$207.90 / Ton
General Steel	\$63.00	4.40 MH / Ton	\$277.20 / Ton
Light Steel	\$63.00	7.10 MH / Ton	\$447.30 / Ton
Concrete	\$63.00	0.48 MH / CY	\$30.24 / CY
Reinforced Concrete	\$68.00	1.20 MH / CY	\$81.60 / CY
Copper-Elect. Cable &			
Generator Leads	\$63.00	12.00 MH / Ton	\$756.00 / Ton
Copper - Generator	\$63.00	9.80 MH / Ton	\$617.40 / Ton
Copper - Transformer	\$63.00	7.40 MH / Ton	\$466.20 / Ton
General Insulation	\$63.00	1.00 MH / CY	\$63.00 / CY
Inground Pipe-Metal(3)	\$63.00	6.00 MH / Ton	\$378.00 / Ton
Concrete Pipe	\$68.00	4.60 MH / Ton	\$312.80 / CY

(1) Includes turbine generator.

(2) Includes parts of the steam generator, pipe larger than 8 inches.

(3) Includes cost to backfill the trenches.

DISPOSAL COST FACTORS

Three cost factors were developed to compute the cost of disposal of non-hazardous wastes at the Homestead Landfill facility, using dumpsters provided by Waste Management, Inc.. Concrete and non-asbestos insulation are non-hazardous wastes. The tipping fee is \$46/CY The per-haul dumpster charges are \$475 per haul for a 20 CY dumpster and \$675 per haul for a 30 CY dumpster.

Cost factors were also developed to compute the cost of removal and disposal of oil tanks, including the cost of related soil remediation. Such costs are computed for each tank in FPL's system, and are located appropriately in the detailed spreadsheet.

<u>Concrete</u>

One cubic yard of concrete in place weighs 3,950 pounds. One cubic yard becomes 1.3 cubic yards after demolition. Each load will contain 15.38 cubic yards (20 cu. yds./1.3) of in place concrete. 15.38 cubic yards weighs 61,000 pounds or 30.50 tons.

Dumpster Charge	\$475.00	/ haul	Х	1 haul	=	\$475.00
Tipping Fees	\$46.00	/ ton	Х	30.5 ton		\$1,403.00
Total Cost per round Trip					-	\$1,878.00
Cost per Cubic Yard	\$1,878.00	/ 15.38	cubic ya	ards =		\$122.11
Plus 10% contractor profit					_	12.21
Total Cost per Cubic Yard					=	\$134.32
Rounded Cost per Cubic Ya	rd				=	\$134.00

Insulation

A trailer with a 30 cubic yard capacity is used for insulation because of its lighter weight. For purposes of this computation the dumpster is assumed to be 90% full (although the tipping fee is based on the assumption of 100% full truck - i.e., the weight to volume conversion uses 30 cubic yards - the full volume of the dumpster). A cubic yard of insulation weighs 121.5 pounds or .060750 tons. The 30 cubic yard dumpster capacity times .060750 tons/cubic yard= 1.82 tons.

Calcium Silicate Insulation

Truck Cost	\$675.00	/ haul	Х	1 haul	=	\$675.00
Tipping Fees	\$46.00	/ ton	Х	1.82 ton	=	\$83.72
Total Cost per round Trip					-	\$758.72
Cost per Cubic Yard	\$758.72	/ 27 cub	ic yards =			\$28.10
Plus 10% contractor profit					_	2.81
Total Cost per Cubic Yard					=	\$30.91
Rounded Cost per Cubic Yard					-	<u>\$31.00</u>

SALVAGE VALUE FACTORS

The salvage value factors, presented in dollars per ton, is from published data and conversations with scrap metals dealers. The list covers all salvageable materials recovered from FPL sites.

Iron & Steel Stainless Steel Aluminum (Sheet Metal) Wire & Cable:	\$120 / ton \$2,000 / ton \$1,340 / ton
- Insulated Copper	\$2,100 / ton \$1,020 / ton
Copper	\$5,000 / ton
- 70/30 Cupro-Nickel	\$4,000 / ton
- 80/20 Cupro-Nickel - Monel	\$6,000 / ton \$10,000 / ton
Admiralty Brass	\$3,600 / ton \$2,800 / ton
Titanium	\$4,000 / ton

OTHER SITE COSTS

Site Management Expenses

Site management expenses refer to FPL's management costs and contractors' expenses associated with the dismantlement project. The cost factors provided by FPL's Construction Estimating Department are: FPL expenses of \$21,134 per month, both office and site, and contractor's expenses of \$25,948 per month for site indirect costs. These expenses are to be incurred over the 18 month dismantlement period for Turkey Point Plant. FPL's management costs include administration, engineering, permit costs and various other costs. Contractors' expenses include field management supervision security, etc..

Site Management Expenses per month	\$47,082
Number of months	
Total Site Management Expenses	\$847,476

Intake & Discharge Backfill

FPL's Power Generation Division developed this cost factor on the basis of a typical such structure for FPL's production plants. The assumption is that a volume of 1,600 cubic yards for the intake and 1,120 cubic yards for the discharge will need to be filled. FPL's Construction Estimating Department has updated the costs as follows:

	Cost/Unit	Quantity	Totals
Intake	44,128	1	\$44,128
Discharge	35,115	1_	\$35,115
			\$79,243

Grading and Seeding

This cost refers to the restoration of the dismantled area to a green field area. The land is filled with sand, spread with topsoil and then seeded. The cost factor provided by Power Generation Division (PGD) and FPL's Construction Estimating Department is \$63,579 per acre. The acreage was determined for each site by reviewing engineering drawings to determine the areas requiring this effort. Assumptions underlying this cost factor include 2,000 cubic yards per acre to be backfilled and 968 cubic yards per acre of topsoil to be spread and seeded.

Turkey Point Acreage to be graded and seeded	30.60
Cost Factor	\$63,579
Total Grading and Seeding Expense	\$1,945,517

Other Site Contamination & Special Waste

Florida Power & Light's Environmental Department has provided the following information about certain environmental related costs at the company's generating stations. At Turkey Point, the following cost estimates have been identified:

<u>Description</u>	Amount
Asbestos	\$838,000
Lead in paint	900
Basins Clean Out/Material	50,000
Tanks/Washwater	67,535
Total	\$956,435

Removal, Dsiposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Unit of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
FERC Account 311										
Improvements to Site										
Concrete Pavement	CY	1	5,165.00	5.165.00	30.24	156,190	134.00	692 110	0.00	0
Sewer System - Cast Iron	TN	1	58,88	58.88	277.20	16.322	0.00	002,110	120.00	7.066
Sewer System - Steel	TN	1	7.30	7.30	277.20	2.024	0.00	ō	120.00	876
Sewer System - Concrete	CY	1	145.36	145.36	312.80	45,469	134.00	19,478	0.00	0
Manholes & Catchbasins	CY	1	148.67	148.67	81.60	12,131	134.00	19,922	0.00	0
Fire Protection System	TN	1	22.93	22.93	277.20	6,356	0.00	0	120.00	2,752
Fuel Oil Dock	ÇY	1	210.00	210.00	81.60	17,136	134.00	28,140	0.00	0
Hose Handling Structure	TN	1	1.30	1.30	277.20	360	0.00		120.00	156
Subtotal						255,987		759,650		10,849
Circulation and Service Water System										
Water Treatment Area Siab	CV	4	267.00	267.00	91 60	01 707	404.00	05 770		
Water Treatment Equipment	TN	1	207.00	207.00	207.00	21,787	134.00	35,778	0.00	0
Piping - Cast Iron - 18	TN	1	255.02	255.02	207.90	53 010	0.00	0	120.00	6,480
Piping - Cast Iron - 6"	TN	1	3 45	3 45	277.20	056	0.00	0	120.00	30,602
5 Ton Trolley Hoist	TN	1	0.90	0.90	447.30	403	0.00	0	120.00	414
Bridge Crane	TN	1	25.35	25.35	207.90	5 270	0.00	0	120.00	3 042
Station Crane	TN	1	148.50	148.50	207.90	30,873	0.00	0	120.00	17 820
Raw Water Storage Tank - 500,000gl	TN	1	352.00	352.00	207.90	73,181	0.00	0	120.00	42 240
Elevated Water Storage Tank - 100,000	TN	1	124,50	124.50	207,90	25,884	0.00	ō	120.00	14,940
Concrete Foundations	CY	1	432.00	432.00	81.60	35,251	134.00	57,888	0.00	0
Structural Steel	TN	1	64,00	64.00	207.90	13,306	0.00	o	120.00	7,680
Elevator	TN	1	37.60	37.60	207.90	7,817	0.00	0	120.00	4,512
Subtotal						278,973		93,666		127,838
Fuel & Ash Structures										-
Fuel Oil Storage Tanks - 268,000bbl	EA	2	925.00	1,850.00	n/a	102,272	0.00	o	120.00	222,000
Cleaning Fuel Oil Storage Tanks	EA	2	268,000.00	536,000.00	n/a	0	n/a	1,300,000	0.00	0
Soil Remediation - Fuel Oil Storage Tan	EA	2	203.00	406.00	n/a	0	n/a	231,102	0.00	0
Fuel Oil Transport Lines	TN	1	306.46	306.46	207.90	63,713	0.00	0	120.00	36,775
Subotal						165,985		1,531,102		258,775
Other Buildings										
Concrete	CY	1	1,137.00	1,137.00	81.60	92,779	134.00	152,358	0.00	o
Miscellaneous Steel	TN	1	19.80	19.80	447.30	8,857	0,00	0	120.00	2,376
Subtotal						101,636		152,358		2,376
Total Account 311						802,581		2,536,776		399,839
FERC Account 312 Boiler Plant Equipment										
Light Oil Tanke	TN	2	40.00		-1-	40.000	0.00			
Foundation	HN	2	12.28	24.00	n/a	13,636	0.00	0	120.00	2,947
Light Oil Tank - Cleaning			n/a	n/a	0/9	0	n/a	63,836	0.00	0
-gen on rank - Oreannig			iva	iva	149	U	n/a	13,000	0.00	0

Removal, Dsiposal & Saivage Cost Worksheet	Unit of Measure	Number of Compo- nents	Unit of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Soil Remediation		_	n/a	n/a	n/a	0	n/a	26,189	0.00	0
Fuel Oil Transfer Pumps Subtotal	TN	6	1.23	7.38	277.20	0	0.00	0 103,025	120.00	2,947
Boiler Plant Auxiliaries	71	4	7.54	7.04	077.00	0.005			400.00	
Caustic wash System		1	7.34	7.34	277.20	2,035	0.00	U	120.00	881
Cane Sturry System		1	13.60	13.60	211.20	3,770	0.00		120.00	1,032
Subtotal						5,805		U		2,513
Total Account 312						19,441		103,025		5,460
FERC Account 315 Accessory Electrical Equipment Power & Conversion Equipment						1				
Station Service Transformer	TN	1	4.00	4.00	277.20	1,109	0.00	0	120.00	480
Emergency Diesel Generator	TN	1	9.45	9,45	277.20	2,620	0.00	0	120.00	1,134
Startup Transformer - 32,000kva	ΤN	1	36.75	36.75	207.90	7,640	0.00	0	120.00	4,410
Lighting Transformer	TN	15	0.60	9.00	447.30	4,026	0.00	0	120.00	1,080
Transformer Copper	TN	1	16.54	16.54	466.20	7,711	0.00	0	5,000.00	82,700
Storage Batteries & Equipment	TN	1	7.50	7.50	277.20	2,079	0.00	0	120.00	900
Subtotal						25,184		0		90,704
Switching, Control & Protective Equipmen	ıt									
Instrument Transformers	TN	3	0.60	1.80	447.30	805	0.00	0	120.00	216
Subtotal						805		.0		216
Total Account 315						25,989		0		90,920
TOTAL TURKEY POINT COMMON				:		848,011		2,639,801		496,219
TURKEY POINT UNITS 1 & 2 FERC Account 311 Circulating and Service Water System										
Intake Structure - Concrete	CY	1	966.00	1,932.00	81.60	157,651	134.00	258,888	0.00	0
Traveling Water Screens	TN	2	14.11	56.44	207.90	11,734	0.00	0	120.00	6,773
Intake Conduit	TN	1	656.25	1,312.50	277.20	363,825	0.00	0	120.00	157,500
Subtotal						533,210		258,888		164,273
Station Structures	C V		0 4 4 4 6 6	4 000 00			404.00	500 F-0	0.00	
Concrete Footings and Piers	CY CY	1	2,114.00	4,228,00	81.60	345,005	134.00	555,552	0.00	0
Structural Steel	UY	1	3,290.00	0,080.00	81.60	536,928	134.00	881,720	0.00	0
Miscellangous Steel	TN	1	303,00	150.00	2/7,20	202,356	0.00	0	120.00	87,600
Floors - Concrete	CY	1	1 462 00	2 024 00	211.20	41,091	134.00	201.846	120.00	18,048
Floor and Roof Slabs	cv	1	155 00	2,924.00	81.60	∠30,390 25,200	134.00	391,010	0.00	0
Enclosure - Concrete	CY	1	160.00	320.00	81.60	20,290	134.00	41,040	0.00	0
Misc. Cranes and Hoists	TN	1	1 65	3 30	447 30	1 478	0.00	42,000	120.00	206
Subtotal			1.00	0.00	447.30	1,417,462	0.00	1,924,508	120.00	106,044
Total Account 311						1,950,672		2,183,396		270,317

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Removal, Dsiposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Unit of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
PERC Account 312				j						1
Evel Oil & Gas Equipment				1		[l l
Metering Tank Equipitient	CV	4	520 50	1 070 00	-		0/2	25/ 128	0.00	0
Fuet Oil Metoring Tank 12000 bbl		2	539.50	1,079.00	nva n/a	14 000	0.00	234,130	120.00	24 288
FOR Metering Tank - 12000 bbi	EA	2	50.60 a/a	202.40	nva n/o	34,090	0.00	140.000	120.00	24,200
Soil Remediation	EA	1	11/2	n/a	n/a	0	n/a	4 344	0.00	Ŭ
Burner Pumps	TM	י ק	1 50		277 20	2 405	0.00	-,	120.00	1 080
Burner Fuel Oil Booster Pumps	TN	2	1.00	4 02	277.20	1 364	0.00	0	120.00	590
Fuel Oil Pining	TN	1	97.07	194 14	277.20	53 816	0.00	0	120.00	23 297
Concrete	CY	i	43.00	86.00	81.60	7 018	134.00	11 524	0.00	0
Forced Draft Foundation	CY	1	229.50	459.00	81.60	37 454	134.00	61 506	0.00	ő
Forced Draft Fans	TN	2	38.50	154.00	207.90	32 017	0.00	01,000	120.00	18,480
Forced Draft Fan Air Ducts	TN	2	127.00	508.00	63.00	32 004	0.00	o o	120.00	50,960
FD Fan Air Duct Insulation	CY	1	225.00	160 71	63.00	10 125	31.00	4 982	0.00	00,000
FD Fan Air Duct Insulation - Calcium 5	CY		270.00	540.00	63.00	34,020	31.00	16.740	0.00	ő
Subtotal				0.0.00		244,402		493,232	•••	128,695
Boiter Equipment						j				
Boiler Frame	TN	1	1,140.00	2,280.00	207.90	474,012	0.00	0	120.00	273,600
Platforms, Grating & Handrails	TN	1	414.00	828,00	277.20	229,522	0.00	0	120.00	99,360
Boiler - including;	TN	1	3,733.00	7,466.00	207.90	1,552,181	0.00	0	120.00	895,920
Drum, Headers, Hangers & Supports Waterwall, Downcomers & Tube-Guide	\$									
Piping, Valves & Silencers				1		1				}
Superneater, Keneater, Economizer										
Sootbiowers	-		400.00						400.00	004.040
Air Prenealer		2	483,00	1,932,00	207.90	401,003	0.00	10 720	120.00	231,640
Insulation Coloive Officete			970.00	340,43	63.00	21,820	31.00	10,739	0.00	
Instrument Air Compression		2	1,150.00	1,150.00	63.00	12,450	31.00	33,030	120.00	600
Instrument Air Compressors	TN	2	1.20	5.00	207,90	1,040	0.00	0	120.00	2 000
Subtotal	1 N	1	10.34	32,00	447.30	2,767,310	0.00	46,389	120.00	1,505,242
Boiler Blant Augiliaria										
L Q Ecodurator Mentor #1	TN	4	12.75	45 50	207.00	0 450	0.00	0	120.00	5.460
L.P. Feeuwater Heater #1	711		22.73	40,00	207,90	9,409	0.00	0	120.00	5,400
L.P. Feedwater Hogier #2	LIN Thi		10.20	32.40	207.90	0,730	0.00	0	120.00	3,000
H.P. Fecuwater Heater #6	757	4	11.00	23.70	207.90	4,927	0.00	0	120.00	2,044
H.P. Feedwater Heater #5	אוו	4	19.10	30.20	207.90	7 600	0.00	0	120.00	3,024
H.P. Feedwater Heater #6	111	4	10.30	113 70	207.90	7,009	0.00	0	120.00	4,352
H D Feedwater Heater #7	TM	1	77.60	155 20	207.80	20,000	0.00	0	120.00	18 634
Boiler Food Dumps (including motors)	TN	י י	27.00	109.00	207.00	32,200	0.00	0	120.00	18,024
Condensate Storage Tank - 150 000 al		4	27.00 A1 95	83 50	207.90	22,403	0.00	0	120.00	0.000
Condensate Recovery Cooler		1	0.83	1 60	447 20	7/2	0.00	0	120.00	9,900
Condensate Recovery Vent Condenser	TN	1	1.40	2.00	277 20	776	0.00	0	120.00	338
Condensate Recovery Tank - 3 900ml	TN	1	3.00	6.00	277.20	1 663	0.00	0	120.00	720
Condensate Recovery Flash Tank - 515	TN	1	0.50	1.00	447 30	447	0.00	0	120.00	120
Heater Drain Pump	TN	1	0.65	1.30	447.30	581	0.00	0	120.00	156

