



Metro

Metropolitan Transportation Authority

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Los Angeles, CA 90012-2952

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**FINANCE AND BUDGET COMMITTEE
APRIL 15, 2009**

SUBJECT: COMPRESSED NATURAL GAS (CNG) HEDGING

ACTION: EXTEND THE CNG HEDGING PROGRAM

RECOMMENDATION

Approve the extension of the Compressed Natural Gas (CNG) Hedging Program for an additional five years until June 30, 2015.

RATIONALE

In March 2007, the CNG hedging program was adopted in order to stabilize the rates for natural gas used as CNG to fuel our buses. Since implementing the hedging program budget variances for CNG have been minimal and mostly related to consumption of CNG in excess of budgeted volumes. Hedging increases certainty in budgeting for CNG costs, facilitating more effective utilization of budgetary resources. The original authorization of the hedging program permitted hedging of future fuel needs through June 30, 2010. Further authorization is now required to hedge fuel prices for fiscal years 2011 through 2015. See Attachment A.

The program guidelines, Attachment A, have been amended to incorporate the use of a hedge ratio to address a slight but increasing mismatch, or basis variance, in the relationship between the Gas Company's rate for its cost of gas known as the WACOG and the market rate index we use for the hedges. The current mismatch has caused us to be slightly underhedged. The ratio will accommodate a better matching of the dollars we receive under the hedge with the dollars we pay to the Gas Company. Over the past year we have observed the Gas Company's pricing to be slightly higher relative to the index and trending upward over the past several years. Use of a hedge ratio should help us better match our hedges to our payments for natural gas.

FINANCIAL IMPACT

Expenses for CNG fuel are included in each fiscal year budget in every cost center and project that uses the fuel. Since this is a multi-year program, the Chief Operations Officer will be responsible for budgeting the cost in each fiscal year budget.

Use of a hedging program to stabilize the CNG natural gas budget greatly improves budget certainty and reduces rate-related budget variances. For FY08 and the first two quarters of FY09 the hedging program has performed well, stabilizing rates close to the budgeted (hedged) rates of about \$0.90 per therm. The program achieved this level of stability during a period when equivalent market prices were extremely volatile, fluctuating from \$0.50 to \$1.32 per therm.

ALTERNATIVES CONSIDERED

Without hedging, we would be exposed to potentially volatile fluctuations in the monthly rates we pay to the Southern California Gas Company (the "Gas Company"). The Gas Company's rates fairly closely follow the fluctuations of the market. If the hedging program is not extended, the magnitude of rate-related CNG budget variances, both favorable and unfavorable, will increase.

Several other hedging products and techniques are available including use of commodity futures contracts and commodity futures options, etc. Use of these is not recommended at this time. If market conditions or objectives of the hedging program change in the future, we would evaluate these alternatives more closely and return to the Board with any recommended changes to the Hedging Policy.

BACKGROUND

In 2007, following several years of significant budget variances for CNG, both favorable and unfavorable, we retained a hedging consultant to evaluate various hedging alternatives. The consultant recommended that we establish a hedging program using "commodity swaps" to lock in a hedged cost of CNG in advance of each fiscal year. In a commodity swap, we pay a counterparty a fixed rate per therm. Simultaneously the counterparty pays us a variable rate based on an index that tracks closely with actual price charged by our gas provider. Use of the commodity swap alternative was recommended because it provides the best combination of low risk, hedge effectiveness, and low administrative burden. While commodity swaps are generally considered a low risk product for this application, there are various risks associated with all types of swaps. Attachment B provides a listing of risks associated with commodity swaps.

