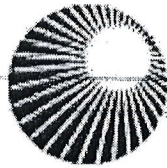


Merrimack Station Unit 2 Boiler Replacement Feasibility Study



**Public Service
of New Hampshire**

The Northeast Utilities System

PSNH Generation

Confidential

**November 2004
Project 36444**

TABLE 5-1: COST ESTIMATES

Description	(2008\$)	(2006\$)
	Option 1: 365 MW Gross - Cyclone Boiler Replcmnt/APC Addition	Option 2: 343 MW Gross - Cyclone APC Addition
PROCUREMENT		
Mechanical Procurement		
Steam Turbine - Generator	\$ -	\$ -
Boiler Island/APC Equipment	\$ 83,346,000	\$ 22,903,000
Surface Condenser & Air Removal Equipment	\$ -	\$ -
Boiler Feed Pumps	\$ -	\$ -
Condensate Pumps/Circulating Water Pumps	\$ -	\$ -
Miscellaneous Mechanical Equipment	\$ 6,215,000	\$ 695,000
Electrical & Control Procurement		
Auxiliary Transformers	\$ 350,000	\$ 250,000
Medium Voltage Metal-Clad Switchgear	\$ 1,050,000	\$ 630,000
480 V Switchgear & Transformers	\$ 830,000	\$ 440,000
Miscellaneous Electrical Equipment	\$ 674,000	\$ 500,000
Control Procurement	\$ 2,931,000	\$ 504,000
CONSTRUCTION		
Major Equipment Erection		
Steam Turbine - Generator Erection	\$ 7,500,000	\$ 7,500,000
Boiler Island/APC Equipment Erection	\$ 79,265,000	\$ 22,393,000
Furnish & Erect Packages		
Cooling Tower	\$ -	\$ -
Material Handling Systems	\$ 10,854,000	\$ 6,937,000
Chimney	\$ 6,900,000	\$ 6,100,000
Civil / Structural Construction	\$ 22,595,000	\$ 8,755,000
Mechanical Construction	\$ 35,969,000	\$ 2,973,000
Electrical Construction	\$ 16,696,000	\$ 5,934,000
PROJECT INDIRECTS		
Construction Management	\$ 10,100,000	\$ 5,050,000
Preoperational Testing, Startup, & Calibration	\$ 10,295,000	\$ 4,165,000
Miscellaneous Construction Indirects	\$ 6,337,000	\$ 2,842,000
Project Management & Engineering	\$ 23,554,000	\$ 9,814,000
Project Bonds	\$ 4,312,000	\$ 3,798,000
Escalation	\$ 33,000,000	\$ 6,323,000
Project Development	\$ 2,000,000	\$ 1,000,000
Owner Operations Personnel	\$ 2,285,000	\$ 1,143,000
Substation / Transmission Upgrades	\$ 800,000	\$ 800,000
Land	\$ -	\$ -
Permitting & License Fees	\$ 2,343,000	\$ 2,283,000
Initial Fuel Inventory	\$ -	\$ -
Miscellaneous Owner Costs	\$ 5,872,000	\$ 2,714,000
Sales Tax & Duties	\$ -	\$ -
Owner Contingency	\$ 37,608,000	12,680,000
TOTAL PROJECT COST	\$ 413,683,000	\$ 139,478,000