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Removal, Dsiposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Unit of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Blow Down Tank - 1,700g	TN	1	1.00	2 00	277.20	554	0.00	0	120.00	240
Cooling Water Pumps	TN	4	1.55	12 40	277 20	3 437	0.00	ő	120.00	1 488
Cooling Water Heat Exchanger	TN	2	18.05	72 20	207.90	15 010	0.00	ő	120.00	8 664
Cooling Water Surge Tank - 564gl	TN	1	0.50	1.00	447.30	447	0.00	0	120.00	120
Chemical Feed System	TN	1	1.50	3.00	277 20	832	0.00	o o	120.00	360
Subtotal				0.00		155,011	0.00	0	120.00	87,739
Boiler Plant Piping										
Main Steam Piping	TN	1	297.52	595.04	277.20	164,945	0.00	0	120.00	71,405
Hot Reheat Piping	TN	1	73.60	147.20	277.20	40,804	0.00	0	120.00	17,664
Cold Reheat Piping	TN	1	88.08	176.16	277.20	48,832	0.00	0	120.00	21,139
Condensate Piping	TN	1	399.72	799.44	277.20	221,605	0.00	0	120.00	95,933
Extraction Steam Piping	TN	1	135,45	270.90	277.20	75,093	0.00	0	120.00	32,508
Boiler Feed Piping	TN	1	96.98	193.96	277.20	53,766	0.00	0	120.00	23,275
Air Evacuation Piping	TN	1	9.77	19.54	277.20	5,416	0.00	0	120.00	2,345
Instrument Piping	TN	1	26.50	53.00	277.20	14,692	0.00	0	120.00	6,360
Saturated Auxiliary Steam Piping	TN	1	28.65	57.30	277.20	15,884	0.00	0	120.00	6,876
Closed Cooling Water Piping	TN	1	60.71	121.42	277.20	33,658	0.00	0	120.00	14,570
Miscellaneous Piping	TN	1	9.79	19.58	277.20	5,428	0.00	0	120.00	2,350
Pipe Insulation	CY	1	747.00	533.57	63.00	33,615	31.00	16,541	0.00	0
Pipe Insulation - Calcium Silicate	CY	1	900.00	1,800.00	63.00	113,400	31.00	55,800	0.00	0
Subtotal						827,136		72,341		294,425
Induced Draft Equipment										
Insulation	CY	1	325.00	232.14	63.00	14,625	31.00	26,350	0.00	0
Insulation	CY	1	425.00	850.00	63,00	53,550	31,00	59,520	0.00	0
Stacks	CY	1	960.00	1,920.00	81.60	156,672	134.00	257,280	0.00	0
Dust Collectors	ŤΝ	2	87.00	348.00	207.90	72,349	0.00	0	120.00	41,760
Gas Ducts	TN	1	386,00	772.00	207.90	160,499	0.00	0	120.00	92,640
Breeching	TN	1	120.00	240.00	207.90	49,896	0.00	0	120.00	28,800
Subtotal						507,591		343,150		163,200
Miscellaneous Steel & Equipment	TN	1	514.00	514.00	447.30	229,912	0.00	0	120.00	61,680
Total Account 312			•			4,731,363		955,112		2,240,981
FERC Account 314										
Pedestal Concrete	CY	1	1,725,50	3.451.00	81.60	281 602	134.00	462 424	0.00	0
Inserts & Anchor Bolts	TN		10.85	21 70	277 20	6.015	0.00	102,707	120.00	2 604
Turbo-Generator Unit	TN	1	648.00	1 296 00	157 50	204 120	0.00	0	120.00	155 530
Turbine Cooper	TN	1	50.00	100.00	617.40	£1 740	0.00	0	5 000 00	500,020
Turbine Piping	TN	1	260.00	520.00	758.00	303 120	0.00	0	120.00	500,000
Turbine Insulation	GY	1	700.00	500.00	63.00	31 500	31.00	15 500	0.00	02,400
Subtotal		•	/00.00	000.00	00.00	978,097	51.00	477,934	0.00	720,524
Condensers and Auxiliaries										
Condenser Shell	TN	1	867.50	1,735.00	207.90	360,707	0.00	0	120.00	208,200
Condenser - Aluminum-Brass Tubes	TN	1	214.50	429.00	277.20	118,919	0.00	0	2,800.00	1.201.200
Circulating Water Pumps	TN	2	70.54	282.16	207.90	58,661	0.00	0	120.00	33,859

		Number	Unit of		Removal		Disposal		Salvage	
		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Dsiposal & Salvage	Unit of	Compo-	рег	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Butterfly Valves	TN	2	8.00	32.00	277.20	8,870	0.00	0	120.00	3,840
Condensate Pumps	TN	2	15.08	60.32	207.90	12,541	0.00	0	120.00	7,238
Lube Oil System	TN	1	23.50	47.00	277.20	13,028	0.00	0	120.00	5,640
Subtotal						572,726		0		1,459,978
Miscellaneous Steel & Equipment	TN	1	117.36	117.36	447.30	52,495	0.00	0	120.00	14,083
Total Account 314						1,603,318		477,934		2,194,585
FERC Account 315										
Accessory Electrical Equipment Foundations & Structures										
Manholes & Handholes	CY	1	85.00	170.00	81.60	13,872	134.00	22,780	0.00	0
Manhole & Handhole Frames and Cove	TN	1	2.19	4,38	447.30	1,959	0.00	0	120.00	526
Equipment Foundations - Concrete	CY	1	185.00	370.00	81.60	30,192	134.00	49,580	0.00	0
Subtotal						46,023		72,360		526
Conduit, Insulators & Conductors										
Concrete	CY	1	705.00	1,410.00	81.60	115,056	134.00	188,940	0.00	0
Conduit	TN	1	18.74	37.48	447.30	16,7 6 5	0.00	0	120.00	4,498
Generator Leads & Copper Tube	TN	1	22.24	44,48	756.00	33,627	0.00	0	5,000.00	222,400
Power & Control Wiring	TN	1	202.10	404.20	756.00	305,575	0.00	0	2,100.00	848,820
Cable Trays	TN	1	5.12	5.12	447.30	2,290	0.00	0	120.00	614
Subtotal						473,313		188,940		1,076,332
Switching, Control & Protective Equipment	t									
Aux Power Transformer	TN	1	59.40	118.80	207.90	24,699	0.00	0	120.00	14,256
Instrument Transformers	TN	3	0.60	3.60	447.30	1,610	0.00	0	120.00	432
Transformer Copper	TN	1	24.00	24.00	466.20	11,189	0.00	0	5,000.00	120,000
Switchgear - 4160v Metalclad	TN	1	40.00	80.00	207.90	16,632	0.00	0	120.00	9,600
Switchgear - 480v Metalclad	TN	2	18.00	72.00	207.90	14,969	0.00	0	120.00	8,640
Station Grounding System	TN	1	6.08	6.08	447.30	2,720	0,00	0	120.00	/30
Subtotal						71,818		0		153,658
Total Account 315						591,154		261,300		1,230,515
FERC Account 316										
Miscellaneous Power Plant Equipment		-		10.00	077.00	4 000	0.00		100.00	0.400
Air Compressor	TN	2	4.50	18.00	277.20	4,990	0.00	0	120.00	2,160
Service Air Piping	TN	1	6.55	13.10	447.30	5,860	0.00	0	120.00	1,572
Total Account 316						10,849		U		3,732
TOTAL TURKEY POINT UNITS 1 & 2						8,887,356		3,877,742		5,940,130
TOTAL TURKEY POINT COMMON, UNITS	51&2					9,735,367		8,517,543		6,436,348

Turkev Point Unit 5 Account 341: Structures and Improvements

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Removal, Dsiposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Unit of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Lighting and Fire Protection Systems						-				
Yard Lighting	TN	1	11000	5.50	447.30	2,460	0.00	0	120.00	660
Plant Lighting	TN	1	4.000	2.00	447.30	895	0.00	0	120.00	240
Fire Protection System Foundation	CY	1.325	0.04	53,00	81.60	4,325	134.00	7,102	0.00	0
Sanitary Sewer Piping Foundations	CY	1.230	0.014814815	18,22	81.60	1,487	134.00	2,442	0.00	0
						9,166		9,544		900
Power Block										
Power Block - Structural Steel	TN	1,044		1,044.00	207.90	217,048	0.00	0	120.00	125,280
Base Plates	TN	4	160,000	80.00	207.90	16,632	0.00	0	120.00	9,600
Power Block - Handrail, Toeblock, Misc.	TN	2	20,000	10.00	447.30	4,473	0.00	0	120.00	1,200
Power Block - Decking	TN	80,000	1200000	600.00	447.30	268,380	0.00	0	120.00	72,000
Power Block - Ladders, Stairs & Platforms	TN	100		100.00	447.30	44,730	0.00	0	120.00	12,000
HRSG Structural/Ductwork	TN	4	1,680,400	840.20	277.20	232,903	0.00	0	120.00	100,824
Power Block Grade Slab Concrete	CY	1,400		1,400.00	81.60	114,240	134.00	187,600	0.00	0
Power Block Structure Foundation Concret	CY	1,700		1,700.00	81.60	138,720	134.00	227,800	0,00	0
Power Block Elevated Slabs	CY	350		350.00	81.60	28,560	134.00	46,900	0.00	0
HRSG Analyzer Building	ĊY	300		200.00	81.60	16,320	134.00	26,800	0.00	0
HRSG DCS Building	CY	350	0.22	77.78	81.60	6,347	134.00	10,422	0.00	0
· · · · · · · · · · · · · · · · · · ·						1,088,353		499,522		320,904
Open Cooling Water System										
OCW System 2" & < - Pipe	TN	450	1350	0.68	277.20	187	0.00	0	120.00	81
OCW System 2 1/2" & > - Pipe	TN	1,500	165000	82.50	207.90	17,152	0.00	0	120.00	9,900
OCW Duplex Basket Strainers	TN	4	1200	0.60	277.20	166	0.00	0	120.00	72
Open Cooling Water Pumps	TN	4	94400	47.20	207.90	9,813	0.00	0	120.00	5,664
Open Cooling Water Booster Pumps	TN	3	19,605	9.80	207.90	2,038	0.00		120.00	1,176
						20,000		-		
Pond Water System								_		
Pond Water System 2" & < - Pipe	TN	330	990	0.50	277.20	137	0.00	0	120.00	59
Pond Water System 2 1/2" & > - Pipe	TN	1,225	12250	6.13	207.90	1,273	0.00	0	120,00	/35
Pond Water Booster Pumps	TN	2	13,070	6.54	207.90	1,359	0.00	0	120.00	784
						2,709		U	:	1,515
Water Treatment System	Th	0.000	0400	4.20	207.00	1 464	0.00	n	120.00	504
Service Water System 2" & < - Pipe	TN	2,800	8400	4.20	207.90	1,104	0.00	0	120.00	540
Service water System 2 1/2" & > - Pipe	IN	900	9000	4.50	207.90	307	0.00	0	120.00	
Service Water Pumps	IN	4	4540	2.27	277.20	629	0,00	20,000	20.00	212
HRSG Blowdown Tank Sump	CY	200		200.00	01.60	16,320	134.00	20,800	120.00	0
Wastewater System 2" & < - Pipe	TN	1,230	3690	1.85	277.20	511	0.00	0	120.00	221
Power Block Drainage Pipe Foundations	CY	4,290	0.02962963	127.11	30.24	3,844	134.00	17,033	0,00	00.000
Wastewater System 2 1/2" & > - Pipe	TN	15,600	468000	234.00	207.90	48,649	0.00	0	120.00	28,080
Sump Pumps	TN	42	21000	10.50	207,90	2,183	0.00	0	120.00	1,260
Miscellaneous Equipment	TN	12	6000	3.00	207.90	624	0.00	0	120.00	360
Potable Water System	CY	2,000	0.014814815	29.63	30.24	896	134.00	3,970	0.00	0
Pipe Rack Drilled Piers - Concrete	CY	900		900.00	81.60	73,440	134.00	120,600	0.00	0
						148,627		168,403		31,238

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TURKEY POINT FOSSI	DISMANTL	EMENT STUDY
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Removal, Dsiposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- ne <u>n</u> ts	Unit of Measure per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
Account 341 Totals:						1,278,272		677,469		371,514
Account 342: Fuel Holders, Producers a	nd Acces	sories								
Gas System										
Natural Gas System 2" & < - Pipe	TN	33	99	0.05	277.20	14	0.00	0	120.00	6
Gas Piping	TN	2,000	220000	110.00	277.20	30,492	0.00	0	120.00	13,200
Natural Gas System 2 1/2" & > - Pipe	TN	500	55000	27.50	207.90	5,717	0.00	0	120.00	3,300
Liquid Fuel System 2 1/2" & > - Pipe	TN	2,500	75000	37.50	207.90	7,796	0.00	0	120.00	4,500
Account 342 Totals:						44.019		0		21,008
Acount 343: Prime Movers										
HRSG Foundation	CY	404		404.00	81.60	32,966	134.00	54,136	0.00	0
HRSG Mechanical	TN	4	1,270,400	635.20	157.50	100,044	0.00	0	120.00	76,224
Mechanical Finishes - Casings	TN	1	132,900	66.45	207.90	13,815	0.00	0	120.00	7,974
Modules - Unit 5	TN	4	18,805,200	9,402.60	157,50	1,480,910	0.00	0	120.00	1,128,312
HRSG Blowdown System 2 1/2" & > - Pipe	IN	800	56000	28.00	207.90	5,821	0.00	U	120.00	3,300
	IN	2	110,000	55.00	211.20	1,648,802	0.00	54,136	120.00	1,222,470
Feedwater System										
Feedwater System 2" & < - Pipe	TN	3,000	9000	4.50	277.20	1,247	0.00	0	120.00	540
Feedwater System 2 1/2" & > - Pipe	TN	2,500	175000	87.50	207.90	18,191	0.00	0	120.00	10,500
HRSG HP Feedwater Pumps	TN	3	111,600	55.80	207.90	11,601	0.00	0	120.00	6,698
HRSG LP Feedwater Pumps	TN	3	111,600	55.80	207.90	11,601	0.00	0	120.00	6,696
HRSG Feed Pump Foudations Concrete	CY	300		300.00	81.60	24,480	134.00	40,200	0.00	0
H P Feed Pumps - Insulation	CY	1,200	0.037037037	44.44	63.00	2,800	31.00	1,378	0.00	0
L P Feed Pumps - Insulation	CY	900	0.04	33.33	63.00	2,100	31.00	1,033	0.00	u o
UB Feedwater Piping - Insulation	CY	2,547	0.04	94.33	63.00	5,943	31.00	45,535	0.00	24,432
Compustion Turbine										
Combustion Turbine Fdn Concrete	CY	900		900.00	81.60	73,440	134.00	120,600	0.00	0
Condensate Pump Casings	TN	4	2,000	1.00	277.20	277	0.00	0	120.00	120
Miscellaneous Mechanical Equipment Fdn:	CY	100		100.00	81.60	8,160	134.00	13,400	0.00	C
C.T. Skid Mounted Equipment Fdn Concre	CY	150		150.00	81.60	12,240	134.00	20,100	0,00	C
C.T. 5 Combustion Turbine	TN	4	1,508,000	754.00	157.50	118,755	0.00	0	120.00	90,480
C.T. 5 Insulation	CY	4	29	115.56	63.00	7,280	31.00	3,582	0.00	0
C.T. Interconnect Pipe 2 1/2" & > - Pipe	TN	6,100	427000	213.50	207.90	44,387	0.00	0	120.00	25,620
C.T. Interconnect Pipe 2 * & < - Pipe	TN	13,000	39000	19.50	277.20	5,405	0.00	157,682	120.00	2,340
Main Steam System										
Main Steam System 2 1/2" & > Pipe	TN	7,500	3375000	1,687.50	207.90	350,831	0.00	0	120.00	202,500
L/8 Main Steam Piping - Insulation	CY	5,600	0.04	217.78	63.00	13,720	31.00	6,751	0.00	0
Aux Boiler System 2" & < - Pipe	TN	1,000	3000	1.50	277.20	416	0.00	0	120.00	180
Aux Boiler System 2 1/2" & > - Pipe	TN	400	12000	6.00	207.90	1,247	0.00	0	120.00	720
L/B Auxiliary Boiler Piping - Insulation	CY	900	0.02	15.00	63.00	945	31.00	465	0.00	0

