

Review of the New York Power  
Authority Fixed Cost of Service for  
Southeast New York Governmental  
Customers for the Year 2007

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# Chapter 1: Introduction, Executive Summary and Findings

## *Introduction*

This report presents Science Applications International Corporation's (SAIC's) key findings and recommendations regarding the NYPA 2007 SENY Customer Fixed Cost of Service.

## *Executive Summary*

SAIC recommends that the 2007 SENY proposed Fixed Cost of Service of \$154.4 million be reduced by \$5.6 million. These reductions are associated with the Operations and Maintenance Costs associated with the Poletti Steam Station and the 500 MW Combined-Cycle Unit and allocated Shared Services Expenses.

SAIC proposes that a mechanism be established allowing the Fixed Cost of Service to increase based upon the overall level of inflation for the years 2008 and 2009. The baseline for this index would be a negotiated 2007 Fixed Cost of Service including the recommendations included in this report. SAIC feels that both the SENY Customers and NYPA would benefit from such a mechanism.

## *Specific Recommended Changes to the Fixed Cost of Service*

Table 1 summarizes the fixed cost of service proposed by NYPA, adjustments recommended by SAIC and the revised fixed cost of service.

Item	Proposed 2007 Fixed COS by NYPA	Proposed Adjustments to Fixed COS	Adjusted Fixed COS
Operations and Maintenance	\$32.5M	\$(4.0)M	\$28.5M
Shared Services	\$18.7M	\$(1.6)M	\$17.1M
Debt Service	\$89.4M	-0-	\$89.4M
Other Expenses	\$15.7M	-0-	\$15.7M
Investment and Other	\$(1.4)M	-0-	\$(1.4)M

Income			
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**Table 1 – Proposed 2007 Fixed COS, SAIC Recommended Adjustments and SAIC Recommended Fixed COS**

The findings of this report are discussed below.

***1. Findings: The Poletti Steam Unit Non-Fuel O&M Costs Are Too High and Should Be Reduced.***

The fixed O&M for the Poletti plant represents all non-fuel costs associated with the day-to-day operation of that unit. These items include such costs such as labor, contract services, supplies and other miscellaneous items.

The fixed costs for Poletti are projected to increase in 2007 4.24 percent over the final cost of service for 2006. SAIC finds this increase unreasonable. First of all, the plant is projected to be retired in February 2010. A plant facing retirement has the ability to decrease costs because items such as preventive maintenance and general upkeep are decreased. Secondly, the start-up of the Poletti 500 MW CCU unit enables NYPA to share certain costs across the units and thus attain economies of scale.

SAIC recommends the fixed costs associated with this plant be reduced by \$0.7M for 2007. This level was determined through an examination of peer electric generating units across the country. A “New York City” premium was added to these costs. The resulting analysis indicates that the Poletti Steam Unit costs are extremely high compared to peer units and the proposed budget is unreasonable.

***2. Finding: The 500 MW CCU non-Fuel O&M Costs Are Too High and Should Be Reduced***

NYPA is requesting an increase in the non-fuel O&M costs for the Poletti 500 MW CCU unit of 40.24 percent. This increase is unreasonable and SAIC recommends maintaining this cost component at 2006 levels thereby decreasing the proposed non-fuel O&M for this unit by \$3.3M.

This unit entered service one year ago and is considered a state of the art combined-cycle combustion turbine (CCCT) generation station. Given the age and technology of this plant it should have lower than average fixed O&M costs for this type of technology. In addition, this unit currently shares operating staff with the Poletti Steam Unit. This provides this unit with an operating cost advantage that should be reflected in the cost of service to the customers.

Information supplied by NYPA in information requests indicates the requested O&M increase may include non-recurring items. If this is accurate and these costs are justified they should be amortized over their useful lives.

***3. Finding: The Shared Services Expenses are Unreasonable***

The total Shared Services budget for 2007 is proposed to increase \$2.70M or 16.9 percent. SAIC finds the level of this increase unreasonable and proposes a 2007 budget for Shared Services of \$17.1M. The reduction reflects a change in the allocation of the total Shared Service Expenses.

***4. Finding: An Alternative Approach to Establishing the Fixed Cost of Service for 2008-09 Would be Advantageous to NYPA and the SENY Customers***

SAIC further suggests that a Fixed Cost of Service Review can be avoided for the years 2008 and 2009 if an alternative mechanism is enacted. This mechanism would allow controllable fixed cost of service components to escalate at the rate of inflation.

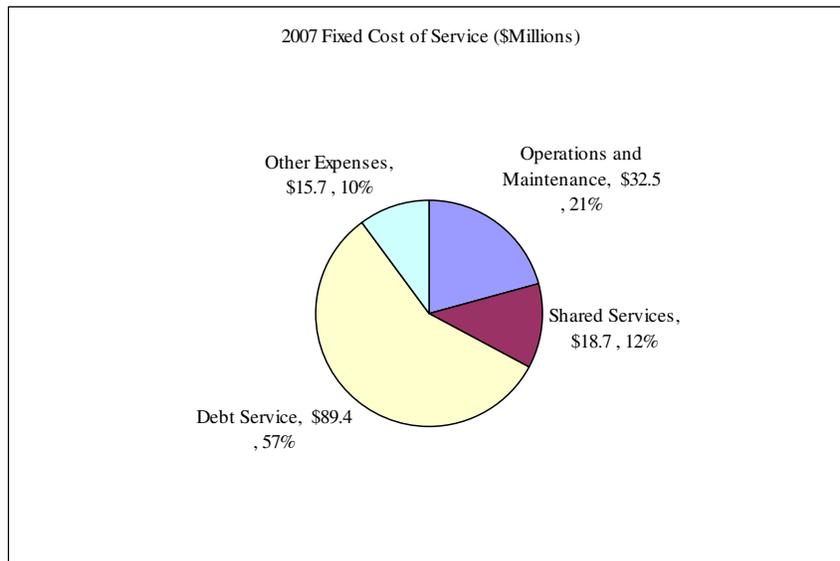
***Organization of this Report***

This report is organized as follows:

- 1) Chapter 2 provides a discussion of the components of the Fixed Cost of Service and historical changes in this portion of the cost of service;
- 2) Chapter 3 includes the analyses supporting the findings of this report;
- 3) Chapter 4 discusses the proposed Alternative Multi-year Fixed Cost Proposal.

## Chapter 2: NYPA Fixed Cost of Service for SENY Customers

The NYPA Fixed Cost of Service includes all production cost components excluding fuel for the power plants and the costs of various risk management instruments. The total fixed costs proposed by NYPA for 2007 are \$154.9M compared to the final approved costs for 2006 of \$142.6M constituting an increase of 8.6 percent increase. A summary of the fixed cost of service is illustrated in Figure 1 below:



**Figure 1 – Proposed 2007 Fixed Cost of Service by Category**

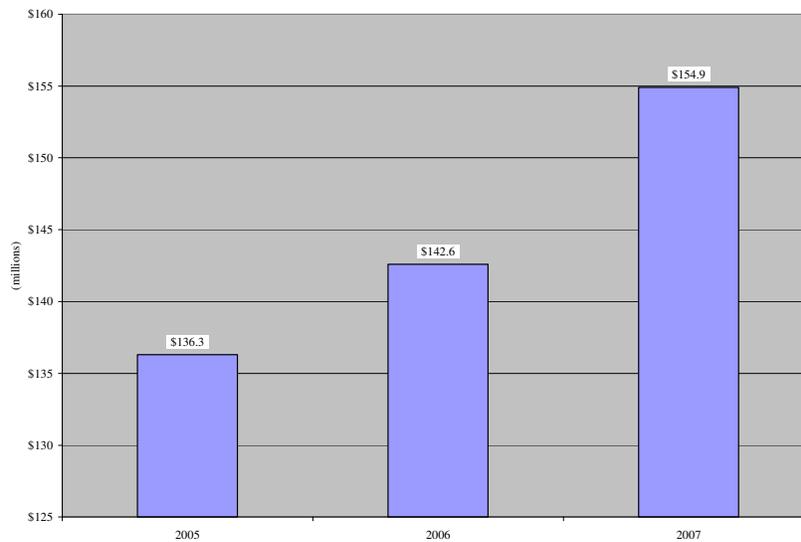
Table 2 below provides the NYPA proposed 2007 Fixed COS compared to the final 2006 Fixed COS:

Item	2006 Final Fixed COS	2007 Proposed Fixed COS	Increase - \$M	Increase - %
Operations and Maintenance	\$30.6M	\$32.5M	\$2.2M	7.3%
Shared Services	\$16.0M	\$18.7M	\$2.8M	17.4%
Debt Service	\$85.0M	\$89.4M	\$4.4M	5.2%
Other Expenses	\$12.6M	\$15.7M	\$3.1M	24.6%
Investment and Other Income	\$(1.3)M	\$(1.4)M	\$(0.1)	7.6%
<b>Total Fixed Costs</b>	<b>\$142.6M</b>	<b>\$154.9M</b>	<b>\$12.4M</b>	<b>8.7%</b>

**Table 2 – Comparison of the Final 2006 and the Proposed 2007 Fixed COS**

### *Historical Changes in the Fixed Cost of Service*

The Fixed COS has increased significantly since 2005. Figure 1 illustrates the annual levels of this component in the NYPA tariff.



**Figure 2 – Fixed Cost of Service 2005-7**

A significant increase in the Fixed COS was triggered by the 500 MW Combined-Cycle Unit (CCU). The debt service, operations and maintenance (O&M) costs and the change in the allocation of Shared Services Expenses associated with this plant significantly increased the Fixed Cost of Service allocated to the SENY Customers. However, even when adjusting for the changes in the components of the Fixed COS, the Fixed COS has been increasing at a level significantly above the level of overall inflation.

## **Chapter 3: Analysis of the Reasonableness of the Components of the Fixed Cost of Service**

Provided below are analyses and SAIC opinions regarding the specific components of the Fixed Cost of Service for 2007.

### ***Analysis of Operations and Maintenance Costs***

Operations and Maintenance (O&M) Costs for a generation unit are defined as those costs associated with the day-to-day operation of the plant. Given the structure of the annual COS from NYPA all fuel costs and the costs of hedging instruments are included in the variable COS. Costs captured in the O&M Category include: (1) The labor to operate and maintain the unit; (2) The day-to-day supplies such as chemicals and other consumables; and, (3) Outside services required for maintenance of the plant and out-sourced operations duties.

