

**New York State Office of Mental Health  
Wards Island  
Costs for Operating the Existing Power Plant, Building 122**

**Estimate of Current Operating Costs for Power Plant (Includes all buildings supplied by the Power Plant and the WWTF)**

Fuel Costs		Units	January	February	March	April	May	June	July	August	September	October	November	December	Total
Monthly Average from 2005-2008	Gallons		334,326	329,502	362,900	213,144	157,240	95,824	120,247	79,703	115,734	101,513	174,611	220,436	2,305,177
	MMBtu		47,809	47,119	51,895	30,480	22,485	13,703	17,195	11,397	16,550	14,516	24,969	31,522	329,640
	\$/MMBtu		\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88
	\$		\$472,348	\$465,534	\$512,720	\$301,138	\$222,154	\$135,383	\$169,890	\$112,607	\$163,514	\$143,422	\$246,697	\$311,440	\$3,256,847

**Notes:** 1 gallon #6 fuel oil = 143,000 Btu  
 Fuel oil unit costs obtained from the NYS Office of General Services Contract Fuel Prices for the period ending 11/27/08. OMH utilizes this mechanism to procure fuel oil.  
 Fuel oil consumption values obtained from actual invoices and updated through September 2008

**Annual Staffing Costs (Salaries based on the 2006 OMH Staffing Model, assumes fully staffed)**

Salaries	\$956,616
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**Annual Maintenance Costs (Consists of typical service contract tasks for steam boilers and the ancillary systems)**

Service contract costs	\$70,000
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\* assumes some portion of preventive/corrective maintenance can be performed by in-house staff

<b>Total Annual Operating Costs</b>	<b>\$4,283,462</b>
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**Unit Cost of Steam Production with Comparison to ConEd Rates**

**Steam Generation Utilizing Existing Power Plant**

	Units	January	February	March	April	May	June	July	August	September	October	November	December	Total
Steam Usage	MLbs	44,039	45,658	44,563	30,562	22,496	16,609	16,561	16,395	15,950	23,881	32,886	42,107	351,708
Monthly Operating Costs	\$	\$557,900	\$551,085	\$598,271	\$386,689	\$307,706	\$220,935	\$255,441	\$198,158	\$249,065	\$228,973	\$332,248	\$396,992	\$4,283,462
Monthly Stm Unit Cost	\$/MLbs	\$12.67	\$12.07	\$13.43	\$12.65	\$13.68	\$13.30	\$15.42	\$12.09	\$15.62	\$9.59	\$10.10	\$9.43	\$12.18

**Notes:** Steam consumption for WWTF obtained from a dedicated steam meter in the Power Plant, Building 122. Steam consumption for all buildings on the Wards Island campus obtained from a dedicated steam meter in the Power Plant, Building 122. The sum of the WWTF and Wards Island campus consumption is represented here.

**ConEd Steam Generation Rates - Service Class 2**

Total Steam Cost	\$	\$1,201,606	\$1,233,286	\$1,212,491	\$780,253	\$305,872	\$226,568	\$225,921	\$223,682	\$217,691	\$324,529	\$836,466	\$1,147,544	\$7,935,910
Steam Unit Cost	\$/MLbs	\$27.29	\$27.01	\$27.21	\$25.53	\$13.60	\$13.64	\$13.64	\$13.64	\$13.65	\$13.59	\$25.44	\$27.25	\$22.56

**Notes:** For consumption and rate comparison only. Assumes ConEd steam distribution infrastructure is in place for any Wards Island occupant to receive steam from ConEd.