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		Number	Unit of		Removal		Disposal		Salvage	
		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Dsiposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
L/B B.O.P. Piping - Insulation	CY	450	0.02	7.50	63.00	473	31.00	233	0.00	0
-						367,632		7,449		203,400
Blowdown System										
HRSG Blowdown System 2" & Under - Pip	TN	900	2700	1.35	277.20	374	0.00	0	120.00	162
HRSG Blowdown Tanks	TN	4	18,960	9.48	207.90	1,971	0.00	0	120.00	1,138
Main Steam DrainTanks	TN	4	11500	5.75	207,90	1,195	0.00	o	120.00	690
HRSG Blowdown Tanks - Insulation	CY	600	0.011111111	6.67	63.00	420	31.00	207	0.00	0
Steam Drain Tanks - Insulation	CY	1,200	0.01	13.33	63.00	840	31.00	413	0.00	0
Mechanical Finishes - Insulation	CY	1	100	100.00	63.00	6,300	31.00	3,100	0.00	0
						11,101		3,720		1,990
Steam Turbine										
Steam Turbines - Insulation	CY	1 080	0.04	40.00	63.00	2 520	31.00	1 240	0.00	0
Main Steam System 2" & < - Pine	TN	5 100	30600	40.00	277.20	2,320	31,00	1,240	120.00	1 926
Steam Turbino Pasa Diatos		3,100	100.000	50.00	157.50	4,241	0.00	0	120.00	1,030
Steam Turbine & Accessories	111	2	700,000	250.00	131.30	010,1	0.00	0	120,00	6,000
Hudraulic Dower Linit	1.7	2	100,000 8,000	300.00	171.00	545	0.00	0.	120.00	42,000
Instament Tubiog		25,000	12500	6.25	277.20	1 723	0.00	0	120.00	300
matument tubing	114	20,000	12500	0.23	211.20	78 042	0.00	1.240	120.00	700
						70,945		1,240		50,940
Condensate System										
Condensate System 2" & < - Pipe	TN	2,500	7,500	3.75	277.20	1,040	0.00	0	120.00	450
Condensate System 2 1/2" & > - Pipe	TN	3,000	330,000	165.00	207.90	34,304	0.00	0	120.00	19,800
L/B Condensate Piping - Insulation	CY	4,000	0	66.67	63.00	4,200	31.00	2,067	0.00	0
Condenser Vacuum Pump Skid & Equip	TN	2	5,000	2.50	207.90	520	0.00	0	120.00	300
Condensate Storage Tank Fdn	CY	280		280.00	81.60	22,848	134.00	37,520	0.00	0
Condensate Make-Up Pumps	TN	2	3,000	1.50	207.90	312	0.00	0	120.00	180
HRSG Chemical Fd. System 2" & < - Pipe	TN	1,300	3,900	1.95	277.20	541	0.00	0	120.00	234
HRSG Chemical Feed Skids	TN	2	30,000	15.00	207.90	3,119	0.00	0	120.00	1,800
Lube Oil Storage Tanks	TN	2	13,040	6.52	207.90	1,356	0.00	0	120.00	782
Miscellaneous Process Tanks	TN	4	21,200	10.60	207.90	2,204	0.00	0	120.00	1,272
CondensateTransfer System 2" & < - Pip	TN	2,500	7,500	3.75	277.20	1,040	0.00	0	120.00	450
CondensateTransfer System 2 1/2" & > -	TN	6,500	195,000	97.50	207.90	20,270	0.00	0	120.00	11,700
Condensate Pumps	TN	4	125,600	62.80	207.90	13,056	0.00	0	120.00	7,536
Condensate Transfer Pumps	TN	4	9,560	4.78	207.90	994	0.00	0	120.00	574
Condensate Storage Tanks	TN	2	4,780	2.39	207.90	497	0.00	0	120.00	287
Bulk Gas System 2" & < - Pipe	TN	7,000	21,000	10,50	277.20	2,911	0.00	0	120.00	1,260
Condensers	TN	2	665,000	332.50	207.90	69,127	0.00	0	2,000.00	665,000
Gland Steam Condensers	TN	2	10,000	5.00	207.90	1,040	0.00	0	120.00	600
Condensate Air Rem System 2" & < - Pi	TN	1,500	4,500	2.25	277.20	624	0.00	0	120.00	270
Condensate Air Rem System 2 1/2" & > -	TN	400	12,000	6.00	207.90	1,247	0.00	0	120.00	720
				Ĩ		181,245		39,587		713,215
Circulating Water System										
Circulating Water System 2" & < _ Pino	TN	740	2045 F	1 1 2	277 20	211	0.00		120.00	405
Circulating Water System 2 1/2" & > _ Di	TN	150	4770	2 20	207.00	106	0.00	0	120.00	130
I /B Circulating Water Pining - Inculation	CY	108	3 50	2.05	63.00	4 704	31.00	000	0.00	200
Circulating Water Pumps	TN	2	05 050	47 08	277 20	13 200	0.00	000	120.00	E 757
C W Chem Tr System 2" & < - Pine	TN	500	1500	0.75	277 20	208	0.00	0	120.00	101,0
a construction of a second of		000	1000	0.10	217.20	200	0.00	U	120.00	901

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		Number	Unit of		Removal		Disposal		Salvage	
		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Dsiposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvane
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
24" Diameter ICW Pipe	CY	100	0.44	44.44	312.80	13,902	134.00	5,956	0.00	0
84" Diameter ICW Pipe	CY	400	1.56	622.22	312.80	194,631	134.00	83,378	0.00	C
Concrete - Cofferdam Area	CY	350		350.00	30.24	10,584	134.00	46,900	0.00	0
66" Diameter Inground CW Pipe	CY	20	1.22	24.44	312.80	7,646	134.00	3,276	0,00	٥
						242,841		140,377		6,268
Screen Wash System										
Intake Bar Rack & Cleaning Rake	IN	2	10,000	5.00	277.20	1,386	0.00	0	120.00	600
Intake Traveling Screens	TN	2	64,000	32.00	277.20	8,870	0.00	0	120.00	3,840
Screen wasn Bubbler System Equipment	TN	2	2000	1.00	277.20	277	0.00	0	120.00	120
Screen Wash System 2" & < - Pipe	TN	60	180	0.09	277.20	25	0,00	0	120.00	11
Screen Wash System 2 1/2" & > - Pipe	TN	320	3200	1.60	207.90	333	0.00	0	120.00	192
Screen Wash Pumps	TN	2	3080	1.54	207.90	320	0.00	0	120.00	185
						11,211		0		4,948
HPSG Stock										
HRSG Stack Foundation Concents	cv	700		700 00	04.00	57.400				
Stacks - Unit 5	TN	100	1 054 000	700.00 507.00	81.0U 207.00	57,120	134.00	93,800	0.00	0
Gland Steam Condensor Inculation	CV	4	1,034,000	527.00	207.90	109,563	0.00	0	120.00	63,240
	UT .	130	0.333333333	50.00	63.00	3,150	31.00	1,550	0.00	0
						169,833		95,350		63,240
Lube Oil System										
Lube Oil System - 2" & < Pipe	TN	2,000	6000	3.00	277.20	832	0.00	0	120.00	360
Lube Oil System - 2 1/2" & > Pipe	ΤN	350	10500	5.25	207.90	1 091	0.00	0	120.00	630
Lube Oil Transfer/Return Pumps	TN	2	3.000	1.50	207.90	312	0.00	ů	120.00	180
S.T. Lube Oil Reservoir	TN	2	20,000	10.00	207.90	2.079	0.00	0	120.00	1 200
Turbo Lube Oil Conditioner	TN	2	4000	2.00	207.90	416	0.00	ő	120.00	240
						4,730				2.610
								_		_,
Cranes and Hoists				1						
Miscellaneous Monorails & Hoists	TN	15	75000	37.50	277.20	10,395	0.00	0	120.00	4,500
Combustion Turking										
Compussion Turbine	~									
Condessets Pump Caines	UT TN	1	2,682	2,682.00	81.60	218,851	134.00	359,388	0.00	0
Mice Mochanical Equipment Edo Concrete		4	2,000	4.00	207.90	832	0.00	0.	120.00	480
CT Equipment Edu Concrete Rode	CY	1	300	300.00	81.60	24,480	134.00	40,200	0.00	0
CT & Combustion Turbine		1	450	450.00	81.60	36,720	134.00	60,300	0.00	0
CT 9 Inculation		4	377,000	/54.00	157.50	118,755	0.00	0	120.00	90,480
C T Latereannest Dine 1 1/25 R >		- 1	180	180.00	63.00	11,340	134.00	24,120	0.00	0
C T interconnect Pipe 1 1/2 & >	EIN	1	210	210.00	207.90	43,659	0.00	0	120.00	25,200
out interconnect ripe 1 1/2 als	t IN	1	10	9.50	207.90	1,975	0.00	0	120.00	1,140
						400,012		484,008		117,300
Closed Cooling Water System										
Closed Cooling Water Heat Exchanger	TN	2	58,676	29.34	277.20	8,132	0.00	0	120.00	3 521
CCW System 2 * & < - Pipe	TN	3,678	11034	5.52	277.20	1,529	0.00	o	120.00	662
CCW System 2 1/2" & > - Pipe	TN	4,868	146040	73.02	207.90	15,181	0.00	o	120.00	8 762
Closed Cooling Water Pumps	TN	3	9750	4.88	207.90	1 014	0.00	ő	120.00	585
CT & Insulation C.T. Interconnect Pipe 1 1/2" & > C.T. Interconnect Pipe 1 1/2" & < <u>Closed Cooling Water System</u> Closed Cooling Water Heat Exchanger CCW System 2 " & < - Pipe CCW System 2 1/2" & > - Pipe Closed Cooling Water Pumps	CY TN TN TN TN TN TN	1 1 1 3,678 4,868 3	180 210 10 58,676 11034 146040 9750	180.00 210.00 9.50 29.34 5.52 73.02 4.88	63.00 207.90 207.90 207.90 277.20 277.20 207.90 207.90	8,132 15,181 1,975 456,612 8,132 1,529 15,181 1,014	0.00 134.00 0.00 0.00 0.00 0.00 0.00 0.00	0 24,120 0 484,008 0 0 0 0	0.00 120.00 120.00 120.00 120.00 120.00 120.00	30,48 25,20 <u>1,14</u> 117,30 3,52 66 8,76 58

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Removal, Dsiposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Unit of Measure per Component	Totai Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost	Disposal Cost per Unit of Measure	Total Disposal Cost	Salvage Value per Unit of Measure	Total Salvage Value
						25,856		0		13,530
Account 343 Totals						3,555,109		1,029,084		2,547,408
Account 344: Generators										
Steam Turbine Foundation Mat Concrete	CY	1,200		1 200 00	81.60	97 920	134.00	160 800	0.00	0
Stearn Turbine Pedestal Concrete	CY	920		920.00	81.60	75.072	134.00	123,280	0.00	ő
C.T. 5 Generator	TN	4	1,256,000	628.00	157.50	98,910	0.00	0	120.00	75.360
Generator Copper	TN	5	180.000	90.00	617.40	55,566	0.00	õ	5.000.00	450.000
Generator	TN	5	2,000,000	1,000.00	157.50	157,500	0.00	ō	120.00	120.000
						484,968		284,080		645,360
Cooling Tower										
Conling Tower	TN	1	1 360 00	1 360.00	447 30	608 328	0.00		120.00	163 200
Reinf Conc	CY	1	553 32	553 32	81.60	45 151	134.00	74 145	0.00	163,200
Subtotal	Ŭ,	•	000.02	000.02	01,00	653 479	104,00	74 145	0.00	163 200
						000,110		, ,,,,,		100,200
Account 344 Totals						1,138,447		358,225		808,560
Account 345: Accessory Electric Equip	ment			:						
Electrical Power Cable	TN	2	5	10.00	277.20	2,772	0.00	0	2,100.00	21,000
Electrical Control Cable	TN	2	3	5.00	277.20	1,386	0.00	0	2,100.00	10,500
Station Transformer	TN	2	39	77.00	277.20	21,344	0.00	0	120.00	9,240
CT Step-up Transformer	TN	2	47	93.12	277.20	25,813	0.00	0	120.00	11,174
Control Center-off base	TN	2	27	54.00	277.20	14,969	0.00	0	120.00	6,480
Miscellaneous Materials + 5%	TN	1	1,987	11.96	277.20	3,314	0.00	0	120.00	1,435
Excitation Equipment						69,598		0		59,829
Concreter Excitation Power Transformer	Th	=	175 000	60.50	007.00	17 705	0.00		400.00	
Transformer Copper	TN	5	120,000	02.00	207.90	11,320	0.00	01	120.00	7,500
Instrumentation	TN	1 500	20000	25.00	400.20	1,000	0.00		5,000.00	125,000
		1,000	00000	13,00	211.20	30,204	0.00		120.00	134,300
			•			,		5		10 1,000
Electrical Equipment										
Electrical Equipment Pads Concrete	CY	125		125.00	81.60	10,200	134.00	16,750	0.00	0
Uninterruptible Power Supply	TN	1	1000	0,50	277.20	139	0.00	0	120.00	60
Station Battery Charger & Panels	TN	2	12,000	6.00	277.20	1,663	0.00	0	120.00	720
Grounding & Cathodic Protection	TN	5	275,000	137.50	277.20	38,115	0.00	0	120.00	16,500
Grounding Grid (Incl. Pads Rods)	TN	22,135	11067.5	5.53	277.20	1,534	0.00	0	120.00	664
Lightning Protection	TN	1	5000	2.50	277.20	693	0.00	0	120.00	300
Embedded Conduits Foundations	CY	75,000	0.006	444.44	81.60	36,267	134.00	59,556	0.00	0
Power & Control Conduits	TN	131592	328980	164,49	277.20	45,597	0.00	0	120.00	19,739
Capacita Duat Beals		18259.5	456487.5	228.24	277.20	63,269	0.00	0	120.00	27,389
Contrete Duct Banks	CY CY	3,000		3,000.00	81.60	244,800	134.00	402,000	0.00	0
Lisophase Rus	TAL	23	2.8	62.50	30.24	1,890	134.00	8,375	0.00	0
Main Control Boards	TN	2,200	50000	45.00	277.20	12,474	0.00	0	120.00	5,400
Prioriti Control Duards		2	13.3	20.00	277.20	5,544	0.00	이	120.00	2,400

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		Number	Unit of	l	Removal		Disposal		Saivage	
		of	Measure	Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Dsiposal & Salvage	Unit of	Compo-	per	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Saivage
Cost Worksheet	Measure	nents	Component	Measure	Measure	Cost	Measure	Cost	Measure	Value
Miscellaneous Relay Panels	TN	18	0.296296296	5.33	277.20	1,478	0.00	0	120.00	640
Instrument Racks	TN	162	32400	16.20	277.20	4,491	0.00	0	120.00	1,944
Annunciators	TN	1	5	5.00	277.20	1,386	0.00	0	120.00	600
Miscellaneous Power Transformers	TN	1	55,000	27.50	277.20	7,623	0.00	0	120.00	3,300
208/120V AC Distribution Panels	TN	3	0.296296296	0.89	277.20	246	0.00	0	120.00	107
Load Centers	TN	3	15,000	7.50	277.20	2,079	0.00	0	120.00	900
Motor Control Centers	TN	17	85,000	42.50	277.20	11,781	0.00	0	120.00	5,100
Distribution Panels	τN	3	0.296296296	3.30	277.20	915	0.00	0	120.00	396
Power Cable – 8KV	TN	86514	181938.942	90.97	756.00	68,773	0.00	0	2,100.00	191,036
Power Cable - Medium Voltage	TN	304187	91255.95	45.63	756.00	34,495	0.00	0	2,100.00	95,819
Electrical Switchgear Foundation Concrete	CY	882		882.00	81.60	71,971	134.00	118,188	0.00	0
Non-Seg Bus	TN	889	35,560	17.78	277.20	4,929	0.00	o	120.00	2,134
4.16 KV Switchgear	TN	3	15,000	7.50	277.20	2,079	0.00	0	120.00	900
Control Cable	TN	689268	48248.76	24.12	756.00	18,238	0.00	0	2,100.00	50,661
Instrumentation Cable	TN	393974	19698.6965	9.85	756.00	7,446	0.00	0	2,100.00	20,684
Distributed Control System	TN	2	10,000	5.00	277.20	1,386	0.00	0	120.00	600
						701,500		604,869		447,992
Account 345 Totais						801,302		604,869		642,121
Account 346: Miscellaneous Plant Equip	oment							1		
Compressed Air Piping	TN	10,028	30084.6	15.04	277.20	4,170	0.00	0	120.00	1,805
Instrument Air System 2" & < Pipe	TN	136	407.4	0.20	277.20	56	0.00	0	120.00	24
Service Air System 2 * & < Pipe	TN	2,660	7980	3.99	277.20	1,106	0.00	0	120.00	479
Instrument Air System 2 1/2" & > Pipe	TN	438	4382	2.19	277.20	607	0.00	0	120.00	263
Service Air System 2 1/2" & > Pipe	TN	548	5475	2.74	277.20	759	0.00	0	120.00	329
Instrument Air Compressors, Rec, & Drye	TN	2	27,180	13.59	277.20	3,767	0.00	0	120.00	1,631
Plant Communications & Phones	TN	2	6,000	3.00	277.20	832	0.00	0	120.00	360
Heat Tracing	TN	2	3750	1.88	277.20	520	0.00	0	120.00	225
Fire Protection/Detection Equipment	TN	2	7,500	3.75	277.20	1,040	0.00	0	120.00	450
Miscellaneous Electrical Items	TN	2		20.00	277.20	5,544	0,00	0	120.00	2,400
Account 346 Totals						18,400				7,966
Unit 5 Totals						6,835,550		2,669,647		4,398,574
			,			16,570,917		9,187,190		10.834.922

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St. Lucie Wind Turbines

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St. Lucie Wind Turbines

The site of St. Lucie Wind Turbines is Hutchinson Island in St. Lucie County. The facility is projected to go in-service in 2011.

