



Monitoring
Analytics

**Summary of Results:
IMM CONE CT Compared to Brattle
Revised**

The Independent Market Monitor for PJM

July 24, 2014

CONE CT CAPITAL COST AND REVENUE REQUIREMENTS

CONE CT Capital Cost		
CONE Area1-AECO Zone	\$Million	\$/kW
2018 Brattle	\$420.000	\$1,060.61
2013 SOM Escalated to 2018	\$357.895	\$872.57
2013 SOM	\$311.036	\$758.33

Levelized Revenue Requirements						
CONE Area1-AECO Zone	Brattle 2018		2013 SOM Escalated to 2018		2013 SOM	
Levelized Revenue Requirements	\$/MW-Day	\$/MW-Year	\$/MW-Day	\$/MW-Year	\$/MW-Day	\$/MW-Year
Capital	\$369.86	\$135,000	\$301.57	\$110,074	\$262.21	\$95,708
Fixed O&M	\$41.10	\$15,000	\$44.70	\$16,316	\$38.42	\$14,023
Total	\$410.96	\$150,000	\$346.27	\$126,390	\$300.63	\$109,731

Plant Description	Brattle 2018	SOM 2013-2018
CT Model	GE Frame 7FA.05	GE Frame 7FA.05
Number of CTs	2	2
Plant Capacity (MW)	396.000	410.162
Heat Rate (BTU/kWh) (HHV)	10,309	10,241
Financial Assumptions		
Percent Equity	40%	50%
Percent Debt	60%	50%
Debt Term (Years)	20	20
Project Life (Years)	20	20
Debt Interest Rate (%)	7.0%	7.0%
Federal Tax Rate (%)	35.0%	35.0%
State Tax Rate (%)	9.0%	9.0%
Effective Tax Rate (%)	40.9%	40.9%
Target Equity IRR (%)	13.8%	12.0%
ATWACC (%)	8.00%	8.07%
General Escalation (%)	2.3%	2.5%
MACRS Depreciation (Yrs.)	15	15

CONE CT CAPITAL COST DETAIL

CONE Area 1-AECO Zone	Brattle 2018		2013 SOM Escalated to 2018		2013 SOM	
	\$000	\$/kW	\$000	\$/kW	\$000	\$/kW
Plant Proper EPC	\$317,300	\$801.26	\$283,748	\$691.80	\$246,014	\$599.80
Electric Interconnect	\$13,000	\$32.83	\$11,527	\$28.10	\$9,996	\$24.37
Gas Interconnect	\$22,600	\$57.07	\$12,114	\$29.54	\$10,505	\$25.61
Equipment Spares-Inventories	\$6,900	\$17.42	\$3,770	\$9.19	\$3,308	\$8.06
Total Direct Costs	\$359,800	\$908.59	\$311,160	\$758.63	\$269,823	\$657.85
Owners Contingency	\$6,100	\$15.40	\$7,094	\$17.29	\$6,150	\$15.00
Mobilization and Startup	\$7,200	\$18.18	\$3,597	\$8.77	\$3,179	\$7.75
Land Purchase	\$2,000	\$5.05	\$2,376	\$5.79	\$2,376	\$5.79
Development Expenses	\$15,900	\$40.15	\$6,894	\$16.81	\$6,094	\$14.86
Legal Fees	\$0	\$0.00	\$2,142	\$5.22	\$1,893	\$4.62
Financing Fees	\$9,400	\$23.74	\$3,579	\$8.73	\$3,110	\$7.58
Interest During Construction	\$19,600	\$49.49	\$18,787	\$45.80	\$16,317	\$39.78
Permits	\$0	\$0.00	\$1,482	\$3.61	\$1,310	\$3.19
Emissions Reductions Credits	\$0	\$0.00	\$783	\$1.91	\$783	\$1.91
Total Soft Costs	\$60,200	\$152.02	\$46,735	\$113.94	\$41,213	\$100.48
Total Project Cost	\$420,000	\$1,060.61	\$357,895	\$872.57	\$311,036	\$758.33

CONE CT FIRST YEAR ANNUAL FIXED O&M EXPENSES DETAIL

CONE Area 1-AECO Zone	Brattle 2018		2013 SOM Escalated to 2018		2013 SOM	
	\$000	\$/MW-Year	\$000	\$/MW-Year	\$000	\$/MW-Year
Site O&M Labor	\$1,500	\$3,788	\$1,714	\$4,179	\$1,426	\$3,476
O&M Contract Parts & Labor	\$700	\$1,768	\$665	\$1,621	\$576	\$1,405
Electric Purchases-Consumables	\$200	\$505	\$267	\$651	\$236	\$575
Training-Employee Expenses	\$0	\$0	\$132	\$322	\$117	\$285
Asset O&M Management Fee	\$400	\$1,010	\$300	\$731	\$265	\$646
Insurance	\$2,400	\$6,061	\$1,556	\$3,793	\$1,349	\$3,289
G&A	\$200	\$505	\$205	\$500	\$181	\$442
Property Taxes	\$400	\$1,010	\$882	\$2,151	\$767	\$1,869
Total	\$5,800	\$14,646	\$5,721	\$13,947	4,917	\$11,987