Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

Metro

Board Report

File #: 2018-0368, **File Type:** Contract **Agenda Number:** 37.

OPERATIONS, SAFETY AND CUSTOMER EXPERIENCE COMMITTEE
JULY 19, 2018

SUBJECT: BIOMETHANE/RENEWABLE NATURAL GAS

ACTION: APPROVE RECOMMENDATIONS

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to:

A. RECEIVE AND FILE the results of the one year pilot for the use of biomethane fuel at Bus Division 5;

B. EXPAND the use of biomethane fuel from Division 5 to all Metro Bus Divisions;

C. EXERCISE Contract Modification No. 3 to Indefinite Delivery/Indefinite Quantity Contract No. OP7396000 with Clean Energy Renewables to exercise a single four- year Option in the amount of $54,808,110 to provide Biomethane Gas for all Metro Bus Divisions, increasing the total contract value from $1,240,520 to $56,048,630, and extending the term of the contract from August 1, 2018 to July 31, 2022; and

D. EXECUTE individual Task Orders (Transaction Confirmations) and changes within the Board approved contract amount.

ISSUE

In July 2017, the Board approved award of Indefinite Delivery/Indefinite Quantity Contract No. OP7396000 with Clean Energy Renewables for a period of five (5) years, inclusive of one four-year Option starting August 1, 2018. The one-year base period allowed for a pilot at Division 5 located at 5425 S Van Ness Avenue in Los Angeles. Compared to fossil natural gas, the contracted biomethane (or renewable natural gas (RNG)) delivered during the pilot period has 43% fewer lifecycle greenhouse gas emissions. Information on the biomethane pilot has been previously presented to the Metro Sustainability Council.

Given the success of the pilot, expansion of the use of biomethane to all of Metro's Bus Divisions requires a contract modification to exercise the four-year option extending the term of the contract through July 31, 2022. Board approval will allow Metro to foster healthier communities through the utilization of the lowest-carbon fuel commercially available for Metro's existing bus fleet while

simultaneously planning for the transition to zero emission busses.

BACKGROUND

In June 2014, the Board approved the *Biomethane Implementation Plan* to procure for biomethane as a cost-effective strategy to reduce the carbon footprint of Metro's bus operations. Biomethane is derived from landfills, dairies, and wastewater treatment plants rather than being extracted or mined from the ground. The process to capture and use methane (an extremely potent greenhouse gas) that would otherwise be released into the environment as biomethane provides a low carbon alternative to traditional "fossil natural gas" as a transportation fuel. In 2017, biomethane comprised of over 65% of the natural gas consumed in California as a transportation fuel. Many transit agencies have transitioned to biomethane including Santa Monica's Big Blue Bus (BBB), Orange County Transportation Authority (OCTA), San Diego Metropolitan Transportation System (MTS), and Torrance Transit.

In April 2017, Metro awarded an Indefinite Delivery/Indefinite Quantity Contract No. OP7396000 with Clean Energy Renewables for a not-to exceed amount of $1,240,520 for a base year (for one bus division as a pilot) and a not-to-exceed amount of $54,808,110 for a single four-year Option, for a total contract amount of $56,048,630 (for all bus divisions if the pilot is successful). Compared to fossil natural gas, the contracted biomethane delivered to Metro has 43% fewer lifecycle greenhouse gas emissions.

As indicated in the initial staff report in April 2017, the use of biomethane does not involve any changes or upgrades to Metro's bus fleet or fueling infrastructure. The Southern California Gas Company (SoCal Gas), which provides natural gas distribution to all of Metro facilities, allows for delivery of biomethane through its Core Aggregation Transportation (CAT) services whereby Core Transport Agents (CTAs) provide procurement services to SoCal Gas customers such as Metro. Under this arrangement, CTAs are required to coordinate with SoCal Gas to meet natural gas delivery requirements, including meeting strict quantity and quality natural gas standards. The initial year of this Contract was designed to monitor logistic and administrative aspects of purchasing biomethane under CAT services.

DISCUSSION

Metro began using biomethane in August 2017 under the current Contract with Clean Energy Renewables. Through April 2018, Clean Energy Renewables delivered nearly 3 million Therms of biomethane to Division 5, or about 9% of Metro's total natural gas use during that time. Metro's Operations Department reports that their experience with Clean Energy Renewables has been positive and the transition to biomethane has been seamless.

Staff now recommends exercising the Contract Option to expand the use of biomethane for four more years. In doing so, Metro will have the opportunity to immediately expand biomethane delivery to all bus divisions. This is a clean air and greenhouse gas emissions reducing strategy that allows Metro to foster healthier communities through the utilization of the lowest-carbon fuel commercially available for the existing bus fleet while simultaneously planning for our transition to zero emissions bus technology.

The carbon credits generated from an expanded use of biomethane also enhances the revenue generation potential associated with environmental commodities sales. Metro has realized two distinct financial benefits with biomethane use as summarized in the table below. By procuring for biomethane, during the pilot period on an index, Metro saved $143,487 -- a 14% reduction from the cost of fossil natural gas procured from SoCal Gas. By utilizing biomethane, Metro has generated additional environmental commodities in the form of Low Carbon Fuel Standard (LCFS) Credits and Renewable Identification Numbers (RINs) which can in turn be monetized in carbon credit markets. These carbon credits are more than what Metro would have generated if there was no shift to biomethane use at Division 5.

