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OAKLAND

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November 28, 2006

IGNACIO DE LA FUENTE, PRESIDENT  
CITY COUNCIL  
OAKLAND, CALIFORNIA

PRESIDENT DE LA FUENTE AND MEMBERS OF THE CITY COUNCIL

**SUBJECT: RESOLUTION AUTHORIZING THE CITY ADMINISTRATOR TO ENTER INTO AN AGREEMENT WITH THE PORT OF OAKLAND AND CLEAN ENERGY FOR THE FUNDING, DESIGN, AND CONSTRUCTION OF A DOWNTOWN COMPRESSED NATURAL GAS REFUELING STATION; AND TO APPROPRIATE AN AMOUNT NOT TO EXCEED \$375,000 IN GRANT FUNDING FOR THE CONSTRUCTION OF A COMPRESSED NATURAL GAS REFUELING STATION AT 205-209 BRUSH STREET**

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#### **PURPOSE AND SCOPE**

In accordance with the Measure H Charter Amendment, which was passed by the voters at the General election of November 5, 1996, we have made an impartial financial analysis of the accompanying Proposed Resolution and the Agenda Report. In making our analysis, we also asked for additional information and clarification from the City of Oakland's Public Work Agency (PWA) staff.

The City Auditor is elected by the citizens of Oakland, California to serve as an officer in charge of an independent department auditing city government activities. The City Charter establishes the independence of the Office of City Auditor.

Since the Measure H Charter Amendment specifies that our impartial financial analysis is for informational purposes only, we did not apply Generally Accepted Government Auditing Standards as issued by the Comptroller General of the United States.

## SUMMARY

The proposed resolution authorizes the City Administrator to enter into a construction contract with the Port of Oakland and Clean Energy, for the funding, design, and construction of a compressed natural gas (CNG) refueling station, which will be located at 205-209 Brush Street. The resolution also authorizes the City Administrator to appropriate \$375,000 in previously accepted grant funding to "...offset the incremental cost of acquiring one compressed natural gas refueling station..." as stated in previous Resolution 79902 and Resolution 79903.

Currently, the city has 177 CNG vehicles in its non-emergency fleet. Reportedly, most of the vehicles are stored in downtown Oakland, but the city purchases fuel at the Municipal Service Center (MSC), located at 7101 Edgewater Drive. The MSC station is for the exclusive use of the city and is 7 miles from downtown Oakland. During the last fiscal year the station sold on average 150 Gasoline Gallon Equivalents (GGE) per day.

The new station will only be 1.1 miles away from downtown Oakland's City Hall. It is believed that the reduced travel time will help to contribute to improved air quality and decreased auto emissions. Also, it is estimated that the new refueling station will reduce the city's dependence on foreign oil and advance social equity by decreasing vehicle emissions in disadvantaged areas. However, our research shows that CNG vehicles are composed chiefly of methane that poses economic and health risks because they emit potentially carcinogenic particles in the atmosphere leading to respiratory disorders.

Because there has not been a demand for CNG vehicles, there has been a diminishing rate of CNG produced vehicles in the United States. There are no new-modeled CNG trucks coming out in the year 2007. In the year 2000, there were 15 new CNG vehicles produced by major manufacturers such as Ford, Toyota, Honda, and Chevrolet. In the upcoming year, there will be only one new CNG vehicle manufactured, the Honda Civic GX. The majority of CNG vehicles are in the form of heavy-duty trucks such as buses, shuttle buses, and taxi's.

The city will be purchasing, and then converting 12 new CNG vehicles next year, in the form of light duty trucks. Unfortunately, it is very difficult to convert regular fueled vehicles into CNG vehicles. The process is highly uncommon and very expensive, usually over \$11,000.

The Port of Oakland has entered into a Space/Use Permit<sup>1</sup> with Clean Energy, a California corporation, in which the Port will provide the land for the station while Clean Energy will design, construct, operate and maintain the station. The estimated construction cost is \$960,120, and Clean Energy has agreed to pay all of the costs exceeding the \$375,000 allocated to it by the city. In exchange, the city will buy the fuel at a significantly reduced rate for up to 10 years. The city will also receive royalties of \$0.025 for every Gasoline Gallon Equivalent (GGE) sold to the public. However, the city does not have any pending contracts with companies who have large fleets of CNG vehicles, such as PG&E and the Oakland Airport. We have estimated that these royalties will total no more than \$6,400 per year.

