

Preliminary

Below are preliminary cost assumptions for various generation renewable energy technologies. Based upon the discussions of the Generation Cost Task Force that CEEEP convened, the consensus was that generation cost assumptions published by the Energy Information Administration in its recent Annual Energy Outlook were too low. CEEEP proceeded to collect other publicly available data applicable to New Jersey and the region and supplemented these with confidential and semi-confidential data provided by several stakeholders.

Table 1 provides the range of preliminary cost assumptions for generation and renewable energy technologies that CEEEP will use in its initial round of modeling\*. These assumptions were developed in the context of long-term planning and are not intended to reflect the cost or level of detail of particular projects developed by specific entities. As always, CEEEP is open to input regarding its assumptions, particularly specific, documented, and credible data that is useful in long-term energy planning.

**Table 1: NJ Generation Cost Assumptions (\$2006)**

	Overnight Installed Cost (\$/kW)		Variable Operation & Maintenance Cost (\$/MWh)		Fixed Operation & Maintenance Cost (\$/kW-yr)		Heat Rate (MMBtu/kWh)	Capacity Factors	
	Min	Max	Min	Max	Min	Max		Min	Max
Conventional Coal	\$ 1,900	\$ 2,400	\$ 2.20	\$ 2.70	\$ 18.30	\$ 22.40	9,200	determined by model	
Integrated Gas Combined Cycle (IGCC)	\$ 2,400	\$ 3,200	\$ 1.00	\$ 1.25	\$ 32.00	\$ 40.00	8,000	determined by model	
Advanced Combined Cycle	\$ 700	\$ 950	\$ 2.00	\$ 2.50	\$ 11.40	\$ 14.00	6,900	determined by model	
Gas Turbine	\$ 500	\$ 750	\$ 5.00	\$ 6.20	\$ 6.00	\$ 7.30	11,300	determined by model	
Nuclear	\$ 1,700	\$ 3,700	\$ 0.50	\$ 0.60	\$ 70.00	\$ 80.00	n/a	85%	92%
Wind									
On-shore	\$ 1,500	\$ 2,200	\$ 1.00	\$ 2.00	\$ 28.00	\$ 32.00	n/a	25%	35%
Off-shore	\$ 2,000	\$ 2,800	\$ 1.00	\$ 2.00	\$ 28.00	\$ 32.00	n/a	25%	35%
Solar	\$ 7,500	\$ 8,000	\$ -	\$ 1.00	\$ 11.00	\$ 12.00	n/a	14%	16%
Levelized Real Fixed Capital Charge Rate (%)	Min	Max							
	12%	15%							

Note: Costs in NJ are assumed to be 10% higher than rest of PJM

Improvements in technologies and cost reductions are modeled consistent with those in the Annual Energy Outlook and other References.

\* - Other cost assumptions related to Combined Heat and Power (CHP), Energy Efficiency (EE), and the Regional Greenhouse Gas Initiative (RGGI) are being finalized along with fuel price assumptions.