Non-fuel O&M costs are generally broken into two components: (1) fixed costs that do not vary regardless of the dispatch of the unit; (2) Variable costs that vary with the dispatch of the unit. Example of fixed costs would be the day-to-day labor required to operate and dispatch the unit on a routine basis. Examples of variable costs are water and water treatment chemicals where the costs are proportionately related to the dispatch of the plant.

SAIC made a series of data requests requesting that this information be broken down into fixed and variable components. NYPA responded that they did not account for plant cost information in this manner.

### **Analysis of 500 MW CCU Non-Fuel O&M to Peers**

#### ***Description of the 500 MW Combined-Cycle Unit***

The 500 MW CCU, which is adjacent to the Poletti Steam Unit, entered service in late 2005. The 500 MW CCU is a GE 7FA combined cycle unit with two 7FA combustion turbines feeding into

a single steam turbine. NYPA estimates that this unit will have gross generation of 20,538.5 GWH with an average heat rate of 7.287 MMBTU/MWH.

***Proposed 2007 500 MW CCU Operations and Maintenance Budget***

	Proposed 2007	Final 2006	Increase \$M	Increase %
Total Site Payroll	\$ 4.7	\$ 4.5	\$ 0.2	4.4%
Direct Purchases	\$ 1.3	\$ 1.3	\$ -	0.0%
Store Issues	\$ 0.5	\$ 0.9	\$ (0.4)	-44.4%
Fees and Dues	\$ -	\$ -	\$ -	0.0%
Office and Station Expenses	\$ 0.2	\$ 0.8	\$ (0.6)	-75.0%
Contracted Services	\$ 4.7	\$ 0.7	\$ 4.0	571.4%
Consultants	\$ 0.1	\$ -	\$ 0.1	0.0%
Other Expenses	\$ -	\$ -	\$ -	0.0%
Assessments	\$ -	\$ -	\$ -	0.0%
Total O&M	\$ 11.5	\$ 8.2	\$ 3.3	40.2%

**Table 3 – 500MW O&M Budget – Proposed 2007 versus Final 2006**

The single line item -Contracted Services- stands out in the O&M costs for the 500 MW CCU – because of the singularly high increase ( 571.43 percent) over budgeted 2006 levels. SAIC sent the following data request to NYPA about this line item:

Q. Please provided a detailed explanation for the 40.2% increase in the non-fuel O&M costs for the New CCU over the final 2006 Cost of Service. This explanation should address specific line items addressed in Figure 2.

A. The increase in the O&M for the 500 MW CCU is attributable to additional estimated contractor services required to support unit outage inspections and balance of plant work scheduled for each unit in 2007.

SAIC can interpret this response in one of two ways. First, the outside contractor services are required to finish “punch-list” items completing the unit. In this case these costs should be capitalized and recovered over the life of the facility. Second, these services are normal O&M expenses and simply did not appear in the first year’s budget.

### *Analysis of Combined-Cycle O&M Expenses*

In order to overcome the lack of data about the distinction between fixed and variable costs, SAIC compared the non-fuel O&M costs of the 500 MW CCU to peer power plants across the nation with similar operating attributes as the 500 MW CCU. The source of this data was the Platts Database. Platts is the largest supplier of data for the energy industry in the United States.

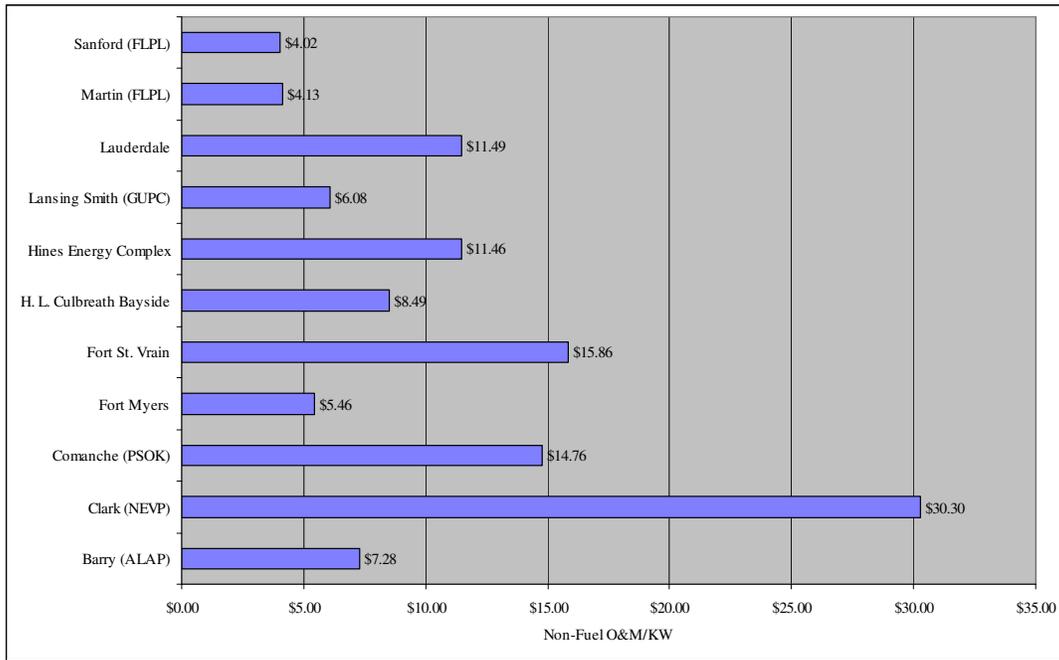
SAIC extracted data for other combined-cycle combustion turbine power plants in the United States. Eliminated from the analysis were units that met the following criteria:

- 1) Units smaller than 250MW. Plants of this type may be using a completely different technology than the 7F such as aeroderivative and would not be comparable to the 500 MW CCU;
- 2) Combined-cycle units that were operating at low capacity factors. The 500 MW CCU is anticipated to operate at a capacity factor of approximately 64 percent. Many combined cycle power plants that were constructed in the past 10 years in regions such as the Midwest have proved to have uneconomic dispatch prices compared to the local market due to high natural gas prices. These units have low capacity factors and provide data which is not comparable to a unit in regular operation such as the 500 MW CCU;
- 3) Units with unique cost and operating characteristics. An example of one such unit, the Beluga CCU, is located in Alaska. Alaska's unique cost and operating characteristics does not allow it to be compared to anything in the Lower 48 States. Furthermore, this unit utilizes aeroderivative technology which is not comparable to the 7F technology;
- 4) Units that mixed data for steam and CCU units at the same station were removed. The data is not comparable because it blends two different technologies.

Another hurdle that SAIC had to address as it evaluated the reasonableness of the fixed costs was the comparability of data. NYPA does not provide customers with data consistent with the electric power industry (FERC) standards. Therefore, comparing information on an account-by-account basis is not easily accomplished. The approach that SAIC embraced in order to overcome this issues was to compare data for all non-fuel operations and maintenance costs.

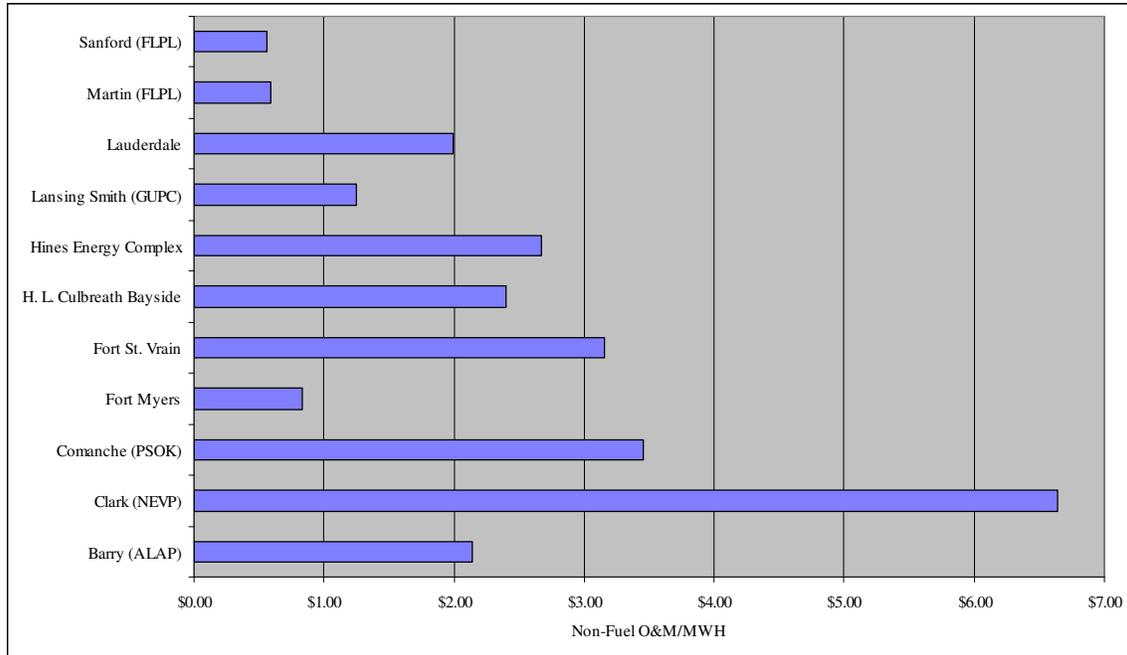
SAIC is reasonably confident that this data is comparable and does not require a detailed breakdown by account.

Figure 3 below illustrates the results of the non-fuel O&M per kilowatt analysis. SAIC identified a total of 11 combined-cycle units with comparable operating characteristics where detailed data is available. This group of plants as a whole has a weighted average non-fuel O&M cost per kilowatt of \$4.02 per kilowatt. This compares to the new 500 MW CCU average cost per kilowatt of \$23.00 per kilowatt. Appendix A provides the details of the inputs of this analysis.



**Figure 3 – Non-Fuel O&M for Combined-Cycle Combustion Turbines Stated in Dollars per Kilowatt**

SAIC also reviewed the ranking of these plants according to non-fuel O&M costs on a dollar per megawatt-hour basis. The results of this analysis are shown in Figure 4 below.



**Figure 4 - Non-Fuel O&M for Combined-Cycle Combustion Turbines Stated in Dollars per Megawatthour**

In comparison to its peer units, the 500 MW CCU unit has non-fuel O&M costs of \$23.00 per MWH. This is significantly higher than the mean value and the 75<sup>th</sup> percentile for the peer group.

***Results of Analysis***

Table 4 below summarizes the results of the analysis discussed above with comparable data projected by NYPA for the non-fuel O&M of the 500 MW CCU.