The project will consist of six wind turbines on FPL property and will generate up to 13.8 MW of clean renewable wind energy for more than 3,600 residents. Each turbine is a 2.3 MW Siemens wind turbine weighing approximately 90 tons and on a concrete foundation using about 400 cubic yards.

This filing is the first time that Florida Power & Light has requested dismantlement accruals for this St Lucie Wind Turbines facility.

Due to the early stage of construction of the St. Lucie wind turbines station, the equipment list and related information used for the development of its dismantlement calculation is not, at this point, definitive and will need to be updated and improved upon in future dismantlement studies. This dismantlement cost estimate includes only the cost to dismantle and remove the concrete foundations and the turbines themselves.

The economic recovery date used to calculate the dismantlement accrual for this wind turbines energy center is 25 years from the study year, or 2034. The dismantlement of the facility is assumed to require two years beginning in 2039.

ST LUCIE WIND TURBINES SITE DISMANTLEMENT ASSUMPTIONS

FPL will provide management personnel for the dismantlement effort.

FPL will prepare the request for proposal package and solicit bids for the dismantlement effort.

FPL will provide site security during the dismantlement.

FPL will hire a demolition contractor to perform the actual dismantling work. This contractor will have the salvage rights to all plant equipment and structural material.

The land will be made available for future use.

All dismantling work will be done in accordance with OSHA regulations.

The following items will be removed:

- a. All structures, equipment, and concrete pads, pedestals, foundations, etc;
- b. All underground sewer and water piping and electrical conduits;

Scrap will be unprepared, i.e., cut only to the extent required to load the pieces on scrap dealers' trailers. Trucking costs for removal are paid by the scrap dealer and are reflected in the salvage value paid.

The estimate does not reflect land value or its resale.

The productivity factors employed are assumed valid for purposes of this study.

A contingency of 16% has been applied to the total removal and disposal costs. This contingency percentage covers costs associated with delays occurring after dismantlement begins due to such causes as equipment failure and weather delays.

All materials and equipment are assumed to be either fully salvageable or to be disposed of completely. The availability of powerful cutting shears makes possible the cutting of even the heaviest steel to a size that permits salvage as scrap.

A 30% swell factor is used to compute the disposal cost per cubic yard of concrete. One cubic yard of concrete becomes 1.3 cubic yards of concrete rubble after demolition.

It is assumed that dismantlement activity of the St. Lucie Wind Turbines will begin five years after the economic recovery date. The economic recovery dates used for this assumption are as follows:

Units	Economic Recovery Date
St. Lucie Wind Turbines	2034

It is assumed that any insulation material used for the St. Lucie Wind Turbines will not be hazardous material.

ST LUCIE WIND TURBINES SUMMARY OF DISMANTLEMENT COSTS

Description	Cost (A)	Disposal Cost (B)	Salvage Value (C)	Total (D)=(A + B - C)
St. Lucie Wind Turbines Production Plant				
Structures and Improvements	195,840	199,200	0	395,040
Subtotal	345,528	199,200	64,800 64,800	84,888 479,928
Total Wind Turbines Equipment	345,528	199,200	64,800	479,928
Contingency - 16% Fotal Wind Turbines Equipment	<u>55,284</u> 400,812	31,872 231,072	64,800	87,156 567,084
	Description St. Lucie Wind Turbines Production Plant Structures and Improvements Prime Movers Subtotal Fotal Wind Turbines Equipment Contingency - 16% Fotal Wind Turbines Equipment	Description (A) St. Lucie Wind Turbines Production Plant Structures and Improvements 195,840 Prime Movers 149,688 Subtotal 345,528 Total Wind Turbines Equipment 345,528 Contingency - 16% 55,284 Fotal Wind Turbines Equipment 400,812	Cost Cost Description (A) St. Lucie Wind Turbines Production Plant Structures and Improvements 195,840 Prime Movers 149,688 Stubtotal 345,528 Total Wind Turbines Equipment 345,528 Contingency - 16% 55,284 Structures Equipment 400,812	Cost Cost Value Description (A) (B) (C) St. Lucie Wind Turbines Production Plant (C) (C) Structures and Improvements 195,840 199,200 0 Prime Movers 149,688 0 64,800 Subtotal 345,528 199,200 64,800 Cotal Wind Turbines Equipment 345,528 199,200 64,800 Cotal Wind Turbines Equipment 345,528 199,200 64,800 Cotal Wind Turbines Equipment 345,528 199,200 64,800

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ST LUCIE WIND TURBINES DISMANTLEMENT COST FOR INFLATION PROJECTION

		Material &			
	Labor	Equipment	Burial	Salvage	Total
Description	(A)	(B)	(C)	(D)	(A) + (B) + (C) - (D)
St. Lucie Wind Turpines	240,487	160,325	231,072	64,800	567,084
Total	240,487	160,325	231,072	64,800	567,084
Labor is 60% of Removal Cost from Sur	nmary of Dismantlement Co/	sts.			i
Material & Equipment is 40% of Remove	al Cost from Summary of Dis	mantlement Costs.			
Burial is 100% of Disposal Cost from Su	ummary of Dismantlement Co	osts.			
Salvage is 100% of Salvage from Summ	nary of Dismantlement Costs	5.			

ST LUCIE WIND TURBINES DISMANTLEMENT STUDY

DEVELOPMENT OF COST FACTORS

Cost factors have been developed to compute the net salvage value of the demolition of the PSL Wind Turbines. The net salvage value of the demolition is the net of: the removal and disposal cost and the salvage value of equipment and steel not disposed of. These factors provide a unit cost or value for removal, disposal and salvage of a given unit of measure of the component materials of which a power plant is constructed. The assumption is that the cost or value per unit of a given component can be multiplied by the quantity of that component in the plant to calculate a total cost or value for removal, disposal, or salvage of that component.

REMOVAL COST FACTORS

The removal cost factors developed for this study have two elements: a burdened labor rate and productivity factor. The burdened labor rate multiplied by the productivity factor yields the removal cost factor. The labor rates used in this study are from R.S. Means Construction Data. The crew rate per man-hour is for a crew consisting of six journeymen laborers, one outside foreman and one heavy equipment operator - a typical crew for demolition work. The rate includes the cost per man-hour of a crane, an excavator, and a front end loader. The equipment cost is also from R.S. Means, and both equipment and labor are adjusted by the appropriate R.S. Means City Cost Index. (Means provides national average rates for labor and equipment which are then adjusted by City Cost Indexes to arrive at the appropriate rate for a given region.) The productivity factors employed, e.g., the number of man-hours required to remove a given unit of measure of concrete, were developed by an engineering consulting firm. These factors are assumed valid for purposes of this study.

Labor Rate

Labor rates are for non-union crews and the per crew hour rate is based on a forty hour week.

Labor Foreman Heavy Equipment Operator Total Cost per hour of 8 ma	n crew	\$33.05 \$41.96 \$39.99	X X X	6 1 1	=	\$198.33 \$41.96 <u>\$39.99</u> \$280.28
Cost per man hour			\$280.2	8 /	8 =	\$35.04
Equipment Rate						
The equipment rate is based	on the follo	wing equipment:				
Ci Fr Ci T	rane/Excava ont End Loa utting Equip otal per mo	ator ader ment nth				31,395.00 6,234.15 231.75 37,860.90
37,860.90	1	176	hours per r	nonth =		215.12
Cost per man hour Plus: amount for small tools Total Cost per man hour	i		\$215.1	2 /	8 =	\$26.89 1.00 \$27.89

ST LUCIE WIND TURBINES DISMANTLEMENT STUDY

Equipment & Labor Summary

Labor Equipment Total	\$35.04 27.89 \$62.93
Rounded	\$63.00
For Concrete demolition add \$5.00 per hour additional equipment charge.	\$68.00

The Removal Cost Factor is the product of the productivity factor for removal of a particular component multiplied by the total burdened hourly labor rate. The removal cost factors for all materials to be removed from FPL's sites are as follows:

<u>Components</u>	<u>Hourly Rate</u>	Productivity Factor	Removal Factor
Extra Heavy Steel (1)	\$63.00	2.50 MH / Ton	\$157.50 / Ton
Heavy Steel (2)	\$63.00	3.30 MH / Ton	\$207.90 / Ton
General Steel	\$63.00	4.40 MH / Ton	\$277.20 / Ton
Light Steel	\$63.00	7.10 MH / Ton	\$447.30 / Ton
Concrete	\$68.00	0.48 MH / CY	\$32.64 / CY
Reinforced Concrete	\$68.00	1.20 MH / CY	\$81.60 / CY
Copper-Elect. Cable &			
Generator Leads	\$63.00	12.00 MH / Ton	\$756.00 / Ton
Copper - Generator	\$63.00	9.80 MH / Ton	\$617.40 / Ton
Copper - Transformer	\$63.00	7.40 MH / Ton	\$466.20 / Ton
General Insulation	\$63.00	1.00 MH / CY	\$63.00 / CY
Inground Pipe-Metal(3)	\$63.00	6.00 MH / Ton	\$378.00 / Ton
Concrete Pipe	\$68.00	4.60 MH / Ton	\$312.80 / CY

(1) Includes turbine generator.

(2) Includes parts of the steam generator, pipe larger than 8 inches.

(3) Includes cost to backfill the trenches.

DISPOSAL COST FACTORS

Three cost factors were developed to compute the cost of disposal of non-hazardous wastes at the Martin County Solid Waste Facility. Concrete and calcium silicated insulation are non-hazardous wastes. The tipping fee of \$30/ton and per haul charges were obtained from Waste Management. The per haul charges are \$395.00 per haul for a 20 cubic yard dumpster (5 tons deductible) and \$475.00 per haul for a 30 cubic yard dumpster (7 tons deductible).

Cost factors were also developed to compute the cost of removal and disposal of oil tanks, including the cost of related soil remediation. Such costs are computed for each tank in FPL's system, and are located appropriately in the detailed spreadsheet.

Concrete

One cubic yard of concrete in place weighs 3,950 pounds. One cubic yard becomes 1.3 cubic yards after demolition. Each load will contain 15.38 cubic yards (20 cu. yds./1.3) of in place concrete. 15.38 cubic yards weighs 61,000 pounds or 30.50 tons.

ST LUCIE WIND TURBINES DISMANTLEMENT STUDY

Dumpster Cost Tipping Fees Total Cost per round Trip	\$395.00 \$30.00	/ hau! / ton	X X	1 haul 25.5 tons	=	395.00 765.00 1,160.00
Cost per Cubic Yard Plus 10% contractor profit Total Cost per Cubic Yard	\$1,160.00	/ 15.38 cul	oic yards =			\$75.42
Rounded Cost per Cubic Yard						\$83.00

Insulation - Calcium Silicate (Non-Hazardous)

A trailer with a 30 cubic yard capacity is used for calcium silicate insulation. For purposes of this computation the dumpster is assumed to be 90% full (although the tipping fee is based on the assumption of 100% full truck - i.e., the weight to volume conversion uses 30 cubic yards - the full volume of the dumpster). A cubic yard of calcium silicate insulation weighs 121.5 pounds or .060750 tons. 30 cubic yards times .060750 tons/cubic yard = 1.82 tons.

Truck Cost	\$475.00	/ haul	Х	1 haul	=	475.00
Tipping Fees	\$30.00	/ ton	Х	0 tons	=	0.00
Total Cost per round Trip						475.00
Cost per Cubic Yard	\$475.00	/ 27 cubi	c yards =			\$17.59
Plus 10% contractor profit			-			1.76
Total Cost per Cubic Yard						\$19.35
Rounded Cost per Cubic Yard						\$19.00

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ST LUCIE WIND TURBINES DISMANTLEMENT STUDY

SALVAGE VALUE FACTORS

The salvage value factors, presented in dollars per ton, were provided by scrap metals dealers. The list covers all salvageable materials recovered from FPL sites.

Iron & Steel Stainless Steel Aluminum (Sheet Metal)	\$120 / ton \$2,000 / ton \$1,340 / ton
- Insulated Copper	\$2,100 / ton
- Insulated Aluminum	\$1,020 / ton
Copper	\$5,000 / ton
Nickel Alloys	
- 70/30 Cupro-Nickel	\$4,000 / ton
- 80/20 Cupro-Nickel	\$6,000 / ton
- Monel	\$10,000 / ton
Admiralty Brass	\$3,600 / ton
Aluminum Brass	\$2,800 / ton
Titanium	\$4,000 / ton

ST. LUCIE WIND TURBINES

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Removal, Disposal & Salvage Cost Worksheet	Unit of Measure	Number of Compo- nents	Units of Measure Per Component	Total Units of Measure	Removal Cost per Unit of Measure	Total Removal Cost Per item	Disposal Cost per Unit of Measure	Total Disposal Cost Per Item	Salvage Value per Unit of Measure	Realizable Salvage Value per Item
WIND TURBINES FERC Account 341- Structures & Improvements Concrete Base	CY	6	400.00	2,400.00	81.60	195,840	83.00	199,200	0.00	0
FERC Account 343 - Prime Movers Siemens 2.3 MW turbines	TN	6	90.00	540.00	277.20	149,688	0.00	0	120.00	64,800
						345,528		199,200		64,800

West County Energy Center

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West County Energy Center (WCEC)

West County Energy Center Units 1 & 2 are natural gas fired generating stations currently under construction. Units 1 & 2 will be completed in 2009. Unit 3 is planned for construction with an expected in-service date of 2011.

The project site is located in Palm Beach County, west of Seminole Pratt-Whitney Road and north of State Road 80 (also known as State Road 441 and US Highway 98).

The three units are configured as 3-on-1, i.e., three combustion turbines to one steam generator. Each unit will produce approximately 1,250 megawatts. The three units are capable of serving the equivalent of 750,000 homes and businesses, using state-of-the-art, natural gas fired combined cycle technology. They will be clean, efficient, reliable and cost effective.

The combustion turbines are Mitsubishi 501G1's (at about 250 MW's each), The Steam Turbines are Toshiba (at about 500 MW's each). The Heat Recovery Steam Generators (HRSG's) are made by Nooter, and the Distributed Control System (DCS) is made by Emerson Ovation.

Initial primary cooling water will come from the Floridan Aquifer and with a transition to Reclaimed Water from Palm Beach County by January 2011. The Aquifer wells will be maintained as a back-up water source.

Combustion controls and selective catalytic reduction (SCR) will minimize emissions. The use of inherently clean natural gas as fuel and combined cycle design will result in one of the cleanest new power plants in the state.

Emergency/back-up fuel will be ultra low sulfur light oil. The site will be served by an extension of Gulfstream's natural gas pipeline. The site is located to a transmission substation and major transmission lines needed to deliver power to urban areas.

As the units are currently under construction, the equipment list used in this study is an approximation of the final list and is subject to review and change in future studies.

For purposes of this dismantlement study, the economic recovery dates for these units are as follows:

<u>Unit [1]</u>	<u>Year</u>
Unit 1	2034
Unit 2	2034
Unit 3	2036

[1] The WCEC generating stations are still under construction and thus have not yet been unitized. Common foundations and equipment have been included in Unit 1's equipment list. In future studies, when these stations will be unitized and Common Plant is identified, the economic recovery date for Common facilities' dismantlement cost will conform to Unit 3's date: 2036.

West County Energy Center (WCEC) [continued]

The dismantlement of these units is assumed to span two years, beginning five years after the economic recovery dates. This is the first time that Florida Power & Light Company has requested dismantlement accruals for the West County Energy Center units.

WEST COUNTY ENERGY CENTER FOSSIL SUMMARY OF DISMANTLEMENT COSTS

		Removal	Disposal	Salvage	
FERC		Cost	Cost	Value	Total
Account	Description	(A)	(B)	(C)	(D)=(A + B - C)
	West County Energy Center Units 1 & 2				· · · · · ·
	Production Plant				
341	Structures and Improvements	3,509,860	2,350,330	622,993	5,237,196
342		72,457	D	35,710	36,747
343	Prime Movers	7,388,371	1,816,156	4,941,900	4,262,627
344	Turbine Generator Equipment	2,112,175	366,665	1,617,120	861,720
345	Accessory Electric Equipment	1,120,989	285,640	1,678,828	(272,199)
346	Miscellaneous Equipment	24,897	0	11,131	13,765
-	Subtotal	14,228,748	4,818,791	8,907,683	10,139,856
	Total Units 1 & 2	14,228,748	4,818,791	8,907,683	10,139,856
	West Courty Common				
	Other Site Coste:				
	Site Management Expenses	R/7 /76			847 470
	injection Well Can & Dug	047,470	600.000		647,476
	intaka & Discharge Backfill	98.000	800,000		600,000
	Grading & Seeding	2 207 500			000,88
	Subtotal	2,207,099			2,207,599
	Subtotal	3,143,075	600,000	U	3,743,075
	Total	17,371,822	5,418,791	8,907,683	13,882,931
	Contingency 16%	2,779,492	867,007		3,646,498
	West County U 1, 2 & Common	20,151,314	6,285,798	. 8,907,683	17,529,429
	West County Energy Center Unit 3				
341	Structures and Improvements	1,426,386	815,821	311,497	1,930,710
342	Fuel Holders	36,229	0	17,855	18.373
343	Prime Movers	3,592,207	907,550	2,360,375	2,139,383
344	Turbine Generator Equipment	1,056,087	183,333	808,560	430.860
345	Accessory Electric Equipment	539,229	142,820	637,979	44.070
346	Miscellaneous Equipment	12,448	0	5.566	6,883
	Subtotal	6,662,587	2,049,523	4.141.832	4.570.279
					4,570,279
	Total Dismantlement Cost:	26,813,901	8,335,321	13,049,515	22,099,707
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Labor Equipment Buri Description (A) (B) (C) West County Energy Units 1, 2 & CM 12,090,788 8,060,526 6 West County Unit 3 3,997,552 2,665,035 2	1ai)),285,798	Saivage (D) 8,907,683	Total (A) + (B) + (C) - (D) 17,529,429
Description (A) (B) (C West County Energy Units 1, 2 & CM 12,090,788 8,060,526 6 West County Unit 3 3,997,552 2,665,035 2	;) 5,285,798	(D) 8,907,683	(A) + (B) + (C) - (D) 17,529,429
West County Energy Units 1. 2 & CM 12,090,788 8,060,526 6 West County Unit 3 3,997,552 2,665,035 2	5,285,798	8,907,683	17,529,429
West County Unit 3 3,997,552 2,665,035 2			
	2,049,523	4,141,832	4,570,279
Total 16,088,341 10,725,560 8	3,335,321	13,049,515	22,099,707

WEST COUNTY ENERGY CENTER DISMANTLEMENT ASSUMPTIONS

FPL will provide management personnel for the dismantlement effort.