**FISCAL IMPACT**

Approval of the proposed resolution will authorize the City Administrator to appropriate \$375,000 in grant funds toward the construction of a compressed natural gas (CNG) refueling station at 205-209-Brush Street station, which is located on Port of Oakland property. The estimated cost of the station is \$960,120. According to Clean Energy’s itemized engineer estimate, the costs are listed below:

<b>Jack London Square(205-209 Brush Street)</b>		<b>Estimated Values</b>
Compressor	Two Ariel JGPs	\$250,000
Dryer	Single Tower w/Regen	\$40,000
Storage	Single Three Pack	\$76,000
Dispenser	Two Fastfill Public	\$103,000
Engineering		\$40,000
PG&E		\$75,000
Permitting		\$5,000
Installation		\$300,000
<b>Subtotal</b>		<b>\$889,000</b>
Misc. Cost/Contingency		\$71,120
<b>Total</b>		<b>\$960,120</b>

Clean Energy will sell CNG to the city at a variable reduced market rate of \$1.00 Gasoline Gallon Equivalent (GGE)<sup>2</sup>. At the current MSC station, the cost to the city is \$1.497 per GGE. In addition, Clean Energy will create a revenue source for the city from royalties of \$0.025 per GGE of CNG sold to the public.

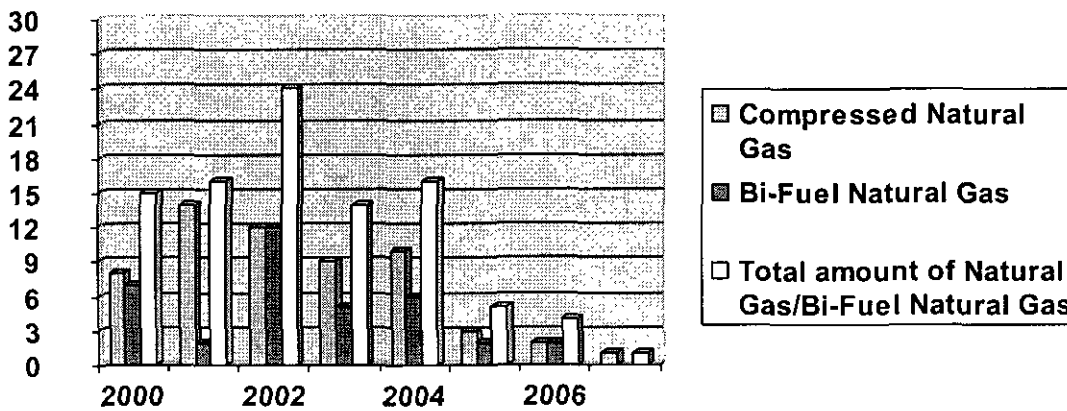
<sup>1</sup> Resolution No. 06137 C.M.S.

<sup>2</sup>The reduced market rate is the PG&E Tariff Price {currently approx. \$.50 per GGE} plus a margin cost of \$0.4972 per GGE for a total variable price of \$1.00 per GGE.

The Public Works Agency is expecting that at least 700 GGE per day will be sold to the public, resulting in royalties of \$17.50 per day, or over \$6,000 per year<sup>3</sup>. Currently, the MSC station only dispenses an average of 150 GGE per day. This station is only made available to the city for its 177 CNG-fueled vehicles. This estimate was wholly based on the hopes that the public, for instance PG&E and the Oakland Airport, will resort to using the new proposed refueling station. PWA does not have any pending contracts with PG&E, Oakland Airport or any entity that uses CNG fueled vehicles.

A representative from the US Department of Energy, who has an interest in this proposal, stated that a trucking company in the Brush street area has indicated that it will convert to CNG if this refueling station is built. However, we have not received anything in writing confirming the trucking company's intent to use the refueling station. Therefore, the anticipation of 700 GGE a day from others using the proposed new refueling station is at present unsupported.

**Number of CNG and CNG/Bi-fuel Models Produced From 2000-2007 (Exhibit 1)**



- This graph shows the declining number of natural gas and bi-fuel natural gas vehicle models being produced over a seven-year span. In 2007 there will only be one new CNG vehicle on the market, a Honda Civic GX.

**SUSTAINABLE OPPORTUNITIES**

<sup>3</sup> 700 GGE/day \*0.025/GGE= \$17.50; \$17.50 \* 365 =\$6,388

The city will pay a variable reduced market price of \$1.00 GGE resulting in a current savings of .99 per GGE<sup>4</sup>. Although these sustainable opportunities are beneficial, the necessity of a new refueling station seems unwarranted and questionable.

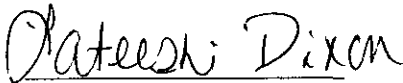
**RECOMMENDATIONS AND CONCLUSIONS**

Ultimately, since compressed natural gas (CNG) appears to be a declining market, we recommend that the \$375,000 be used to convert the remaining city vehicles to CNG-fuel use or add new fuel dispensers to the existing refueling station located at 7101 Edgewater Drive.

Because there is an unsupportable assumption that other governmental entities will use the new Brush Street station and that there is a declining market for such fuel, we recommend that the city reject the proposal as submitted by the Public Works Agency.

Prepared by:

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<sup>4</sup> November market rate is \$1.99 GGE.