	Non-Fuel O&M per Kilowatt	Non-Fuel O&M per Megawatthour
Average of All Peer Units	\$13.10	\$2.97
75th Percentile	\$13.97	\$3.10
NYPA Proposal for 2007	\$23.00	\$4.08
NYPA Proposal for 2006	\$16.40	\$3.46

**Table 4 – Comparison of Peer Units Results, the 500 MW CCU Final 2006 O&M Costs and the Proposed 2007 O&M Costs**

SAIC recommends the following adjustments be made to the 500 MW CCU cost of service for 2007:

- 1) The level of non-fuel O&M allowed for the 500 MW CCU should be held constant at 2006 approved cost of service levels. This is \$8.2M and a reduction of \$3.3M under the proposed revenue cost of service for this unit.
- 2) If any non-recurring items are included in the 2007 cost of service beyond the \$8.2M in the 2006 approved level of expenditures, these costs may be included and amortized as long as these costs do not exceed a total cost of service for 2007 of \$8.2M;

## **Analysis of Poletti Non-Fuel O&M Costs to Peer Units**

### ***Description of the Poletti Steam Unit***

The Poletti Steam Unit entered service in 1977. It is an 875 MW steam unit that burns natural gas as its primary fuel and residual fuel oil as its secondary fuel. NYPA projects the heat rate for this unit to be 10.994 MMBTU/MWH when burning natural gas. Given the higher heat rate of this unit it provides the customers with very little or no energy value compared to NYISO Zone J prices. In other words, the cost of fuel and consumables for this plant is approximately equal to the revenues it receives from the NYISO. The primary value of this plant is the UCAP revenues it generates.

Under a stipulation agreement between the City of New York, NYPA and other parties this plant will be retired no later than February 2010.

### ***Proposed 2007 Operations and Maintenance Budget***

Table 5 below compares the proposed 2007 and final approved 2006 non-fuel O&M expenses for the Poletti Steam Unit.

	Proposed 2007	Final 2006	Increase \$M	Increase %
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Total Site Payroll	\$ 11.0	\$ 10.5	\$ 0.5	4.8%
Direct Purchases	\$ 0.6	\$ 1.0	\$ (0.4)	-40.0%
Store Issues	\$ 0.7	\$ 0.7	\$ -	0.0%
Fees and Dues	\$ 0.2	\$ 0.3	\$ (0.1)	-33.3%
Office and Station Expenses	\$ 0.2	\$ 0.3	\$ (0.1)	-33.3%
Contracted Services	\$ 4.3	\$ 3.5	\$ 0.8	22.9%
Consultants	\$ 0.2	\$ 0.2	\$ -	0.0%
Other Expenses	\$ -	\$ -	\$ -	0.0%
Assessments	\$ -	\$ -	\$ -	0.0%
Total O&M	\$ 17.2	\$ 16.5	\$ 0.7	4.2%

**Table 5 – Poletti Steam Unit O&M Budget – Proposed 2007 versus Final 2006**

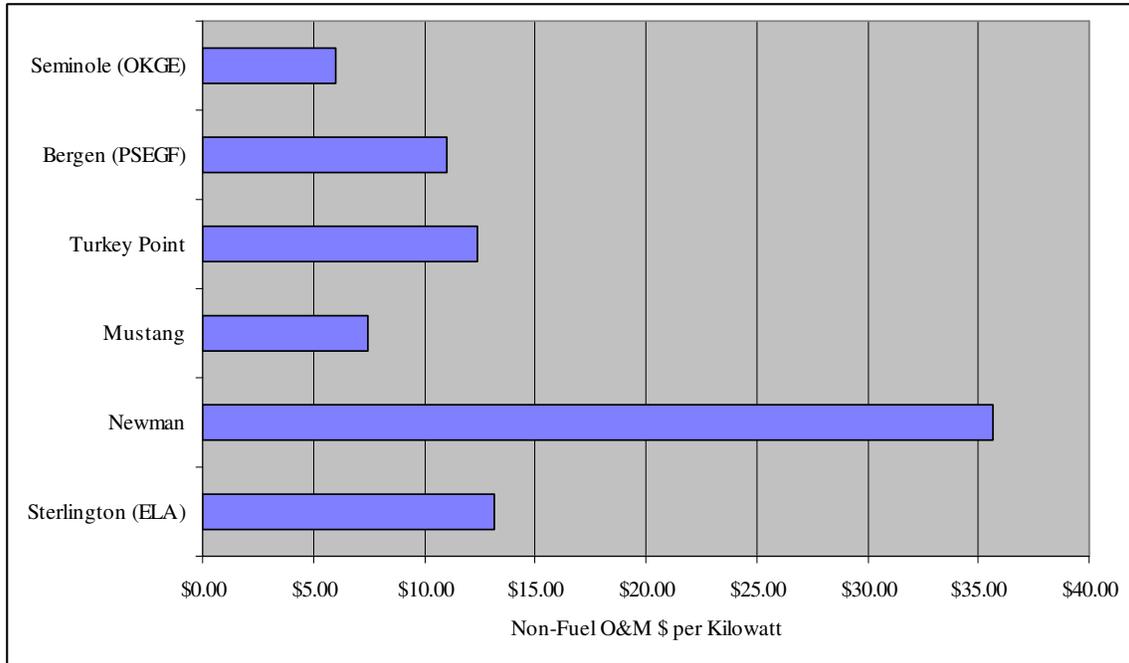
In the 2006 COS review SAIC estimated that the level of non-fuel O&M costs for this plant was too high . A small adjustment was made that has been reversed in this year’s request. In order to test the 2007 request for reasonableness SAIC has compared the O&M costs of the Poletti Steam Unit to those of similar units in manner similar to our analysis of the New 500 MW CCU