FPL will prepare the request for proposal package and solicit bids for the dismantlement effort.

FPL will provide site security during the dismantlement.

FPL will hire a demolition contractor to perform the actual dismantling work. This contractor will have the salvage rights to all plant equipment and structural material.

The land will be made available for future use.

All dismantling work will be done in accordance with OSHA regulations.

All storage tanks will be cleaned and their contents disposed of according to the requirements of current regulations.

The following items will be removed:

- a. All structures, equipment, and concrete pads, pedestals, foundations, etc;
- b. All underground gas, oil, sewer and water piping and electrical conduits;
- c. All hazardous and contaminated materials, e.g., acid filled lead batteries, oil tank residue.

Discussions with FPL's Power Generation Division (PGD) indicate that the return of the site to a green field condition entails removal of all structures above the wood pilings and steel-encased concrete pilings. The removal of the pilings would be unfeasible and, therefore, will remain in place.

The turbine pedestals and chimney will be control-blasted.

Scrap will be unprepared, i.e., cut to the extent required to load the pieces on scrap dealers' trailers. Trucking costs for removal are paid by the scrap dealer and are reflected in the salvage value paid.

The estimate does not reflect land value or its resale.

The productivity factors employed are assumed valid for purposes of this study.

A contingency of 16% has been applied to the total removal and disposal costs. This contingency percentage covers costs associated with delays occurring after dismantlement begins due to such causes as equipment failure and weather delays.

The costs of such overhead items as project management, site security, etc., have been estimated by FPL's Construction and Corporate Services Department. These costs are listed on the cost summary pages for each site's dismantlement study.

All materials and equipment are assumed to be either fully salvageable or to be disposed of completely. The availability of powerful cutting shears makes possible the cutting of even the heaviest steel to a size that permits salvage as scrap.

Any unusable materials and supplies inventory will be sold as scrap. Estimated balances of such inventory (with related salvage value) have been included on the cost summary pages for each site's dismantlement study.

A 30% swell factor is used to compute the disposal cost per cubic yard of concrete. One cubic yard of concrete becomes 1.3 cubic yards of concrete rubble after demolition.

WEST COUNTY ENERGY CENTER DISMANTLEMENT ASSUMPTIONS (continued)

The switchyard and ancillary equipment (FERC account 353) will remain in place with the exception of the main power transformers, oil circuit breakers, superstructures, and foundations associated with the tie-in of plant generated power in the switchyard. However, the dismantlement cost of substation equipment is not included in this study so as to avoid duplicating recovery of expense already included in the net salvage factor of the substation plant accounts' depreciation rates.

Injection wells will be plugged, capped and closed.

It is assumed that dismantlement activity at West County Energy Center will begin five years after end of service. The economic recovery dates used for the WCEC Units are as follows:

Unit	Economic Recovery Date
Units 1, 2 and Common	2034
Unit 3	2036

DISMANTLING ACTIVITIES: OIL & GAS AND OTHER PRODUCTION PLANTS

- Remove loose equipment, furniture, and spare parts.
- Drain liquids, drum-up, and dispose of drums.
- Remove hazardous materials; i.e., leads (alkaline), acids, solvents, lubricants, oils, chemicals, and gasses.
- Strip all insulation and covering, package and remove to acceptable landfill.
- Collapse circulating water lines and backfill trenches.
- Remove main steam, hot and cold piping, downcomers, valves, and supports, pumps, motors, generator auxiliary equipment, feedwater heaters, soot blowers, and condensers.
- Remove intake and discharge structures, equipment pumps, piping and valves.
- Remove systems that must be completed prior to the start of the boiler removal including lube oil pumps, all piping, instrument and electrical systems.
- Remove forced drafts and induced draft ductwork, air heaters and fans.
- Remove hoppers, burners, upper and lower headers, manways, and waterwalls.
- Remove heavy steel structures and above ground steel precut key members, lower and cut at ground level.
- Disassemble crane, boiler feed pumps, and turbine generator.
- Separate scrap metals, and remove to scrap yard.
- Remove and dispose of miscellaneous rubble.
- Remove turbine pedestal, foundation, and heavy concrete structures and building, stack foundations, equipment foundations, substructures, support buildings and stacks. Remove to landfill.
- Cut off piles and remove pile caps. Remove concrete encased duct banks and underground piping.
- Remove septic tank and backfill.
- Remove underground storage tanks.
- Test and remove contaminated soil/bases all areas.
- Install environmental monitoring equipment, for example, at wells.
- Remove or improve remaining site facilities such as buildings, fences, parking areas in accordance with local code and regulations.
- Install/modify existing site storm water runoff system.

DISMANTLING ACTIVITIES: OIL & GAS AND OTHER PRODUCTION PLANTS (Continued)

- Remove gas supply metering site, valve stations, underground distribution system.
- Remove solid and liquid wastes from waste treatment processing areas landfilled material, precipitated material in ponds and tanks, contaminated resins and reactants.
- Remove marine facilities such as fuel unloading docks, equipment, bridges, and dams.
- Cut and remove fuel oil tanks, piping, valves, and supports.
- Remove top soil/gravel, backfill, and remove barrier wall foundation.
- Backfill, site grading, seeding and mulching.

DEVELOPMENT OF COST FACTORS

Cost factors have been developed to compute the net salvage value of the demolition of the WCEC Plant. The net salvage value of the demolition is the net of: the removal and disposal cost and the salvage value of equipment and steel not disposed of. These factors provide a unit cost or value for removal, disposal and salvage of a given unit of measure of the component materials of which a power plant is constructed. The assumption is that the cost or value per unit of a given component can be multiplied by the quantity of that component in the plant to calculate a total cost or value for removal, disposal, or salvage of that component.

REMOVAL COST FACTORS

The removal cost factors developed for this study have two elements: a burdened labor rate and productivity factor. The burdened labor rate multiplied by the productivity factor yields the removal cost factor. The labor rates used in this study are from R.S. Means Construction Data. The crew rate per man-hour is for a crew consisting of six journeymen laborers, one outside foreman and one heavy equipment operator - a typical crew for demolition work. The rate includes the cost per man-hour of a crane, an excavator, and a front end loader. The equipment cost is also from R.S. Means, and both equipment and labor are adjusted by the appropriate R.S. Means City Cost Index. (Means provides national average rates for labor and equipment which are then adjusted by City Cost Indexes to arrive at the appropriate rate for a given region.) The productivity factors employed, e.g., the number of man-hours required to remove a given unit of measure of concrete, were developed by an engineering consulting firm. These factors are assumed valid for purposes of this study.

Labor Rate

Labor rates are for non-union crews and the per crew hour rate is based on a forty hour week.

Labor	\$33.14	х	6	• =	\$198.86
Foreman	\$42.08	Х	1	=	42.08
Heavy Equipment Operator Total Cost per hour of 8 man crew	\$40.10	X	1	=	<u>40.10</u> \$281.03
Cost per man hour		\$281.03	1	8 =	\$35.13

Equipment Rate

The equipment rate is based on the following equipment:

	Crane/Excavate Front End Load Cutting Equipm	or Ier Ient			27,874.28 6,234.15
	Total per mon	th			\$34,340.18
	34,340.18	1	176	hours per month =	195.11
Cost per man hour Plus: amount for sm Total Cost per man h	nall tools Iour			\$195.11 / 8 =	\$24.39 <u>1.07</u> \$25.46

Equipment & Labor Summary

Labor Equipment Total	\$35.13
Rounded	\$61.00
For Concrete demolition add \$5.00 per hour additional equipment charge.	\$66.00

The Removal Cost Factor is the product of the productivity factor for removal of a particular component multiplied by the total burdened hourly labor rate. The removal cost factors for all materials to be removed from FPL's sites are as follows:

<u>Components</u>	Hourly Rate	Productivity Factor	Removal Factor
Extra Heavy Steel (1)	\$61.00	2.50 MH / Ton	\$152.50 / Ton
Heavy Steel (2)	\$61.00	3.30 MH / Ton	\$201.30 / Ton
General Steel	\$61.00	4.40 MH / Ton	\$268.40 / Ton
Light Steel	\$61.00	7.10 MH / Ton	\$433.10 / Ton
Concrete	\$66.00	0.48 MH / CY	\$31.68 / CY
Reinforced Concrete	\$66.00	1.20 MH / CY	\$79.20 / CY
Copper-Elect. Cable &			
Generator Leads &	\$61.00	12.00 MH / Ton	\$732.00 / Ton
Copper - Generator	\$61.00	9.80 MH / Ton	\$597.80 / Ton
Copper - Transformer	\$61.00	7.40 MH / Ton	\$451.40 / Ton
General Insulation	\$61.00	1.00 MH / CY	\$61.00 / CY
Inground Pipe-Metal(3)	\$61.00	6.00 MH / Ton	\$366.00 / Ton
Concrete Pipe	\$66.00	4.60 MH / Ton	\$303.60 / CY

(1) Includes turbine generator.

(2) Includes parts of the steam generator, pipe larger than 8 inches.

(3) Includes cost to backfill the trenches.

DISPOSAL COST FACTORS

Three cost factors were developed to compute the cost of disposal of non-hazardous wastes at the Solid Waste Authority of PBC located at 6554 North Jog Road in West Palm Beach, Florida. Concrete and calcium silicated insulation are all non-hazardous wastes. The tipping fee of \$28/ton was obtained from the Palm Beach County Landfill. The dumpster charges, obtained from Southern Waste Systems, are \$375 per haul for 20 cubic yard and \$475 per haul for a 30 cubic yard dumpster.

Cost factors were also developed to compute the cost of removal and disposal of oil tanks, including the cost of related soil remediation. Such costs are computed for each tank in FPL's system, and are located appropriately in the detailed spreadsheet.

Concrete

One cubic yard of concrete in place weighs 3,950 pounds. One cubic yard becomes 1.3 cubic yards after demolition. Each load will contain 15.38 cubic yards (20 cu. yds./1.3) of in place concrete. 15.38 cubic yards weighs 61,000 pounds or 30.50 tons.

Dumpster Charge		\$375.00	/haul	Х	, 1 haul	=	375.00
Tipping Fees	1	\$28.00	/ ton	Х	30.5 tons	=	854.00
Total Cost per round Trip						-	1,229.00
Cost per Cubic Yard		\$1,229.00	/ 15.3	3 cubic y	∕ards ≄		\$79.91
Plus 10% contractor profit						_	7.99
Total Cost per Cubic Yard						=	\$87.90
Rounded Cost per Cubic Yard						-	\$88.00

Insulation

For purposes of this computation the dumpster is assumed to be 90% full (although the tipping fee is based on the assumption of 100% full truck - i.e., the weight to volume conversion uses 30 cubic yards - the full volume of the dumpster). A cubic yard of insulation weighs 121.5 pounds or .060750 tons. 30 cubic yards times .060750 tons/cubic yard = 1.82 tons.

\$475.00	/haul	Х	1 ha	ul		\$475.00
\$28.00	/ ton	х	1.82 to	ns	=	50.96
						\$525.96
\$525.96	/ 27 cu	bic yards =		•		\$19.48
						1.95
					_	\$21.43
						AA (AA
						\$21.00
	\$475.00 \$28.00 \$525.96	\$475.00 /haul \$28.00 / ton \$525.96 / 27 cu	\$475.00 /haul X \$28.00 / ton X \$525.96 / 27 cubic yards =	\$475.00 /haul X 1 ha \$28.00 / ton X 1.82 to \$525.96 / 27 cubic yards =	\$475.00 /haul X 1 haul \$28.00 / ton X 1.82 tons \$525.96 / 27 cubic yards =	\$475.00 /haul X 1 haul \$28.00 / ton X 1.82 tons = \$525.96 / 27 cubic yards =

SALVAGE VALUE FACTORS

The salvage value factors, presented in dollars per ton, were provided by scrap metals dealers. The list covers all salvageable materials recovered from FPL sites.

Iron & Steel Stainless Steel	\$120 / ton \$2,000 / ton
Aluminum (Sheet Metal)	\$1,340 / ton
Wire & Cable:	
- Insulated Copper	\$2,100 / ton
- Insulated Aluminum	\$1,020 / ton
Copper	\$5,000 / ton
Nickel Alloys	
- 70/30 Cupro-Nickel	\$4,000 / ton
- 80/20 Cupro-Nickel	\$6,000 / ton
- Monel	\$10,000 / ton
Admiralty Brass	\$3,600 / ton
Aluminum Brass	\$2,800 / ton
Titanium	\$4,000 / ton

OTHER SITE COSTS

Site Management Expenses

Site management expenses refer to FPL's management costs and contractors' expenses associated with the dismantlement project. The cost factors provided by FPL's Power Generation Division (PGD) and updated by Construction Estimating are: FPL expenses of \$21,134 per month, both office and site, and contractor's expenses of \$25,948 per month for site indirect costs. These expenses are to be incurred over the 18 month dismantlement period for the WCEC Plant. FPL's management costs include administration, engineering, permit costs and various other costs. Contractors' expenses include field management, supervison, security, etc..

Site Management Expenses per month	\$47,082
Number of months	18. <u>00</u>
Total Site Management Expenses	\$847,476

Intake & Discharge Backfill

FPL's PGD developed this cost factor on the basis of a typical such structure for FPL's production plants. The assumption is that a volume of 1,600 cubic yards for the intake and 1,120 cubic yards for the discharge will need to be filled. Construction Estimating has updated the costs. The charge for the Intake is \$44,128; the cost for the discharge is \$35,115. WCEC has 1 Intake and 1 Inlet, no Discharge Structure.

·	Cost/Unit	<u>Quantity</u>	
Intakes	\$44,000	2	\$88,000
Discharges:	\$35,115	0_	\$0
Total Cost:		_	\$88,000

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WEST COUNTY ENERGY CENTER DISMANTLEMENT STUDY

Grading and Seeding

This cost refers to the restoration of the dismantled area to a green field area. The land is filled with sand, spread with topsoil and then seeded. The cost factor provided by PGD and updated by Construction Estimating is \$63,579 per acre. The acreage used for WCEC site is an estimate that will be updated in future dismantlement studies, when better information is available. Assumptions underlying this factor include 2,000 cubic yards per acre to be backfilled and 968 cubic yards per acre of topsoil to be spread and seeded.