Pilot Period Results Realized Financial Benefit of Biomethane (Aug 17 thru Apr 18)	% Savings from Fossil CNG	Added Value
Fuel Cost Savings	14%	$143,487
Environmental Commodities	N/A	$185,153
	Total	$328,640

If the Contract Option is exercised, the expanded use of biomethane will further reduce fuel cost savings and accrue a much greater number of environmental commodities compared to current use of fossil natural gas. Based on natural gas index projections, the natural gas cost savings are anticipated to total over $8M over the term of the Contract Option, substantially lowering our natural gas costs as fleet fuel. The actual magnitude of these financial benefits depends on several factors including volumes of biomethane delivered under this Contract and market pricing for both natural gas and environmental commodities.

Newer sources of biomethane are continually developed to meet increasing demand for fuel and carbon in fuel regulatory mandates. However, commercialization of these newer sources takes time as well as the emergence of vendors who specialize in the distribution of such fuels. Therefore, staff is currently preparing to issue a new solicitation for release in the Fall of 2018 with possible indefinite delivery/indefinite quantity contract award in the Spring of 2019. This new procurement will allow Metro to access the lower carbon intense biomethane once commercially available, and as a complement to the biomethane that is going to be supplied to us upon the exercise of this Option.

The recommended Contract Option provides Metro with the ability to increase or decrease biomethane volumes to complement any new lower carbon intense biomethane sources that may become available under potential new contracts. This added flexibility to receive lower-carbon sources of biomethane will further generate low fuel carbon credits and incrementally decrease our carbon footprint leading up to the 2030 target year for a zero emissions fleet.

DETERMINATION OF SAFETY IMPACT

This Board action will not have an adverse impact on safety standards for Metro.

FINANCIAL IMPACT

The total contract value of this action is $56,048,630. The FY19 adopted budget includes $20,831,648 for the purchase of compressed natural gas under Project 306002 Bus Operations Maintenance, Department 3365, and Account 50402 Fuel CNG - Revenue Equipment. Since this is a multi-year contract, the Project Manager and Cost Center Manager will be responsible for budgeting in future fiscal years. Upon approval of Recommendation A, future gas costs will be budgeted against this project.

Impact to Budget

Current funding includes TDA 4, STA, and Local funding such as fares, Prop C40%, and Measure R20%. These funding sources maximize allowable fund use given approved funding provisions and guidelines. Metro has realized a 14% reduction in costs for natural gas delivered to Division 5 under this pilot project. Our agency has also generated almost $200,000 (in July 2018 $ per carbon credit price) of additional environmental commodities in the form of LCFS credits. These LCFS credits are sold in carbon credit markets in accordance with the Board approved *LCFS Market Analysis and Optimization Plan (May 2014)*. Per the Board action in May 2014, LCFS credit sale revenues are reinvested in Metro's green infrastructure initiatives and projects.

By continuing and expanding biomethane delivery to the rest of the bus divisions, Metro has an opportunity to optimize these cost savings and LCFS carbon credit generation. The use of biomethane will continually add on to the number of environmental commodities that can be sold in carbon credit markets.

ALTERNATIVES CONSIDERED

If the Contract Option is not exercised, Contract No. OP7396000 will expire on July 31, 2018 and Metro will no longer receive biomethane. *There will be no disruption in transit service as Metro will continue to receive fossil natural gas as fleet fuel from SoCal Gas but at a higher fossil natural gas cost*. In this scenario, returning to the use of fossil natural gas will also result in additional greenhouse gas emissions equivalent to what was reduced from the use of biomethane at Division 5 during the pilot. If the Contract Option is not exercised, Metro will also forfeit potential revenue from the generation of additional environmental commodities from biomethane use. Overall, Metro will miss an opportunity to utilize the lowest-carbon fuel commercially available for Metro's existing revenue fleet and thus the ability to a maximum potential greenhouse gas emissions fleet reduction during this transition period to a fully zero emissions bus fleet by 2030.

NEXT STEPS

Upon Board approval, staff will execute a Contract Modification with Clean Energy Renewables, exercising the single four-year Option, effective August 1, 2018.

Staff will complete the complementary biomethane procurement in Spring of 2019 to access newer lower carbon biomethane once these are commercially available and will return to the Board at that

time to present any new contract award recommendations. The future contract is intended to be indefinite delivery/indefinite quantity. No biomethane fuel cost will be incurred until lower carbon intense biomethane is delivered to Metro to replace that is currently supplied at that time.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - Contract Modification/Change Order Log
Attachment C - DEOD Log

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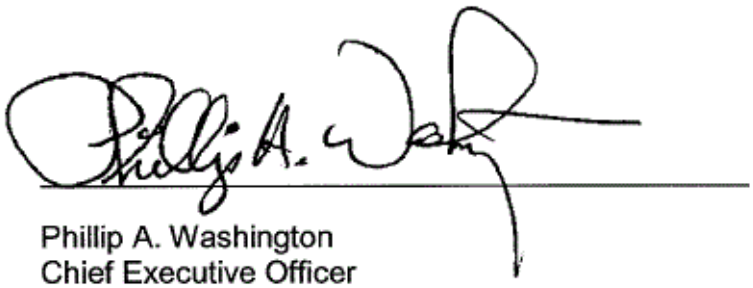

Phillip A. Washington
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