***Analysis of Peer Steam Units O&M Expenses***

In order to provide a comparable basis to evaluate the O&M expenses for the Poletti Steam Unit SAIC extracted detailed cost and operating data for other steam power plants burning natural gas as their primary fuel. The following plants were excluded from the peer group:

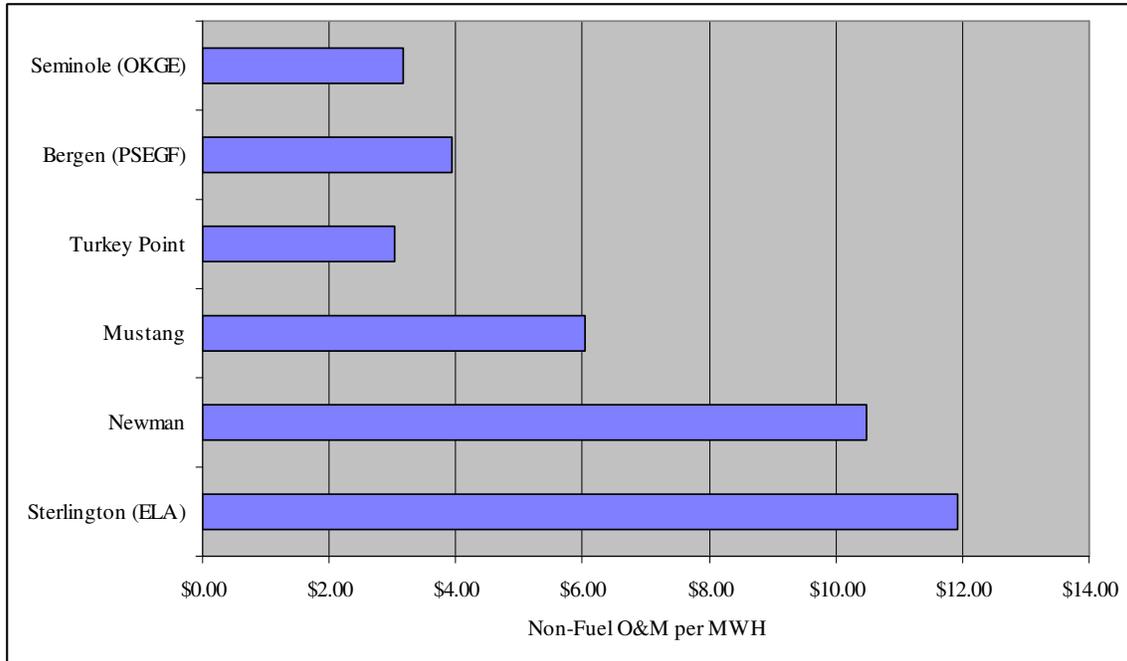
- 1) Plants burning coal because these units are fundamentally different from an engineering and operations standpoint;
- 2) Plants that had extremely low operating hours;
- 3) Plants less than 400 MW.

Figure 5 below illustrates the non-fuel O&M for peer plants on a dollars per kilowatt basis. The average for the peer group is \$11.86 per kilowatt.



**Figure 5 – Non-Fuel O&M for Steam Generation Units Stated in Dollars per Kilowatt**

Figure 6 illustrates this analysis based upon non-fuel O&M costs per Megawatthour. The average for the peer group is \$4.81 per Megawatthour and the Poletti Steam unit has a requested cost of \$9.28 per Megawatthour.



**Figure 6 - Non-Fuel O&M for Steam Generation Units Stated in Dollars per Megawatthour**

***Results of Analysis***

Table 6 below summarizes the results of SAIC’s analysis of O&M costs for the Poletti Unit.

	Non-Fuel O&M Per Kilowatt	Non-Fuel O&M per Megawatthour
Average of All Peer Units	\$12.95	\$5.25
75th Percentile	\$14.12	\$10.23
NYPA Proposal for 2007	\$19.66	\$9.28
NYPA Proposal for 2006	\$18.66	\$6.97

**Table 6 – Comparison of Peer Unit Results, the Poletti Steam Unit 2006 O&M Costs and the Proposed 2007 O&M Costs**

The Poletti Steam Unit is scheduled for a mandatory retirement date of no later than February 2010. Given the short expected lifespan of this plant SAIC feels that economies in its operations can be achieved through prudent O&M practices. Not only have these economies not been achieved, but this unit consistently is operating well above the cost of peers even when a NYC premium is applied to the O&M costs.

SAIC is recommending that the budget allowed for this unit be reduced to the approved 2006 levels. This is well above that justified by the comparison to peer units and should be sufficient to operate this plant in a safe and efficient manner.

### **Small Hydro Projects**

SAIC did not analyze the small hydro projects and is not recommending any changes to the requested COS.

### **Conclusion – Operations and Maintenance Costs**

Non-fuel operations and maintenance costs should be reduced by a total of \$4.0M compared to the requested COS.

### ***Shared Services Expenses***

The Shared Services Expense in the COS represents the allocation of the NYPA overhead costs allocated to the SENY Customers. Table 7 details the total NYPA costs associated with this component of the COS.