WCEC Acreage to be graded and seeded Cost Factor Total Grading and Seeding Expense 34.7 <u>\$63,579</u> \$2,207,599

J			Removal		Disposal		Salvage	
		Total	Cost per	Totat	Cost per	Total	Value per	Total
Removal, Dsiposal & Salvage	Unit of	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	Measure	Measure	Cost	Measure	Cost	Measure	Value
West Count Energy Center Units 1 & 2								
Account 347: Structures and Improvements		ĺ						
Lighting and Fire Protection Systems		0.05	100.10	0.570		-		
Plant Lighting		8.25	433,10	3,573	0.00	0	120.00	990
Fire Protection System Foundation		79.50	433.10	1,299 6 206	88.00	U 6 006	120.00	360
Sanitary Sewer Pioing Foundations	CY	27.33	79.20	2 165	88.00	2 405	0.00	0
	-			13 334		9.401	0.00	1 350
1				10,004		3,401		1,300
Power Block								
Power Block - Structural Steel	TN	1,774.80	201.30	357,267	0.00	0	120.00	212.976
Base Plates	TN	136.00	201.30	27,377	0.00	0	120.00	16,320
Power Block - Handrail, Toeblock, Misc.	TN	17.00	433.10	7,363	0.00	0	120.00	2,040
Power Block - Decking	TN	1,020.00	433.10	441,762	0.00	о	120.00	122,400
Power Block - Ladders, Stairs & Platforms	TN	100.00	433.10	43,310	0.00	0	120.00	12,000
HRSG Structural/Ductwork	TN	1,428.34	268.40	383,366	0.00	o	120.00	171,401
Power Block Grade Slab Concrete	CY	8,211.00	79.20	650,311	88.00	722,568	0.00	0
Power Block Structure Foundation Concrete	CY	10,264.00	79.20	812,909	88.00	903,232	0.00	0
Power Block Elevated Slabs	CY	2,053.00	79.20	162,598	88.00	180,664	0.00	. 0
HRSG Analyzer Building	CY	2,053.00	79.20	162,598	88.00	180,664	0.00	0
HRSG DCS Building	CY	2,258.00	79.20	178,834	88.00	198,704	0.00	0
				3,227,694		2,185,832		537,137
Open Cooling Water System								
OCW System 2" & < - Pipe	TN	1.15	268.40	308	0.00	o	120.00	138
OCW System 2 1/2" & > - Pipe	TN	140.25	201.30	28,232	0.00	o	120.00	16,830
OCW Duplex Basket Strainers	TN	1.02	201.30	205	0.00	o	120.00	122
Open Cooling Water Pumps	TN	80.24	201.30	16,152	0.00	0	120.00	9,629
Open Cooling Water Booster Pumps	TN	16.66	201.30	3,355	0.00	0	120.00	2,000
				48,252		0		28,719
Pond Water System								
Pond Water System 2" & < - Pipe	TN	0.84	268.40	226	0.00	0	120.00	101
Pond Water System 2 1/2" & > - Pipe	TN	10.41	201.30	2,096	0.00	0	120.00	1,250

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			Removal	I	Disposal		Salvage	
		Total	Cost per	Tota	Cost per	Total	Value per	Tota
Removal, Dsiposal & Salvage	Unit of	Units of	Unit of	Remova	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	Measure	Measure	Cost	Measure	Cost	Measure	Value
Fond Water Booster Pumps	TN	11.11	201.30	2,236	0.00	0	120.00	1,333
				4,558		0		2,684
Water Treatment System			[
Service Water System 2" & < - Pipe	TN	7 14	201.30	1.046	0.00	-		
Service Water System 2 1/2" & > - Pipe	TN	7.65	201.00	1,910	0.00	0	120.00	857
Service Water Pumps	TN	3.86	268.40	1.026	0.00	0	120.00	918
HRSG Blowdown Tank Sump	CY	272.00	79.20	1,030	0.00	0	120.00	463
Wastewater System 2" & < - Pipe	TN	3 14	268.40	21,042	0.00	23,936	0.00	0
Power Block Drainage Pipe Foundations	CY	216.09	31.69	042	0.00	0	120.00	376
Wastewater System 2 1/2" & > - Pipe	TN	397.80	201.30	0,040	88.00	19,016	0.00	0
Sump Pumps	TN	17.85	201.30	00,077	0.00	0	120.00	47,736
Miscellaneous Equipment	TN	5 10	201.00	3,593	0.00	0	120,00	2,142
Potable Water System	CY	50 37	201.30	1,027	0.00	0	120.00	612
Pipe Rack Drilled Piers - Concrete	с. СХ	4 334 65	31.00	1,590	88.00	4,433	0.00	٥
	CI	1,224.00	79.20	96,941	88.00	107,712	0.00	0
				216,021		155,096		53,104
Account 341 Totals:				3,509,860		2,350,330		622,993
Account 342: Fuel Holders, Producers and Accounted								
Gas System								
Natural Gas System 2" & < - Pipe	TN	0.00	000 40					
Gas Piping	τN	197.00	200,40	23	0.00	0	120.00	10
Natural Gas System 2 1/2* & > - Pipe	TN	40.75	200.40	50,191	0.00	0	120.00	22,440
Liquid Fuel System 2 1/2" & > - Pine	TN	40,75	201.30	9,411	0.00	0	120.00	5,610
Account 342 Totals:		03.70	201.30	12,833	0.00	<u> </u>	120.00	7,650
				72,457		0		35,710
Acount 343: Prime Movers								
HRSG Foundation	CY	2,360,32	79.20	100 007	66.00	007 (·····		
HRSG Mechanical	TN	1,143,36	152 50	174 200	00.00	207,708	0.00	0
Mechanical Finishes - Casings	TN	119.61	201 90	1/4,302	0.00	0	120.00	137,203
Modules	TN	16,924 68	152.50	24,077	0.00	0	120.00	14,353
HRSG Blowdown System 2 1/2" & > - Pipe	TN	50 40	201.30	2,581,014	0.00	0	120.00	2,030,962
Electrical & Controls	TN	99,00	268.40	10,146	0.00	0	120.00	8,048
		39.00	200.40	26,572	0.00	0	120.00	11,880

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			Removal		Disposal		Salvage	
		Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Dsiposal & Salvage	Unit of	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	Measure	Measure	Cost	Measure	Cost	Measure	Value
				3,003,108		207,708		2,200,446
Englunter System				1				
Feedwater System 2" & < - Pine	TN	8 10	268.40	2 174	0.00	0	120.00	073
Feedwater System 2 1/2" & > - Pipe	TN	157.50	201.30	31,705	0.00	0	120.00	572 18 000
HRSG HP Feedwater Pumps	TN	100.44	201.30	20 219	0.00	0	120.00	12.053
HRSG LP Feedwater Pumps	TN	100.44	201.30	20,219	0.00	, ,	120.00	12,000
IHRSG Feed Pump Foundations Concrete	CY	1,296,00	79.20	102 643	88.00	114.048	120,00	12,000
H P Feed Pumps - Insulation	CY	2,160.00	61.00	131 760	21.00	45 360	0.00	0
L P Feed Pumos - Insulation	CY	1 620 00	61.00	98 820	21.00	34 020	0.00	0
L/B Feedwater Piping - Insulation	CY	4 584 60	61.00	279 661	21.00	96.277	0.00	0
	01	1,001.00	Q 1.00	687 200	21.00	289 705	0.00	43 978
				001,200		200,100		43,570
Combustion Turbine								
Combustion Turbine Fdn Concrete	CY	4,103.46	79.20	324,994	88.00	361,104	0.00	0
Condensate Pump Casings	TN	2.04	268.40	548	0.00	0	120.00	245
Miscellaneous Mechanical Equipment Fdns < 25cy	CY	450.00	79.20	35,640	88.00	39,600	0.00	0
C.T. Skid Mounted Equipment Fdn Concrete Pads	CY	675.00	79.20	53,460	88.00	59,400	0.00	٥
C.T. Combustion Turbine	TN	1,508.00	152.50	229,970	0.00	0	120.00	180,960
C.T. Insulation	CY	231.11	61.00	14,098	21.00	4,853	0.00	0
C.T. Interconnect Pipe 2 1/2" & > - Pipe	TN	427.00	201.30	85,955	0.00	0	120.00	51,240
C.T. Interconnect Pipe 2 " & < - Pipe	TN	39.00	268.40	10,468	0.00	0	120.00	4,680
				755,132		464,958		237,125
Main Steam Suctor								
Main Steam System	TN	3 375 00	201.30	670 298	0.00		100.00	405 000
I /R Main Steem Pining - (asulation	CY	435 56	61.00	26 560	21.00	0 147	120.00	405,000
Aux Boiler System 2* & < - Pipe	TN	3.00	268.40	805	0.00	8, (4/	120.00	260
Aux Boiler System 2 1/2" & > - Pine	TN	12.00	201.30	2 4 16	0.00	0	120.00	1 440
I /R Auxiliary Boiler Pioing - Insulation	CY.	30.00	61.00	1 830	21.00	830	120.00	1,440
I /B B O P. Pining - Inculation	CY	15.00	61.00	015	21.00	215	0.00	0
100 0.0.1 . r iping - metilation	0,	10.00	01.00	711 922	21.00		0.00	
			1	11,344		10,092		406,800
Blowdown System			1					
HRSG Blowdown System 2" & Under - Pipe	TN	2.70	268.40	725	0.00	o	120,00	324
HRSG Blowdown Tanks	TN	18.96	201.30	3,817	0.00	0	120.00	2,275

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			Removal		Disposal		Salvage	
		Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Dsiposal & Salvage	Unit of	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	Measure	Measure	Cost	Measure	Cost	Measure	Value
Main Steam DrainTanks	TN	11.50	201.30	2,315	0.00	o	120.00	1,380
HRSG Blowdown Tanks - Insulation	CY	13.33	61.00	813	21.00	280	0.00	0
Steam Drain Tanks - Insulation	CY	26.67	61.00	1,627	21.00	560	0.00	0
Mechanical Finishes - Insulation	CY	200.00	61.00	12,200	21.00	4,200	0.00	0
				21,496		5,040		3,979
Steam Turbine								
Steam Turbines - Insulation	CY	80.00	61.00	4,880	21.00	1,680	0.00	0
Main Steam System 2" & < - Pipe	TN	30.60	201.30	6,160	0.00	0	120.00	3,672
Steam Turbine Base Plates	TN	100.00	152.50	15,250	0.00	0	120.00	12,000
Steam Turbine & Accessories	LT	700.00	201.30	140,910	0.00	0	120.00	\$4,000
Hydraulic Power Unit	LT	6.00	201.30	1,208	0.00	0	120.00	720
Instrument Tubing	TN	12.50	268.40	3,355	0.00	0	120.00	1,500
				171,763		1,680		101,892
<u>Condensate System</u>								
Condensate System 2" & < - Pipe	TN	7.50	268.40	2,013	0.00	o	120.00	900
Condensate System 2 1/2" & > - Pipe	TN	330.00	201.30	66,429	0.00	o	120.00	39,600
U/B Condensate Piping - Insulation	CY	133.33	61.00	8,133	21.00	2,800	0.00	0
Condenser Vacuum Pump Skid & Equip	TN	5.00	201.30	1,007	0.00	0	120.00	600
Condensate Storage Tank Fdn	CY	420.00	79,20	33,264	88.00	36,960	0.00	0
Condensate Make-Up Pumps	TN	3.00	201.30	604	0.00	0	120.00	360
HRSG Chemical Fd. System 2" & < - Pipe	TN	3.90	268.40	1,047	0.00	0	120.00	468
HRSG Chemical Feed Skids	TN	30.00	201.30	6,039	0.00	0	120.00	3,600
Lube Oil Storage Tanks	TN	13.04	201.30	2,625	0.00	0	120.00	1,565
Miscellaneous Process Tanks	TN	21.20	201.30	4,268	0.00	0	120.00	2,544
CondensateTransfer System 2" & < - Pipe	TN	7.50	268.40	2,013	0.00	0	120.00	900
CondensateTransfer System 2 1/2" & > - Pipe	TN	195.00	201.30	39,254	0.00	0	120.00	28,860
Condensate Pumps	TN	125.60	201.30	25,283	0.00	0	120.00	15,072
Condensate Transfer Pumps	TN	9.56	201.30	1,924	0.00	0	120.00	1,147
Condensate Storage Tanks	TN	4.78	201.30	962	0.00	0	120.00	574
Bulk Gas System 2" & < - Pipe	TN	21.00	268.40	5,636	0.00	0	120.00	2,520
Condensers	TN	710.50	201.30	143,024	0.00	0	2,000.00	1,421,000
Gland Steam Condensers	TN	10.00	201.30	2,013	0.00	0	120.00	1,200
Condensate Air Rem System 2" & < - Pipe	TN	4.50	268.40	1,208	0.00	0	120.00	540
Condensate Air Rem System 2 1/2" & > - Pipe	TN	12.00	201.30	2,416	0.00	0	120.00	1,440

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			Removal		Disposal		Salvage	
		Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Dsiposal & Salvage	Unit of	Units of	Unit of	Removal	Unit of	Disposai	Unit of	Salvage
Cost Worksheet	Measure	Measure	Measure	Cost	Measure	Cost	Measure	Value
				349,161		39,760		1,522,890
Circulating Water System								
Circulating Water System 2" & < - Pipe	TN	2.25	268,40	603	0.00	n	120.00	260
Circulating Water System 2 1/2" & > - Pipe	TN	4.77	201,30	960	0.00	0	120.00	209
L/B Circulating Water Piping - Insulation	CY	56.00	61.00	3.416	21.00	1 178	0.00	012
Circulating Water Pumps	TN	95.95	268,40	25.753	0.00	· · · · ·	120.00	11 514
C W Chem Tr System 2" & < - Pipe	TN	1,50	268.40	403	0.00	0	120.00	11,514
24" Diameter ICW Pipe ·	CY	88.89	303.60	26.987	88.00	7 822	0.00	180
84* Diameter ICW Pipe	CY	1,244.44	303,60	377.813	88.00	109 511	0.00	0
Concrete - Cofferdam Area	CY	0.00	31.68	0	88.00	108,001	0.00	0
66" Diameter Inground CW Pipe	CY	48.89	303.60	14.843	88.00	4 302	0.00	0
				450,777	00.00	122,812	0.00	12.536
Screen Wash System								
Intake Bar Rack & Cleaning Rake	TAL	40.00	6 00 40					
Intake Traveling Screens		10.00	268.40	2,684	0.00	0	120.00	1,200
Screen Wash Bubbler System Equipment	in Th	64.00	268.40	17,178	0.00	0	120.00	7,680
Screen Wash System 2" & < - Pine	111	2.00	268.40	537	0.00	0	120.00	240
Screen Wash System 2 1/2" & > Pine		0.18	268.40	48	0.00	0	120,00	22
Screen Wash Pumps	Th	3.20	201.30	644	0.00	0	120.00	384
	in	3.08	201.30	620	0.00	0	120.00	370
				21,711		0		9,895
HRSG Stack								
HRSG Stack Foundation Concrete	CY	2,325.00	79.20	184,140	88.00	204,600	0.00	0
Stacks	TN	1,054.00	201.30	212,170	0.00	0	120.00	126,480
Gland Steam Condenser - Insulation	CY	100.00	61.00	6,100	21.00	2,100	0.00	0
		ļ		402,410		206,700	-	126,480
Lube Oil System		Ì						
Lube Oil System - 2" & < Pipe	TN	6.00	268.40	1 610	0.00		400 00	
Lube Oil System - 2 1/2" & > Pipe	TN	10,50	201.30	2 114	0.00	U	120.00	720
Lube Oil Transfer/Return Pumps	TN	.3.00	201.30	2,114	0.00	0	120.00	1,260
S.T. Lube Oil Reservoir	TN	20.00	201.30	4 004	0.00	0	120.00	360
Turbo Lube Oil Conditioner	TN	4 00	201.30	4,020	0.00	0	120.00	2,400
		4.00	201.30	0.450	0.00	0	120.00	480
				9,109		0		5.220

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			Removal		Disposal		Salvage	
		Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Dsiposal & Salvage	Unit of	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	Measure	Measure	Cost	Measure	Cost	Measure	Value
Cranes and Hoists]
Miscellaneous Monorails & Hoists	TN	75.00	268.40	20,130	0.00	0	120.00	9,000
Combustion Turbine								
Combustion Turbine Edn Mat Concrete	CY	3,754.80	79.20	297.380	88.00	330,422	0.00	0
Condensate Pump Caings	TN	8.00	201.30	1,610	0.00	0	120.00	960
Misc. Mechanical Equipment Fdn Concrete	CY	480.00	79.20	38.016	88.00	42.240	0.00	0
CT Equipment Fdn Concrete Pads	CY	720.00	79.20	57.024	88.00	63.360	D.00	0
C.T. Combustion Turbine	TN	1,508.00	152.50	229,970	0.00	0	120.00	180.960
CT Insulation	CY	360.00	61.00	21,960	88.00	31,680	0.00	0
C.T. Interconnect Pipe 1 1/2" & >	TN	420.00	201.30	84,546	0.00	0	120.00	50,400
C.T. Interconnect Pipe 1 1/2" & <	TN	19.00	201.30	3,825	0.00	0	120.00	2,280
				734,331		467,702		234,600
Closed Cooling Water System								
Closed Cooling Water Heat Exchanger	TN	58.68	268.40	15,749	0.00	0	120.00	7,041
CCW System 2 * & < - Pipe	TN	11.03	268.40	2,962	0.00	0	120.00	1,324
CCW System 2 1/2" & > - Pipe	TN	146.04	201.30	29,398	0.00	0	120.00	17,525
Closed Cooling Water Pumps	ŤN	9.75	201.30	1,963	0.00	0	120.00	1,170
		1		50,071		0		27,060
Account 343 Totals				7,388,371		1,816,156	1	4,941,900
Account 344: Generators								
Steam Turbine Foundation Mat Concrete	CY	1,920.00	79.20	152,064	88.00	168,960	Ø.00	0
Steam Turbine Pedestal Concrete	CY	1,472.00	79.20	116,582	88.00	129,536	0.00	0
C.T. Generator	TN	1,256.00	152.50	191,540	0.00	٥	120.00	150,720
Generator Copper	TN	180.00	597.80	107,604	0.00	0	5,000.00	900,000
Generator	TN	2,000.00	152.50	305,000	0.00	0	120.00	240,000
				872,790		298,496		1,290,720
Cooling Tower								
Cooling Tower	TN	2,720.00	433.10	1,178,032	0.00	0	120.00	326,400
Reinf Conc	CY	774.65	79.20	61,352	88.00	68,169	0.00	0