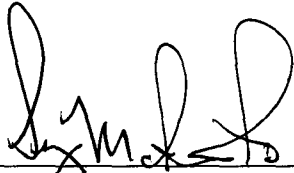
NEXT STEPS

1. Coordinate with Operations to determine future planned volumes
2. Solicit bids and make awards (up to 6 times per year)
3. Monitor program and provide reporting

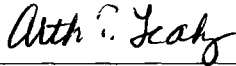
ATTACHMENTS:

- A. The Compressed Natural Gas Hedging Program
- B. Risks

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Chief Executive Officer

Attachment A

Compressed Natural Gas Hedging Program Guidelines

Expiration Date: June 30, 2015

Persons Authorized to Execute and Terminate Hedges and related documents and agreements:

- Chief Executive Officer
- Chief Administrative Services Officer
- Chief Financial Services Officer
- Assistant Treasurer

Maximum Trade Maturity:

- Not more than 30 months forward to coincide with the last business day of the fiscal year being hedged. Using 12-month strips covering only the period within the fiscal year being hedged

Hedge Ratios:

- Volume Hedge Ratio - 90% to 100% of planned therms, adjusted to account for uncertainty of volumes that will actually be used
- Rate Hedge Ratio – Adjust the hedge notional amounts (volume) to be 95% to 110% of the hedge notional amount as determined by the Volume Hedge Ratio. The Rate Hedge Ratio to be determined by staff and the hedging consultant to improve the match of the hedge relative to our actual gas costs.

Maximum Trade Amount:

- Number of therms in budget forecast times the Hedge Ratio divided by value for Frequency of Trades. At the time of each trade total therms hedged for the year may not exceed the Hedge Ratio.

Frequency of Trades:

- From 2 to 6 per year.

Timing of Trades:

- Trades will be executed in advance of the budget year. Trade dates shall have at least 30 days separation between trades.

Counterparty Credit Criteria

- | | |
|---------------------|--|
| • Aa3/AA- or better | No collateral required |
| • A3/A- or better | \$25 million limit without collateral |
| • Baa1/BBB+ | \$15 million limit without collateral |
| • Baa2/BBB | \$10 million limit without collateral |
| • Baa3/BBB- | \$2.5 million limit without collateral |

Monitoring

- Quarterly monitoring of counterparty credit ratings and collateral requirements.
- Quarterly reassessment of therms hedged to ensure the planned amount of therms for the fiscal year has not changed materially.
- Identify CPUC actions that may affect the WACOG.
- Identify any changes to Gas Company's hedging practices.

Reporting

- Quarterly performance reports to be provided to the Board.

Mid-Term Corrections and Exceptions

- Changes in the planned amount of therms more than 10% above or below the hedged amount may result in additional hedges or partial termination of the hedges to match the current plan.
- Swaps will not be terminated for the purpose of generating a profit.
- If needed as result of CPUC actions or change in Gas Company's hedging practices, terminate part or all of the hedges.

Attachment B

Risks

Any strategy to lock-in future prices carries certain risks. The important risks and mitigation steps are identified below.

1. **Counterparty Risk** – The risk that the counterparty fails to make required payments or otherwise comply with the terms of the swap agreement.

This non-performance would usually result from financial difficulty, but could also occur for physical, legal or business reasons. This risk is mitigated by establishing minimum credit quality criteria, establishing maximum credit limits, requiring collateral on counterparty downgrade and when credit limits are exceeded, limiting the term of the agreement and employing credit rating surveillance.

2. **Forward Pricing Risk** – The risk that the forward price agreed to ultimately does not match the spot rate at the point the purchase would have otherwise been made on a current basis.

3. **Political Risk** – The risk that the hedge program may be unjustly criticized.

Political risk is mitigated by ensuring that the Board and public are fully informed about the purpose, nature and expectations for the hedge program.

4. **Basis Risk** – The risk that there is a mismatch between the variable rate payment received from the swap provider and the variable cost paid to the Gas Company.

Basis risk is mitigated by selecting products or indices that have a strong correlation with the price changes of the cost to be hedged.

5. **Timing Risk** – The risk that a hedge is priced unfavorably relative to the average cost in the market over the relevant term.

This risk is mitigated by entering into a number of transactions over the term to improve the likelihood that the average price paid for the hedges will more closely approximate the average price in the market over the term.

6. **Termination Risk** – The risk that there will be a mandatory early termination of the commodity swap. An early termination would result in us either paying or receiving a termination payment.

Mandatory terminations generally result when one of the counterparties suffers degraded credit quality, illiquidity, bankruptcy or failure to perform. This risk is mitigated by establishing appropriate minimum credit requirements such as minimum credit rating and by establishing safeguards such as requiring collateral posting if credit limits are exceeded or credit ratings decline.