Item	2007	2006
Headquarters Cost	\$93.9M	\$90.4M
R&D Costs	\$8.9M	\$8.8M
Total Allocation to Capital	\$(5.7)M	\$(8.8)M

**Table 7 – Total Shared Services Expenses for NYPA**

The absolute level of Shared Services Expenses increased by 7.4 percent above the Final 2006 Cost of Service.

Shared Services Expenses are allocated to the SENY Customers based upon a labor allocation method. It is the understanding of SAIC this approach was mandated through a court decision and neither NYPA nor the SENY Customer group has the discretion to change this approach. The percentage allocation for each plant is listed in Table 8 below.

Unit	Percent Allocation – Percent
A/K	0.32%
C/J/VF	1.70%
Poletti	13.63%
New 500 MW CCU	3.64%
Total	19.29%

**Table 8 – Percent Allocation of Shared Services from Each NYPA Generation Station Serving SENY Customers**

The resulting allocation to the SENY Customers is \$18.7M. These calculations are detailed below in Table 9:

Item	2007	2006	Difference
Headquarters Budget	\$ 93.9	\$ 90.4	\$ 3.5
R&D Budget	\$ 8.9	\$ 8.8	\$ 0.1
Total Allocation to Capital	\$ (5.7)	\$ (8.8)	\$ 3.1
Total Shared Services Expenses	\$ 97.1	\$ 90.4	\$ 6.7
SENY Customer Allocation	19.29%	17.65%	1.64%
Allocated Shared Services to SENY Customers	\$ 18.7	\$ 16.0	\$ 2.8

**Table 9 – Shared Services Expenses Allocated to SENY Customers**

SAIC has estimated the number of employees associated with the 500 MW CCU and has found that number to be excessive compared to other similar units. The payroll expenses associated with that unit is \$4.7M. Based upon an average cost per employee of \$100K (based upon a detailed analysis SAIC performed on another generating unit in NYC) this equates to 47 employees. This differs from the response NYPA provided in the data request dated November 17<sup>th</sup>. In this response they stated that 11 employees were assigned to the 500 MW CCU, but other employees were shared with other facilities and payroll expenses were associated with the shared employees. Although this explanation provides an explanation for the difference in the number of directly assigned employees and the total payroll it does not justify the level of employment,

directly employed and indirectly employed, at that unit. Furthermore, in the past in order to facilitate its review of the costs of the SENY customers portfolio, SAIC requested information on the operating costs associated with the Flynn Plant in the Fixed COS review. The Flynn Plant is a combined-cycle combustion turbine operated by NYPA serving the Long Island Power Authority. NYPA did not provide this information because that plant was not included in the SENY Customer portfolio. Clearly, if a significant level of cost allocation exists between the Flynn and the SENY Customer Portfolio information on the costs should be provided in order to verify the reasonableness of costs for the SENY Customers.

SAIC estimated the number of employees associated with a 500 MW combined-cycle plant. First, SAIC estimated the number of employees at various combined-cycle units from the Platts data discussed above. Based upon the number of employees per unit for similar units, SAIC estimates that a combined-cycle combustion turbine requires 30.62 megawatts per employee as an average employment level. Scaling this result to a 500 MW unit like the one operated by NYPA this equates to a unit employment of 17.03 employees. This represents the number of employees associated with such a plant outside of NYC. Second, SAIC consulted firms that provide outside O&M services for electric generation units and received estimates of 23 employees for plants operated in New York City.

SAIC has assumed that the number of employees required at the 500 MW CCU is 25 and recalculated the Shared Services Expenses and recalculated the allocation of these costs  $((25/47) * 3.64\% = 1.94\%)$ . This reduces the total allocation of Shared Services Expenses to SENY Customers to 17.59 percent from the proposed 19.29 percent and the corresponding allocated overhead budget from \$18.7M to \$17.1M.

## **Debt Service**

SAIC is not recommending any changes in the COS associated with the debt service.

## **Investment and Other Income**

SAIC is not recommending any changes in the COS for Investment and Other Income.

## **Chapter 4: Alternative Multiyear Fixed Cost of Service**

### **Proposal**

As an alternative recommendation SAIC recommends that a Fixed COS level be established for 2007 and for the years 2008 and 2009 be escalated at the rate of inflation less a productivity adjustment. This mechanism would provide the following advantages to NYPA and the SENY Customers:

- 1) It would decrease the administrative burden associated with the annual cost of service;
- 2) It would provide budget certainty for both NYPA and the SENY Customers;
- 3) It provides NYPA with an incentive to reduce costs associated with the Fixed COS.

SAIC recognizes that certain costs are significantly out of the control of NYPA. Examples of these cost components include the debt service (which is influenced by interest rates), Post Retirements Benefits other than Pensions and certain other line items. SAIC recommends that these items be excluded from the annual inflation-adjusted calculation. This approach protects NYPA from bearing the costs of fluctuations that are beyond the control of NYPA's management.