			Removal		Disposal		Salvage	
		Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Dsiposal & Salvage	Unit of	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	Measure	Measure	Cost	Measure	Cost	Measure	Value
Subtotal				1,239,384		68,169		326,400
Account 344 Totals				2,112,175		366,665		1,617,120
Account 345: Accessory Electric Equipment							2	
Electrical Power Cable	TN	20.00	268,40	5,368	0.00	0	2,100.00	42,000
Electrical Control Cable	TN	10.00	268.40	2,684	0.00	0	2,100.00	21,000
Station Transformer	TN	154.00	268.40	41,334	0.00	0	120.00	18,480
CT Step-up Transformer	TN	186.24	268.40	49,987	0.00	0	120.00	22,349
Control Center-off base	TN	108.00	268.40	28,987	0.00	o	120.00	12,960
Miscellaneous Materials + 5%	TN	47.82	268.40	12,836	0.00	0	120.00	5,739
				141,196		0		122,528
Excitation Equipment								
Generator Excitation Power Transformers	TN	125.00	201.30	33,550	0.00	Ø	120.00	15,000
Transformer Copper	TN	130.00	451.40	58,682	0.00	0	5,000.00	650,000
Instrumentation	TN	30.00	268.40	2,376	0.00	0	120,00	3,600
				94,608		0		668,600
<u>Electrical Equipment</u>	01	200.00	70.00	15 0 10		(7.000		
Leistersethie Rever Super-	Cr	200.001	(9.20	15,840	66.00	17,600	0.00	0
Station Battery Charges & Danala	Th	1.00	200,40	208	0,00	0	120.00	120
Grounding & Cathodia Bretaction	10	12.00	200.40	3,221	0.00	U	120,00	1,440
Grounding & Califold Protection		2/5.00	200.40	73,010	0.00	0	120.00	33,000
Lightning Britation		11.07	200.40	2,971	0.00	U	120.00	1,328
Embedded Conduite Equadations		5.00	200.40	1,342	0.00	U 80 570	120.00	600
Power & Control Conduits		228.08	269.40	30,320	0.00	62,578	100.00	00.470
Cable Trav	TN	466 40	208.40	122 521	0.00	0	120.00	39,478
Concrete Duct Banke	CY	1 000 00	200,40	79,200	99.00	U 88.000	120.00	ə4,179 n
	CY	100.00	31 69	73,200	88.00	00,000	0.00	U
leonhase Rus		100.00	388.40	3,100	0.00	0,000	120.00	10,800
Main Control Boards		0.05	268.40	24,150	0.00	0	120.00	10,800
Miscellaneous Relay Panels	TN	0.01	268.40	4	0.00	0	120.00	2
Instaiment Backs	TN	32.40	200.40	8 606	0.00	0	120,00	0
Annunciators	TN	0.01	200.40	9,9901	0.00	0	120.00	3,888
Miscellaneous Power Transformers	TN	55.00	268.40	14 700	0.00	0	120.00	1
Lightning Protection Embedded Conduits Foundations Power & Control Conduits Cable Tray Concrete Duct Banks Electrical Manholes Isophase Bus Main Control Boards Miscellaneous Relay Panels Instrument Racks Annunciators Miscellaneous Power Transformers	TN CY TN TN CY CY TN TN TN TN TN TN	5.00 711.11 328.98 456.49 1,000.00 100.00 90.00 0.01 .0.00 32.40 0.01 55.00	268.40 79.20 268.40 268.40 79.20 31.68 268.40 268.40 268.40 268.40 268.40 268.40	2,971 1,342 56,320 88,298 122,521 79,200 3,168 24,156 4 0 8,696 1 114,762	0.00 88.00 0.00 88.00 88.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0 62,578 0 88,000 8,800 0 0 0 0 0 0 0 0 0 0 0 0	120.00 120.00 120.00 120.00 0.00 120.00 120.00 120.00 120.00 120.00 120.00 120.00	1,328 600 0 39,478 54,779 0 10,800 2 0 3,888 1 6,600

			Removal		Disposal		Salvage	
		Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Dsiposal & Salvage	Unit of	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	Measure	Measure	Cost	Measure	Cost	Measure	Value
208/120V AC Distribution Panels	TN	0.00	268.40	0	0.00	0	120.00	0
Load Centers	TN	15.00	268.40	4,026	0.00	0	120.00	1,800
Motor Control Centers	TN	85,00	268.40	22,814	0.00	0	120.00	10,200
Distribution Panels	TN	0.00	268.40	٥	0.00	0	120.00	a
Power Cable - 8KV	TN	181.94	732.00	133,179	0.00	0	2,100.00	382,072
Power Cable - Medium Voltage	TN	91.26	732.00	66,799	0.00	0	2,100.00	191,637
Electrical Switchgear Foundation Concrete	CY	1,234.80	79.20	97,796	88.00	108,662	0.00	C
Non-Seg Bus	TN	35.56	268.40	9,544	0.00	0	120.00	4,267
4.16 KV Switchgear	TN	15.00	268.40	4,026	0.00	0	120.00	1,800
Control Cable	TN	48.25	732.00	35,318	0.00	0	2,100.00	101,322
Instrumentation Cable	TN	19.70	732.00	14,419	0.00	0	2,100.00	41,367
Distributed Control System	TN	10.00	268.40	2,684	0.00	0	120.00	1,200
				885,185		285,640		887,701
Account 345 Totals				1,120,989		285,640		1,678,828
Account 346: Miscellaneous Plant Equipment								
Compressed Air Piping	TN	30.08	268.40	8,075	0.00	0	120.00	3,610
Instrument Air System 2" & < Pipe	TN	0.41	268.40	109	0.00	0	120.00	49
Service Air System 2 " & < Pipe	TN	7.98	268.40	2,142	0.00	o	120.00	958
Instrument Air System 2 1/2" & > Pipe	TN	4.38	268,40	1,176	0.00	0	120.00	526
Service Air System 2 1/2" & > Pipe	TN	5.48	268.40	1,469	0.00	0	120.00	. 657
Instrument Air Compressors, Rec, & Dryers	TN	27.18	268.40	7,295	0.00	o	120.00	3,262
Plant Communications & Phones	TN	6.00	268.40	1,610	0.00	0	120.00	720
Heat Tracing	TN	3.75	268.40	1,007	0.00	0	120.00	450
Fire Protection/Detection Equipment	TN	7,50	268.40	2,013	0.00	0	120.00	900
Miscellaneous Electrical Items	ŤN	0.00	268.40	0	0.00	0	120.00	C
Account 346 Totals				24,897		0		11,131
Common, Units 1 & 2 Totals				14,228,748		4,818,791		8,907,683
West Count Energy Center Unit 3					1			
Account 341: Structures and Improvements								
Lighting and Fire Protection Systems								
Yard Lighting	TN	4.13	433.10	1,787	0.00	0	120.00	495

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			Removal		Disposal		Salvane	
		Total	Cost per	Total	Cost per	Total	Value ner	Toto
Removal, Dsiposal & Salvage	Unit of	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvas
Cost Worksheet	Measure	Measure	Measure	Cost	Measure	Cost	Measure	Value
Plant Lighting	TN	1.50	433.10	650	0.00	0	120.00	
Fire Protection System Foundation	CY	39.75	79.20	3,148	88.00	3 498	0.00	100
Sanitary Sewer Piping Foundations	CY	13.67	79.20	1,082	88.00	1,203	0.00	ŭ
				6,667	-	4,701	- 0.00	675
Power Block								
Power Block - Structural Steel	TN	887.40	201.30	178 634	0.00		100.00	
Base Plates	TN	68.00	201.30	13 688	0.00		120.00	106,488
Power Block - Handrail, Toeblock, Misc.	TN	8.50	433.10	3 681	0.00	0	120.00	8,160
Power Block - Decking	TN	510.00	433 10	220 881	0.00	0	120.00	1,020
Power Block - Ladders, Stairs & Platforms	ŤN	50.00	433.10	21 655	0.00	0	120.00	61,200
HRSG Structural/Ductwork	TN	714.17	268.40	191 683	0.00	0	120.00	6,000
Power Block Grade Slab Concrete	CY	2,720.00	79.20	215 424	88.00	200.000	120.00	85,700
Power Block Structure Foundation Concrete	СҮ	3.400.00	79.20	269,280	89.00	239,360	0.00	0
Power Block Elevated Slabs	CY	680.00	79.20	53,856	88.00	299,200	0.00	0
HRSG Analyzer Building	CY	680.00	79.20	53,856	88.00	59,840	0.00	0
HRSG DCS Building	CY	748.00	79.20	59 242	88.00	59,640	0.00	0
				1,281,880	- 00.00	724,064	0.00 _	268,568
Open Cooling Water System				l l l l l l l l l l l l l l l l l l l				
OCW System 2" & < - Pipe	TN	0.57	268 40	154	0.00			
OCW System 2 1/2" & > - Pipe	TN	70.13	201.30	14 116	0.00	0	120.00	69
OCW Duplex Basket Strainers	TN	0.51	201.00	102	0.00	0	120.00	8,415
Open Cooling Water Pumps	TN	40 12	201.30	9.076	0.00	0	120.00	61
Open Cooling Water Booster Pumps	TN	8 33	201.30	1 877	0.00	0	120.00	4,814
		0.00	201.00	24,126	0.00	0	120.00	1,000
Pand Water System								1,000
Pond Water System 2" & < - Pine	TN		000 40					
Pond Water System 2 1/2" & > _ Pine	TN	0.42	268.40	113	0.00	0	120.00	50
Pond Water Booster Pumps	Th	5.21	201,30	1,048	0.00	0	120.00	625
	111	5.55	201.30	1,118	0.00	0	120.00	667
				2,279		0		1,342
Water Treatment System								
Service Water System 2" & < - Pipe	TN	3.57	201.30	958	0.00	o	120.00	428

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			Removal	ĺ	Disposal		Salvage	
		Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Dsiposal & Salvage	Unit of	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	Measure	Measure	Cost	Measure	Cost	Measure	Value
Service Water System 2 1/2" & > - Pipe	TN	3.83	201.30	303	0.00	0	120.00	459
Service Water Pumps	TN	1.93	268.40	518	0.00	0	120.00	232
HRSG Blowdown Tank Sump	CY	136.00	79.20	10,771	88.00	11,968	0.00	0
Wastewater System 2" & < - Pipe	TN	1.57	268.40	421	0.00	0	120.00	188
Power Block Drainage Pipe Foundations	CY	216.09	31.68	6,846	88.00	19,016	0.00	0
Wastewater System 2 1/2" & > - Pipe	TN	198.90	201.30	40,039	0.00	0	120.00	23,868
Sump Pumps	TN	8.93	201.30	1,797	0.00	0	120.00	1,071
Miscellaneous Equipment	TN	2.55	201.30	513	0.00	0	120.00	306
Potable Water System	CY	25.19	31.68	798	88.00	2,216	0.00	σ
Pipe Rack Drilled Piers - Concrete	CY	612.00	79.20	48,470	88.00	53,856	0.00	0
				111,434		87,056		26,552
Account 341 Totais:				1,426,386		815,821		311,497
Account 342: Fuel Holders, Producers and Accessories								
Gas System								
Natural Gas System 2" & < - Pipe	TN	0.04	268.40	11	0.00	٥	120.00	5
Gas Piping	TN	93.50	268.40	25,095	0.00	0	120.00	11,220
Natural Gas System 2 1/2" & > - Pipe	TN	23.38	201.30	4,705	0.00	0	120.00	2,805
Liquid Fuel System 2 1/2" & > - Pipe	TN	31.88	201.30	6,418	0.00	0	120.00	3,825
Account 342 Totais:				36,229		0		17,855
HDDC Foundation		001.10	70.00			2 0		-
	CY TH	824.16	79.20	65,273	88.00	72,526	0.00	0
		539.92	152,50	82,338	0.00	D	120.00	64,790
mechanical Finishes - Casings		56.48	201.30	11,370	0.00	0	120.00	6,778
	IN	7,992.21	152.50	1,218,812	0.00	0	120.00	959,065
HRSG Blowdown System 2 1/2" & > - Pipe		23.80	201.30	4,791	0.00	0	120.00	2,856
Lectrical & Controls	TN	46.75	268.40	12,548	0.00	0	120.00	5,610
				1,395,132		72,526		1,039,100
Feedwater System								
Feedwater System 2" & < - Pipe	TN	3.83	268.40	1,027	0.00	0	120.00	459
Feedwater System 2 1/2" & > - Pipe	TN	74.38	201.30	14,972	0,00	. 0	120.00	8,925

066'I		5,520		847,01				
0	00'0	2,100	21.00	001,8	00.18	00.001	KD CA	noiteiuan - sertainia leainera
0	00.0	280	00.12	E18	00.18	ee.et	CA.	Steam Drsin Tanks - Insulation
0	00.0	140	00.12	207	00.18	29'9'	CA	HRSG Blowdown Tanks - Insulation
069	120.00	0	0.00	291'1	501.30	S7.8	NL	sinsTriend meets meM
861,1	120.00	0	00'0	806,1	201.30	84.9	NL	syinsT nwobwold D29H
291	120.00	o	00.0	362	268.40	1.35	NL	Pipe Blowdown System 2" & Under - Pipe
[{		metave nwobwola
203,400	<u> </u> -	910,8		196'998		Į		
0	00'0	831	00.12	428	00.18	09.7	KD CK	L/B B.O.A '9.0.5 BL
0	0.00	315	21.00	916	00.18	00.21	KO (notisiuan - gniqi ⁻ TisilisuA 8⊔
027	120.00	0	0.00	802.1	201.30	00.8	NL	eqi9 - < & "S\t S metert System
081	120.00	0	0.00	E04	04.882	1'20	NL	eqi9 - > 8 "S the state of the
0.	0.00	£73,4	00.12	13'584	00.18	87.712	KO	noitsluzni - gniqi9 mest2 nisM 8/1
202,500	120.00	0	0.00	1469,6EE	201.30	03.789,1	NL	Asin Steam System 2 1/2" & > Pipe
				[<u>mateve meste nieM</u>
700'011		014/207		0001110				
C99 811		BLF CEC		999 228				
070'07	00.021	0	000	PEC 9	265 40	09.01.3	NL	Ser : Andersonnert Pipe 2 * & < - Pipe
0.00 30	00.0	17+*7	00.12	BLO CV	06 100	00'011	NI.	Pine 2 1/2
084'06	00.021	0	0010	C08'+U	00 19	93.211	×3	
10	00.0	001'67	00.00	300 11	09 691	00 192		
ő	00.0	002'61	00.88	070'/1	02.8/	09 200	70	
221	00.021	0	00.0	±17	06 02	70.1	AJ NI	Contensate Mootarisel Equipment Edge < 35ev
0	00.0	Z99'08L	00.88	/6t/Z9L	07'6/	67.160,2	10	
-			0000	207 007	00 02		AU	
l		ļ		ļ		1		
797,02		144'825		341'236				
σ	00.0	861,84	51.00	139,830	00.18	06.292,2	۲D	noitsiusni - gniqi9 naisembean 8/1
0	00.0	010,71	00.12	014'64	00.19	00.018	۲D	L P Feed Pumps - insulation
0	00.0	55,680	21.00	65,880	00.18	00.080,1	۲D	H P Feed Pumps - Insulation
a	00.0	420,TB	00.88	27:322	05.87	00.848	۲D	HRSG Feed Pump Foudations Concrete
Z69'9	120.00	0	00.0	842,9	501.30	64.74	NL	HRSG LP Feedwater Pumps
Z69' S	120.00	0	00,0	842,6	201.30	E4.74	NL	HRSC HP Feedwater Pumps
PulsV	Measure	tsoD	Measure	1200	ensee Measure	Measure	Measure	Cost Morksheet
Salvage	Jo JinU	lssoqaiQ	Unit of	Removal	to tinU	To stinU	fo tinU	Speviel & Salvage Removal Salvage
letoT	Value per	listoT	neq faoD	letoT	Cost per	lefoT		
	apeviez		lseoqalQ		[swomag			
		1						

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1			Removal		Disposal		Salvage	
		Total	Cost per	Total	Cost per	Total	Value per	Tota
Removal, Dsiposal & Salvage	Unit of	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	Measure	Measure	Cost	Measure	Cost	Measure	Value
Steam Turbine								
Steam Turbines - Insulation	CY	40.00	61.00	2,440	21.00	840	0.00	C
Main Steam System 2" & < - Pipe	TN	15.30	201.30	3,080	0.00	0	120.00	1,836
Steam Turbine Base Plates	TN	50.00	152.50	7,625	0.00	0	120.00	6,000
Steam Turbine & Accessories	LT	350.00	201,30	70,455	0.00	0	120.00	42,000
Hydraulic Power Unit	LT	3.00	201.30	604	0.00	0	120,00	360
Instrument Tubing	TN	6.25	268.40	1,678	0.00	0	120.00	750
				85, <i>8</i> 81		840		50,946
Condensate System								
Condensate System 2" & < - Pipe	TN	3.75	268.40	1,007	0.00	0	120.00	450
Condensate System 2 1/2" & > - Pipe	TN	165.00	201.30	33,215	0.00	0	120.00	19,800
L/B Condensate Piping - Insulation	CY	66.67	61.00	4,067	21.00	1,400	0.00	0
Condenser Vacuum Pump Skid & Equip	TN	2.50	201,30	503	0.00	o	120.00	300
Condensate Storage Tank Fdn	CY	210.00	79.20	16,632	88.00	18,480	0.00	0
Condensate Make-Up Pumps	TN	1.50	201.30	302	0.00	o	120.00	180
HRSG Chemical Fd. System 2" & < - Pipe	TN	1.95	268.40	523	0.00	0	120.00	234
HRSG Chemical Feed Skids	TN	15.00	201.30	3,020	0.00	0	120.00	1,800
Lube Oil Storage Tanks	TN	6.52	201,30	1,312	0.00	0	120.00	782
Miscellaneous Process Tanks	TN	10.60	201.30	2,134	0.00	0	120.00	1,272
CondensateTransfer System 2" & < - Pipe	TN	3.75	268.40	1,007	0.00	o	120.00	450
CondensateTransfer System 2 1/2" & > - Pipe	TN	97.50	201.30	19,627	0.00	o	120.00	11,700
Condensate Pumps	TN	62.80	201.30	12,642	0.00	0	120.00	7,536
Condensate Transfer Pumps	TN	⁻ 4.78	201.30	962	0.00	0	120.00	574
Condensate Storage Tanks	TN	2.39	201.30	481	0.00	0	120.00	287
Bulk Gas System 2" & < - Pipe	TN	10.50	268,40	2,818	0.00	0	120.00	1,260
Condensers	TN	332.50	201.30	66,932	0.00	0	2,000.00	665,000
Gland Steam Condensers	TN	5.00	201.30	1,007	0.00	0	120.00	600
Condensate Air Rem System 2" & < - Pipe	TN	2.25	268.40	604	0.00	0	120.00	270
Condensate Air Rem System 2 1/2" & > - Pipe	TN	6.00	201.30	1,208	0.00	oi	120.00	720
				170,001		19,880		713,215
Circulation Water System								
Circulating Water System 2" & < - Pine	TN	1 1 2	268 40	301	0.00		120.00	105
Circulating Water System 2.1/2" & > _ Dine	TN	2 20	200,40	490	0.00		120.00	135
Concurrently water system 2 1/2 or 2 - Fipe	104	2.39	201.00	400	0.00	U I	120.00	286

