DE 06-097
Data Request LIBERTY-01
Dated: 06/30/2006
Q-LIB-022
CONFIDENTIAL ATTACHMENT

Merrimack Station
Unit 2 Boiler Replacement
Feasibility Study

Public Service of New Hampshire

The Northeast Utilities System

PSNH Generation

Confidential

November 2004
Project 36444

Burns & McDonnell
SINCE 1898

TABLE 5-1: COST ESTIMATES

Description	(2008$) Option 1: 365 MW Gross - Cyclone Boiler Replcmnt/APC Addition	(2006$) 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	-
Chimney	$ 6,900,000	$ 6,937,000
		$ 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**