*SAIC recommends that the adjustment mechanism be applied only to the generation unit O&M costs and shared services expenses. These items would be established for the 2007 Base Year. The starting point on these costs would be the 2007 COS adjusted for the adjustments recommended above. An additional reduction of 5% to these line items would occur to adjust the baseline costs for future economies that could be captured by NYPA. These line items would be escalated at the rate of inflation as adjusted by the GDP-IPD.*

# Appendix A

## Combined-Cycle Combustion Turbine

### Detailed Information for Plants Burning Natural Gas as the Primary Fuel

For the Year 2004

Plant Name	Demonstrated Capacity MW	Net Peak Demand MW	Plant Hours Connected	Average # of Employees	Net Generation MWh	Plant Net Energy MWh	Cap Factor %	Total Non-Fuel Oper Exp \$	Total Maintenance \$	Total Non-Fuel Costs	Total Non-Fuel Costs/KW of Demonstrated Capacity	Total Non-Fuel Cost/MWH
Barry (ALAP)	1,132	0	8,784	26	3,853,835	3,853,835	38.76	\$3,495,674	\$4,743,356	\$8,239,030	\$7.28	\$2.14
Clark (NEVP)	500	500	8,784	0	2,282,316	2,282,316	51.97	\$4,961,993	\$10,189,529	\$15,151,522	\$30.30	\$6.64
Comanche (PSOK)	273	271	7,892	21	1,164,159	1,164,159	48.55	\$1,908,214	\$2,120,692	\$4,028,906	\$14.76	\$3.46
Fort Myers	1,451	1,543	8,417	40	9,491,665	9,491,665	74.47	\$3,128,257	\$4,787,335	\$7,915,592	\$5.46	\$0.83
Fort St. Vrain	737	740	8,630	36	3,703,887	3,703,887	57.21	\$3,471,234	\$8,221,141	\$11,692,375	\$15.86	\$3.16
H. L. Culbreath Bayside	1,841	1,769	8,784	59	6,517,835	6,517,835	40.30	\$8,488,240	\$7,144,255	\$15,632,495	\$8.49	\$2.40
Hines Energy Complex	1,111	1,055	8,784	45	4,772,127	4,772,127	48.90	\$4,880,867	\$7,856,327	\$12,737,194	\$11.46	\$2.67
Lansing Smith (GUPC)	493	611	8,784	0	2,405,575	2,405,575	55.55	\$1,225,627	\$1,771,300	\$2,996,927	\$6.08	\$1.25
Lauderdale	885	920	8,711	40	5,096,882	5,096,882	65.56	\$2,617,584	\$7,553,354	\$10,170,938	\$11.49	\$2.00
Martin (FLPL)	931	989	8,428	47	6,542,559	6,542,559	80.00	\$2,000,583	\$1,848,777	\$3,849,360	\$4.13	\$0.59
Sanford (FLPL)	1,876	2,060	8,321	54	13,497,470	13,497,470	81.91	\$3,724,893	\$3,807,577	\$7,532,470	\$4.02	\$0.56
<b>Total / Average</b>	<b>11,230</b>	<b>10,458</b>	<b>8,574</b>	<b>368</b>	<b>59,328,310</b>	<b>59,328,310</b>	<b>60.31%</b>	<b>\$39,903,166</b>	<b>\$60,043,643</b>	<b>\$99,946,809</b>	<b>\$8.90</b>	<b>\$1.68</b>
								<b>Average of Peer Group - 2004\$</b>			<b>\$8.90</b>	<b>\$1.68</b>
								<b>Average of Peer Group - 2007\$</b>			<b>\$9.47</b>	<b>\$1.79</b>
								<b>75th Percentile - 2004\$</b>			<b>\$13.13</b>	<b>\$2.91</b>
								<b>75th Percentile - 2007\$</b>			<b>\$13.97</b>	<b>\$3.10</b>

Appendix B

Steam Turbine												
Detailed Information for non-Coal Burning Power Plants												
For the Year 2003												
Plant Name	Demonstrated Capacity MW	Net Peak Demand MW	Plant Hours Connected	Average # of Employees	Net		Cap Factor %	Total Non-Fuel Oper Exp \$	Total Maintenance \$	Total Non-Fuel O&M \$	\$/MWH	\$/KW
					Generation MWh	Plant Net Energy MWh						
Sterlington (ELA)	427	517	6268	36	470,377	470377	12.58	\$2,617,498	\$2,986,556	\$5,604,054	\$11.91	\$13.12
Newman	479	485	8760	77	1,629,792	1629792	38.84	\$3,895,536	\$13,176,242	\$17,071,778	\$10.47	\$35.64
Mustang	558	494	5516	24	687,006	687006	14.05	\$1,157,564	\$2,986,087	\$4,143,651	\$6.03	\$7.43
Turkey Point	792	800	7706	44	3,224,421	3224421	46.48	\$3,199,906	\$6,594,634	\$9,794,540	\$3.04	\$12.37
Bergen (PSEGF)	1,224	1,112	8093	0	3,435,896	3435896	32.04	\$4,614,114	\$8,921,197	\$13,535,311	\$3.94	\$11.06
Seminole (OKGE)	1,522	1,336	8760	77	2,882,437	2882437	21.62	\$3,609,768	\$5,541,025	\$9,150,793	\$3.17	\$6.01
Total / Average	5,002	4,744	7,517	258	12,329,929	12,329,929	28%	\$19,094,386	\$40,205,741	\$59,300,127	\$4.81	\$11.86
Average of Peer Group - 2003\$											\$4.81	\$11.86
Average of Peer Group - 2007\$											\$5.25	\$12.95
75th Percentile of Peer Group - 2003\$											\$9.36	\$12.93
75th Percentile of Peer Group - 2007\$											\$10.23	\$14.12