Report to the LIPA Finance and Audit Committee
June 24, 2020

ER&T Performance Metrics / Power Supply Hedge Update
Agenda

• Introductions
• Review of ER&T Operational Performance Metrics
• Power Supply Hedge Update
LIPA Finance and Audit Committee

Review of ER&T Operational Performance Metrics
by
Glenn Nafey, PSEG Middle Office
PSEG - Middle Office Update:
PSM / FM Operational Performance Metrics

• Middle Office tracks the operating performance of ER&T under the Power Supply Management (PSM) and Fuel Management (FM) contracts

• The overall PSM metric has 9 individual metric components. The overall FM metric has 6 individual metric components.

• Each individual metric has a performance benchmark, as well as an offset trigger at or above the benchmark and a penalty trigger at or below the benchmark. The triggers define a band of reasonableness around benchmarks, in which performance is considered within the tolerance band (metrics shown in white on following charts).

• Performance above the offset trigger (green metrics on charts) on one individual metric can partially offset performance below the penalty trigger (red metrics on charts) on another individual metric.

• ER&T is subject to an annual financial penalty if performance on the PSM metrics, and/or the FM metrics, nets out to a penalty.

• No possibility of financial bonus.

• ER&T’s overall performance on PSM and FM metrics was above target performance from the start of the contract in 2015 through 2019.
# PSM Operational Performance Metrics

<table>
<thead>
<tr>
<th>PSM</th>
<th>Description</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSM 1: Cable Effectiveness (CSC/Neptune)</td>
<td>H</td>
<td>79.0%</td>
<td>75.8%</td>
<td>79.0%</td>
</tr>
<tr>
<td>PSM 2: Critical Report Timeliness</td>
<td>H</td>
<td>99.6%</td>
<td>99.7%</td>
<td>99.8%</td>
</tr>
<tr>
<td>PSM 3: Generation Bid Accuracy</td>
<td>H</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>PSM 4: Adherence to Bidding Strategy</td>
<td>H</td>
<td>99.9%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>PSM 5: Contingent Bid Responsiveness</td>
<td>H</td>
<td>99.4%</td>
<td>98.6%</td>
<td>99.7%</td>
</tr>
<tr>
<td>PSM 6: Annual Significant Loss</td>
<td>L</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PSM 7: Load Forecasting</td>
<td>L</td>
<td>3.5%</td>
<td>3.4%</td>
<td>3.4%</td>
</tr>
<tr>
<td>PSM 8: Capacity Market ($/kW-month)</td>
<td>L</td>
<td>$0.03</td>
<td>($0.07)</td>
<td>($0.03)</td>
</tr>
<tr>
<td>PSM 9: Quarterly Satisfaction Report</td>
<td>H</td>
<td>4.3</td>
<td>4.1</td>
<td>3.9</td>
</tr>
</tbody>
</table>

## Overall PSM Metric

- **Performance above offset trigger**
- **Performance within tolerance band**
- **Performance below penalty trigger**

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1) The L/H refers to the metric score. The L means when the metric score is lower than the benchmark the better. The H means when the metric score is higher than the benchmark the better.

2) PSM 6: Cannot gain offset points. Zero is best rating. Not possible to be green.
### FM Operational Performance Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM 1: Gas Price Forecasting</td>
<td>Measures the Fuel Manager’s ability to accurately estimate the Gas Daily Settle price of natural gas.</td>
</tr>
<tr>
<td>FM 2: Gas Purchase Price</td>
<td>Measures the Fuel Manager’s ability to secure a favorable price relative to daily market activity.</td>
</tr>
<tr>
<td>FM 3: Gas Balancing Charge</td>
<td>Measures the Fuel Manager’s ability to minimize balancing penalties associated with natural gas nominations while optimizing the use of cashout gas when it is economic to do so based upon market conditions.</td>
</tr>
<tr>
<td>FM 4: Quarterly Satisfaction Report</td>
<td>Rates LIPA’s overall satisfaction with the Fuel Manager’s services based on a survey of LIPA management.</td>
</tr>
<tr>
<td>FM 5: Oil Inventory Monitoring</td>
<td>Monitors the fuel oil inventories to ensure the appropriate oil inventory levels are maintained.</td>
</tr>
<tr>
<td>FM 6: Invoice Processing</td>
<td>Measures the Fuel Manager’s ability to validate and process invoice payments on behalf of LIPA.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FM Performance Metrics</th>
<th>L/H(^{(1)})</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM 1: Gas Price Forecasting</td>
<td>L</td>
<td>Metric 9.0%</td>
<td>Benchmark 11.9%</td>
<td>Metric 7.2%</td>
</tr>
<tr>
<td>FM 2: Gas Purchase Price</td>
<td>L</td>
<td>Metric -0.1%</td>
<td>Benchmark 1.7%</td>
<td>Metric -0.1%</td>
</tr>
<tr>
<td>FM 3: Gas Balancing Charge</td>
<td>L</td>
<td>Metric 0.0%</td>
<td>Benchmark 0.25%</td>
<td>Metric 0.0%</td>
</tr>
<tr>
<td>FM 4: Quarterly Satisfaction Report</td>
<td>H</td>
<td>Metric 4.2</td>
<td>Benchmark 3.0</td>
<td>Metric 4.1</td>
</tr>
<tr>
<td>FM 5: Oil Inventory Monitoring</td>
<td>H</td>
<td>Metric 100.0%</td>
<td>Benchmark 98.0%</td>
<td>Metric 100.0%</td>
</tr>
<tr>
<td>FM 6: Invoice Processing</td>
<td>H</td>
<td>Metric 99.8%</td>
<td>Benchmark 98.0%</td>
<td>Metric 99.8%</td>
</tr>
</tbody>
</table>

**Overall FM Metric**

- **Performance above offset trigger**
- **Performance within tolerance band**
- **Performance below penalty trigger**

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LIPA Finance and Audit Committee

Power Supply Hedge Update
by
Steven Oster, PSEG ER&T
Factors Impacting Natural Gas Prices

Expectations For...
- Weather
- Gas Production Cost
- Gas Storage Inventory
- LNG Exports
- Economy
- Int’l Trade / Tariffs
- Coronavirus
Half of NYS demand is in NYC+LI compared to 38% of generation (supply). Combining this with generator fuel (cost) and transmission (ability to deliver) sets power prices across NYS. As compared to natural gas, there is a limited ability to store electricity.

Factors Impacting Power Prices – Near Term
- Weather
- Economy
- Fuel Prices
- Outages (Generation and Transmission)

Factors Impacting Power Prices – Longer Term
- Economy
- Demand (including energy efficiency; EV’s)
- Generation additions, retirements, location
- Transmission additions
- Fuel Prices
- Environmental Policies

NYISO Capacity By Fuel Type

- Oil: 12%
- Nuclear: 14%
- Gas: 42%
- Coal: 2%
- Hydro: 9%
- Wind: 4%
- Refuse: 1%
Hedge Results – Customer Price Volatility Continues To Decline

Our hedging activity has led to a continuing decline in customer’s price volatility with current volatility levels substantially below wholesale spot market results.

PSC pre 1/1/2017 adjusted up by 2.5 cents/kwh associated with transfer of capacity costs