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			Removal		Disposal		Salvage	
		Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Dsiposal & Salvage	Unit of	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	Measure	Measure	Cost	Measure	Cost	Measure	Value
L/B Circulating Water Piping - Insulation	CY	28.00	61.00	1,708	21.00	588	0.00	
Circulating Water Pumps	TN	47.98	268.40	12,876	0.00	0	120.00	5,757
C W Chem Tr System 2" & < - Pipe	TN	0.75	268.40	201	0.00	0	120.00	90
24" Diameter ICW Pipe	CY	44.44	303.60	13,493	88.00	3,911	0.00	٥
84" Diameter ICW Pipe	CY	622.22	303.60	188,907	88.00	54,756	0.00	0
Concrete - Cofferdam Area	CY	350.00	31.68	11,088	88.00	30,800	0.00	0
66* Diameter Inground CW Pipe	CY	24.44	303.60	7,421	88.00	2,151	0.00	0
				236,477		92,206		6,268
Screen Wash System								
Intake Bar Rack & Cleaning Rake	TN	5.00	268.40	1,342	p.00	0	120.00	600
Intake Traveling Screens	TN	32.00	268.40	8,589	0.00	0	120.00	3,840
Screen Wash Bubbler System Equipment	TN	1.00	268.40	268	0.00	D	120.00	120
Screen Wash System 2" & < - Pipe	TN	0.09	268.40	24	0.00	0	120.00	11
Screen Wash System 2 1/2" & > - Pipe	TN	1.60	201.30	322	0.00	D	120.00	192
Screen Wash Pumps	TN	1.54	201.30	310	0.00	0	120.00	185
ł				10,855		0		4,948
HRSG Stack					<u>n</u>			
HRSG Stack Foundation Concrete	CY	1,162.50	79.20	92,070	88.00	102,300	0.00	0
Stacks	TN	527.00	201.30	106,085	0.00	0	120.00	63,240
Gland Steam Condenser - Insulation	CY	50.00	61.00	3,050	21.00	1,050	0.00	. 0
				201,205		103,350		63,240
Lube Oil System								
Lube Oil System - 2" & < Pipe	TN	3,00	268.40	805	0.00	0	120.00	360
Lube Oil System - 2 1/2" & > Pipe	TN	5.25	201.30	1,057	0.00	0	120.00	630
Lube Oil Transfer/Return Pumps	TN	1.50	201.30	302	0.00	0	120.00	180
S.T. Lube Oil Reservoir	TN	10.00	201.30	2,013	0.00	0	120.00	1.200
Turbo Lube Oil Conditioner	. TN	2.00	201.30	403	0.00	0	120.00	240
				4,580		0		2,610
Cranes and Hoists								
Miscellaneous Monorails & Holsts	ŤN	37.50	268.40	10,065	0.00	o	120.00	4,500

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			Removal	I	Disposal		Salvage	
		Total	Cost per	Total	Cost per	Tota	Value per	Tota
Removal, Dsiposal & Salvage	Unit of	Units of	Unit of	Removal	Unit of	Disposa	Unit of	Salvage
Cost Worksheet	Measure	Measure	Measure	Cost	Measure	Cos	t Measure	Value
Combustion Turbine							1	
Combustion Turbine Fdn Mat Concrete	CY	1,877.40	79.20	148,690	88.00	165,211	0.00	0
Condensate Pump Caings	TN	4.00	201.30	805	0.00		120.00	490
Misc. Mechanical Equipment Fdn Concrete	CY	240.00	79.20	19,008	88.00	21.120	0.00	400
CT Equipment Fdn Concrete Pads	CY	360.00	79.20	28,512	88.00	31,680	0.00	0
C.T. 8 Combustion Turbine	TN	754.00	152.50	114,985	0.00	- 1,000	120.00	00.480
CT 8 Insulation	CY	180.00	61.00	10,980	88.00	15 840	0.00	90,480
C.T. Interconnect Pipe 1 1/2" & >	TN	210.00	201.30	42.273	0.00	10,040	120.00	0
C.T. Interconnect Pipe 1 1/2* & <	TN	9.50	201.30	1,912	0.00	0	120.00	25,200
1				367,166		233,851	120.00	1,140
						,		117,300
Closed Cooling Water System		1					1	-
Closed Cooling Water Heat Exchanger	TN	29.34	268.40	7,874	0.00	n	120.00	2 5 1 1
CCW System 2 " & < - Pipe	TN	5.52	268.40	1,481	0.00	0	120.00	3,3 <u>2</u> 1
CCW System 2 1/2" & > - Pipe	TN	73.02	201.30	14,699	0.00	0	120.00	002
Closed Cooling Water Pumps	TN	4.88	201.30	981	0,00	ů O	120.00	0,702
				25,035			120,00	
								13,330
Account 343 Totals				3,592,207		907,550		2 360 375
Account 314. Concenters								2,000,010
Stoom Turbing Foundation Mat Consult								
Steam Turbine Poundation Mat Concrete	CY	960.00	79.20	76,032	88.00	84,480	0.00	0
	CY	736.00	79.20	58,291	88.00	64,768	0.00	0
C.1. Generator	TN	628.00	152,50	95,770	0.00	0	120.00	75,360
Generator Copper	TN	90.00	597.80	53,802	0.00	0	5,000.00	450,000
Generator	TN	1,000.00	152.50	152,500	0.00	0	120.00	120,000
				436,395		149,248	-	645,360
Cooling Tower		ľ						
Cooling Tower	TN	1 360 00	433 10	590.016	0.00			
Reinf Conc	CY	387.32	70.70	20,076	0.00	0	120.00	163,200
Subtotal	-	557.02	15.20		88.UU -	34,085	0.00	0
				018,082		34,085		163,200
Account 344 Totals				1,056,087		183 333		000 Eco
						100,000		808,560

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			Removal		Disposal		Salvage	
		Total	Cost per	Total	Cost per	Total	Value per	Total
Removal, Dsiposal & Salvage	Unit of	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Cost Worksheet	Measure	Measure	Measure	Cost	Measure	Cost	Measure	Value
Account 345: Accessory Electric Equipment								
Electrical Power Cable	TN	10.00	268,40	2,684	0.00	0	2,100.00	21,000
	TN	5.00	268.40	1,342	0.00	0	2,100.00	10,500
	IN	77.00	268.40	20,667	0.00	0	120.00	9,240
Cr Step-up Transformer	1N	93.12	268.40	24,993	0.00	0	120.00	11,174
Control Center-off base	TN	54.00	268.40	14,494	0.00	0	120.00	6,480
Miscellaneous Materials + 5%	TN	11.96	268.40		0.00	0	120.00	1,435
				67,389		0		59,829
Excitation Equipment								
Generator Excitation Power Transformers	TN	62.50	201.30	16,775	0.00	0	120.00	7,500
I ranstormer Copper	TN	25.00	451.40	11,285	0.00	0	5,000.00	125,000
Instrumentation	TN	15.00	268.40	1,188	0.00	0	120.00	1,800
1				29,248		0		134,300
Electrical Equipment								
Electrical Equipment	CV.	400.00	70.00	7 000	00.00			
Lietorutible Daves Supply	CY	100.00	79.20	7,920	88.00	8,800	0.00	0
Station Batton: Charger & Danala	TN	0.50	200.40	134	0.00	0	120.00	60
Grounding & Cathodic Emtection		127.50	206.40	1,010	0.00	4	120.00	720
Grounding & Californic Protection	514	137.30	200.40	36,905	0.00	0	120.00	16,500
Lightning Protection	TN	5.53	200.40	1,400	0.00		120.00	664
Eighning Folection		2.00	200.40	0/1	0.00		120.00	300
Power & Control Conduits		164.40	78.20	26,160	00.00	31,289	0.00	0
	TN	338.34	200.40	44,149	0.00	U	120.00	19,739
Concrete Duct Reaks	° CY	220,24 500.00	70.20	01,201	0.00	0	120.00	27,389
	CT CY	50.00	79.20	39,000	88.00	44,000	0.00	0
		50.00	31.00	1,304	00.00	4,400	0.00	0
Main Control Boards	Th	45.00	200.40	12,078	0.00	0	120.00	5,400
Miscellageoux Palay Panala	111	0.01	200.40	2	0.00	0	120.00	1
Instrument Coeke	111	0.00	200.40	0	0.00	0	120.00	0
Answerigter	Th	16.20	268.40	4,348	0.00	0	120.00	1,944
	TN	0.00	208.40	1	0.00	0	120.00	0
Prinscenarieous Power Transformers		27.50	268.40	7,381	0,00	0	120.00	3,300
Lond Conten	+N TN	0.00	268.40	0	0.00	0	120.00	0
	IN	7.50	268.40	2,013	0.00	0	120,00	900
motor Control Centers	TN	42.50	268.40	11,407	0.00	0	120.00	5,100

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		Removal		Disposal		Salvage	
	Total	Cost per	Total	Cost per	Total	Value per	Total
Unit of	Units of	Unit of	Removal	Unit of	Disposal	Unit of	Salvage
Measure	Measure	Measure	Cost	Measure	Cost	Measure	Value
TN	0.00	268.40	0	0.00	0	120.00	c
TN	90.97	732.00	66,590	0.00	0	2,100.00	191,036
TN	45.63	732.00	33,400	0.00	0	2,100.00	95,819
CY	617.40	79.20	48,898	88,00	54,331	0.00	٥
TN	17.78	268.40	4,772	0.00	0	120.00	2,134
TN	7.50	268.40	2,013	0.00	0	120.00	900
TN	24.12	732.00	17,659	0.00	a	2,100.00	50,661
TN	9.85	732.00	7,210	0.00	0	2,100.00	20,684
TN	5.00	268.40	1,342	0.00	0	120.00	600
			442,593		142,820		443,850
			539,229		142,820		637,979
TN	15.04	268.40	4,037	0.00	0	120.00	1,805
TN	0.20	268.40	55	0.00	0	120.00	24
TN	3.99	268.40	1,071	0.00	0	120.00	479
TN	2.19	268.40	588	0.00	0	120.00	263
TN	2.74	268.40	735	0.00	0	120.00	329
TN	13.59	268.40	3,648	0.00	0	120.00	1,631
TN	3.00	268.40	805	0.00	0	120.00	360
TN	1.88	268.40	503	0.00	0	120.00	225
TN	3.75	268.40	1,007	0.00	0	120,00	450
TN	0.00	268.40	0	0.00	0	120.00	0
	· 1	·	12,448		0		5,566
			6 662 587		2 049 523		4 141 822
	Unit of Measure TN TN TN CY TN TN TN TN TN TN TN TN TN TN TN TN TN	Total Unit of Measure Units of Me2sure TN 0.00 TN 90.97 TN 45.63 CY 817.40 TN 17.78 TN 24.12 TN 9.85 TN 5.00 TN 5.00 TN 15.04 TN 2.19 TN 2.19 TN 13.59 TN 3.00 TN 1.88 TN 3.75 TN 0.00	Image: Construct set in the image:	Total Cost per Total Unit of Units of Unit of Removal Measure Measure Measure Cost TN 0.00 268.40 0 TN 90.97 732.00 66,590 TN 90.97 732.00 33,400 CY 617.40 79.20 48,898 TN 17.78 268.40 2,013 TN 7.50 268.40 2,013 TN 7.50 268.40 2,013 TN 24.12 732.00 17,659 TN 9.85 732.00 7,210 TN 5.00 268.40 1,342 TN 5.00 268.40 4037 TN 15.04 268.40 55 TN 3.99 268.40 1,071 TN 2.19 268.40 3,648 TN 3.00 268.40 3,648 TN 13.59 268.40 3,648 </td <td>Total Removal Total Cost per Total Cost per Unit of Units of Unit of Removal Unit of Measure TN 0.00 268.40 0 0.00 TN 90.97 732.00 66.590 0.00 TN 90.97 732.00 33.400 0.00 CY 617.40 79.20 48.898 88.00 TN 17.78 288.40 4.772 0.00 TN 7.50 268.40 2.013 0.00 TN 7.50 268.40 2.013 0.00 TN 7.50 268.40 1,342 0.00 TN 9.85 732.00 7,210 0.00 TN 9.85 732.00 7,210 0.00 TN 5.00 268.40 1,342 0.00 TN 15.04 268.40 4.037 0.00 TN 15.04 268.40 55 0.00</td> <td>Total Removal Disposal Unit of Units of Unit of Removal Unit of Disposal Measure Measure Cost per Total Cost per Cost per Cost per TN 0.00 268.40 0 0.00 0 0 TN 90.97 732.00 66.590 0.00 0 0 TN 45.63 732.00 33,400 0.00 0 0 CY 617.40 79.20 448,698 68.00 54,331 TN 17.78 288.40 4.772 0.00 0 TN 7.50 266.40 2.013 0.00 0 TN 24.12 732.00 7,210 0.00 0 0 TN 9.65 732.00 7,210 0.00 0 0 TN 5.00 268.40 1,342 0.00 0 0 TN 15.04 268.40 4.037 0.00<td>Total Removal Disposal Salvage Unit of Unit of Unit of Unit of Unit of Value per TN 0.00 268.40 0 0.00 0 120.00 TN 90.97 732.00 66.590 0.00 0 2,100.00 TN 90.97 732.00 33.400 0.00 0 2,100.00 CY 617.40 79.20 46.898 86.00 54.331 0.00 TN 7.78 288.40 4.772 0.00 0 120.00 TN 7.750 268.40 2.013 0.00 0 120.00 TN 7.750 268.40 2.013 0.00 0 120.00 TN 9.85 732.00 7.210 0.00 0 2,100.00 TN 9.85 732.00 7.210 0.00 0 120.00 TN 9.85 732.00 7.210 0.00 0 120.00</td></td>	Total Removal Total Cost per Total Cost per Unit of Units of Unit of Removal Unit of Measure TN 0.00 268.40 0 0.00 TN 90.97 732.00 66.590 0.00 TN 90.97 732.00 33.400 0.00 CY 617.40 79.20 48.898 88.00 TN 17.78 288.40 4.772 0.00 TN 7.50 268.40 2.013 0.00 TN 7.50 268.40 2.013 0.00 TN 7.50 268.40 1,342 0.00 TN 9.85 732.00 7,210 0.00 TN 9.85 732.00 7,210 0.00 TN 5.00 268.40 1,342 0.00 TN 15.04 268.40 4.037 0.00 TN 15.04 268.40 55 0.00	Total Removal Disposal Unit of Units of Unit of Removal Unit of Disposal Measure Measure Cost per Total Cost per Cost per Cost per TN 0.00 268.40 0 0.00 0 0 TN 90.97 732.00 66.590 0.00 0 0 TN 45.63 732.00 33,400 0.00 0 0 CY 617.40 79.20 448,698 68.00 54,331 TN 17.78 288.40 4.772 0.00 0 TN 7.50 266.40 2.013 0.00 0 TN 24.12 732.00 7,210 0.00 0 0 TN 9.65 732.00 7,210 0.00 0 0 TN 5.00 268.40 1,342 0.00 0 0 TN 15.04 268.40 4.037 0.00 <td>Total Removal Disposal Salvage Unit of Unit of Unit of Unit of Unit of Value per TN 0.00 268.40 0 0.00 0 120.00 TN 90.97 732.00 66.590 0.00 0 2,100.00 TN 90.97 732.00 33.400 0.00 0 2,100.00 CY 617.40 79.20 46.898 86.00 54.331 0.00 TN 7.78 288.40 4.772 0.00 0 120.00 TN 7.750 268.40 2.013 0.00 0 120.00 TN 7.750 268.40 2.013 0.00 0 120.00 TN 9.85 732.00 7.210 0.00 0 2,100.00 TN 9.85 732.00 7.210 0.00 0 120.00 TN 9.85 732.00 7.210 0.00 0 120.00</td>	Total Removal Disposal Salvage Unit of Unit of Unit of Unit of Unit of Value per TN 0.00 268.40 0 0.00 0 120.00 TN 90.97 732.00 66.590 0.00 0 2,100.00 TN 90.97 732.00 33.400 0.00 0 2,100.00 CY 617.40 79.20 46.898 86.00 54.331 0.00 TN 7.78 288.40 4.772 0.00 0 120.00 TN 7.750 268.40 2.013 0.00 0 120.00 TN 7.750 268.40 2.013 0.00 0 120.00 TN 9.85 732.00 7.210 0.00 0 2,100.00 TN 9.85 732.00 7.210 0.00 0 120.00 TN 9.85 732.00 7.210 0.00 0 120.00