

MECHANICAL EQUIPMENT and Labor

(1,000's)

Project Name: Barinas I Power Plant

Customer: PDVSA

Location: Barinas, Venn

Bid Due Date:

310 & 330

Date: 26-Oct-11

Quote No: T 1003

Est By: RHL-civil by Derwick-as

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Item No.	Description	Qty	Unit Price	Total Price	Unit Frt Pr	Frt Price	Hours (day)	Qty (men)	Qty (days)	Qty (mhrs)	Rate (hour)	Total Labor
45	Unloading Pump Skid	3	25,000	75,000	2,250	6,750	10	3	4	360	58	20,887
46	Metering Skid	1	155,000	155,000	4,650	4,650	10	3	4	120	58	6,962
47	Forwarding Pump Skid	1	35,000	35,000	1,050	1,050	10	3	4	120	58	6,962
48	Transfer Pump Skid	1	35,000	35,000	1,050	1,050	10	3	4	120	58	6,962
49	Fuel Heating	-	-	-	-	-	10	-	-	-	58	-
50	Filter Skid	2	75,000	150,000	4,500	9,000	10	2	4	160	58	9,283
51	Centrifuge	3	220,000	660,000	40,000	120,000	10	6	8	1,440	58	83,548
52	Injection Pump Skid	2	-	-	-	-	10	3	4	240	58	13,925
53	Raw DFO Storage Tank Cleaning	1	125,000	125,000	3,750	3,750	10	6	10	600	58	34,811
54	Day Tank 600 M Gal CS Coated	2	500,000	1,000,000	20,000	40,000	10	6	5	600	58	34,811
55												
56	Water Supply System											
57	Raw/Fire Water Storage Tank 350 M gal	1	400,000	400,000	5,000	5,000	10	4	4	160	58	9,283
58	Raw Water Supply Pumps	2	18,000	36,000	1,080	2,160	10	2	3	120	58	6,962
59	Raw Water Forwarding Pumps	2	18,000	36,000	1,080	2,160	10	2	3	120	58	6,962
60	Water Well and Pump	-	80,000	-	-	-	0	4	3	-	58	-
61	Water Treatment System											
62	Multi Media Filter Package	1	45,000	45,000	1,350	1,350	10	3	3	90	58	5,222
63	Water Injection Skid	-	-	-	-	-	10	-	-	-	58	-
64	Demin Treatment System 15 M Gal / Day	1	200,000	200,000	6,000	6,000	10	5	6	300	58	17,406
65	Demin Storage SS Tank gal	-	-	-	-	-	10	-	-	-	58	-
66	Demin water fiberglass tank	2	25,000	50,000	1,500	3,000	10	3	6	360	58	20,887
67	Demin forwarding pumps	1	25,000	25,000	750	750	10	3	4	120	58	6,962
68	Demin Filter Skid	2	60,000	120,000	3,600	7,200	10	3	4	240	58	13,925
69	Demin Water Tank, SS 300M gal	-	-	-	-	-	10	-	-	-	58	-
70												
71	Waste Water and Oil Storage and Transfer											
72	Oily Water Separator	1	55,000	55,000	4,000	4,000	10	4	3	120	58	6,962
73	Oily Waste Tank 10000 gal	1	15,000	15,000	450	450	10	2	3	60	58	3,481
74	Waste Water Tank 10000 gal	1	15,000	15,000	450	450	10	2	3	60	58	3,481
75	Waste Oil and Water forwarding pumps w/ skid	2	10,000	20,000	600	1,200	10	2	3	120	58	6,962
76	Waste Sludge Tank with forwarding pump	1	15,000	15,000	1,500	1,500	10	4	4	160	58	9,283
77	Fire Control Systems											
78	Fire Water Pump Skids (Diesel / Electric)	1	550,000	550,000	16,500	16,500	10	4	8	320	58	18,566
79	Fire Water System, valves, hydrants, monitors	1	125,000	125,000	3,750	3,750	10	6	12	720	58	41,774
80	Fire Water System, PM/CM/TA/commissioning	1	120,000	120,000	-	-						
81	Storm Water System											
82	HDPE Pipe - ()"	-	-	-	-	-	10	-	-	-	58	-
83	HDPE Pipe - ()"	-	-	-	-	-	10	-	-	-	58	-
84	Sump Pumps	-	-	-	-	-	10	-	-	-	58	-
85												
86	Other Systems											
87	Instrument Air Compressor Package, net () scfm	1	72,000	72,000	3,000	3,000	10	3	4	120	58	6,962
88	Potable Water System	-	-	-	-	-	10	-	-	-	58	-
89	Anti-Icing Ducting	-	-	-	-	-	10	-	-	-	58	-

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90	Emergency Generator	1	250,000	250,000	7,500	7,500	10	4	6	240	58	13,925
91							10					
92												
93	Total Cost			4,644		266				15,590		
94												905
										Total Manhours	15,590	
										Times Prod Factor	1.80	
											28,062	58
												1,628

95	BOP Pipe, Valves and Fittings Labor	1	900,000	900,000	27,000	27,000	10	15	130	19,500	58	1,131,372	
96	Total Cost			900		27				19,500		1,131,372	
97													
98							Total Manhours			19,500			
99							Times Prod Factor			1.80	35,100	58	2,036

Price per hour based with all labor burdens as follows:

Local Hrly Cost	30.00
Fringes	2.50
Small Tools	1.50
Labor Burden 35%	10.50
	44.50
Contr G&A 8%	3.56
Contr Mark up 15%	6.68
	54.74
	58.02
45 Hour Work Week =	
Work Week Hours Multiplier	
45	50
1.06	1.1
	1