**OMH Historical (last 25 years) Investment in Power Plant**

System

Power Plant Building	\$311,795
Boiler Components	\$3,432,780
Condensate System	\$154,179
Steam Distribution Sys.	\$11,113,783
Power Plant Disch. Sys.	\$278,036
Electric System	\$1,157,330
Fuel System	\$1,001,084
General Improvement	\$140,140
Methane System	\$98,051
Water System	\$80,000
Power Plant HVAC	\$5,500

<b>Total Investment</b>	<b>\$17,772,678</b>
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**Estimate of Future Operating Costs for Power Plant Excluding OMH Long-term Buildings (Includes the WWTF and Buildings 120-127, 64, 111)**

Fuel Costs		Units	January	February	March	April	May	June	July	August	September	October	November	December	Total	
Monthly Average from 2005-2008	Steam Consumption	MMBtu	22,272	22,634	23,251	17,919	14,553	10,980	10,700	10,566	10,678	14,415	18,131	21,267	197,365	
	Boiler Efficiency	%	80%													
	Equivalent fuel oil	MMBtu	27,840	28,292	29,063	22,399	18,191	13,725	13,376	13,207	13,347	18,018	22,664	26,584	246,706	
	Fuel oil unit cost	\$/MMBtu	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88	\$9.88
	Total Cost	\$	\$275,058	\$279,525	\$287,144	\$221,300	\$179,726	\$135,603	\$132,151	\$130,488	\$131,871	\$178,020	\$223,920	\$262,653	\$2,437,457	

**Notes:** 1 gallon #6 fuel oil = 143,000 Btu  
 Fuel oil unit costs obtained from the NYS Office of General Services Contract Fuel Prices for the period ending 11/27/08. OMH utilizes this mechanism to procure fuel oil.  
 Steam consumption for WWTF obtained from a dedicated steam meter in the Power Plant, Building 122. Steam consumption for Buildings 120-127, 64, and 111 derived from a square foot-usage based on total Wards Island consumption.

**Annual Staffing Costs (Salaries based on the 2006 OMH Staffing Model, assumes fully staffed)**

Salaries	\$956,616
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**Annual Maintenance Costs (Consists of typical service contract tasks for steam boilers and the ancillary systems)**

Service contract costs	\$70,000
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\* assumes some portion of preventive/corrective maintenance can be performed by in-house staff

<b>Total Annual Operating Costs</b>	<b>\$3,464,073</b>
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**Unit Cost of Steam Production with Comparison to ConEd Rates**

Steam Generation Utilizing Existing Power Plant

	Units	January	February	March	April	May	June	July	August	September	October	November	December	Total
Steam Usage	MLbs	22,272	22,634	23,251	17,919	14,553	10,980	10,700	10,566	10,678	14,415	18,131	21,267	197,365
Monthly Operating Costs	\$	\$360,609	\$365,076	\$372,695	\$306,851	\$265,277	\$221,154	\$217,702	\$216,039	\$217,423	\$263,571	\$309,471	\$348,205	\$3,464,073
Monthly Stm Unit Cost	\$/MLbs	\$16.19	\$16.13	\$16.03	\$17.12	\$18.23	\$20.14	\$20.35	\$20.45	\$20.36	\$18.29	\$17.07	\$16.37	\$17.55

ConEd Steam Generation Rates - Service Class 2

Total Steam Cost	\$	\$671,328	\$673,087	\$694,551	\$464,616	\$198,864	\$150,736	\$146,971	\$145,157	\$146,666	\$197,003	\$470,042	\$638,305	\$4,597,327
Steam Unit Cost	\$/MLbs	\$30.14	\$29.74	\$29.87	\$25.93	\$13.67	\$13.73	\$13.74	\$13.74	\$13.74	\$13.67	\$25.92	\$30.01	\$23.29

**Notes:** For consumption and rate comparison only. Assumes ConEd steam distribution infrastructure is in place for any Wards Island occupant to receive steam from ConEd.

**OMH Historical (last 25 years) Investment in Power Plant**

System

Power Plant Building	\$311,795
Boiler Components	\$3,432,780
Condensate System	\$154,179
Steam Distribution Sys.	\$11,113,783
Power Plant Disch. Sys.	\$278,036
Electric System	\$1,157,330
Fuel System	\$1,001,084
General Improvement	\$140,140
Methane System	\$98,051
Water System	\$80,000
Power Plant HVAC	\$5,500

<b>Total Investment</b>	<b>\$17,772,678</b>
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