

BOARD MEETING DATE: March 7, 2014

AGENDA NO. 4

PROPOSAL: Execute Contracts to Upgrade Existing Hydrogen Fueling Infrastructure 

SYNOPSIS: In June 2013, the Board recognized revenue in the amount of \$6,690,828 from CEC into the Hydrogen Fueling Infrastructure Network Fund (63) to upgrade existing hydrogen fueling infrastructure. Subsequently, in November 2013, the Board released RFP #P2014-09 to solicit proposals to upgrade and refurbish existing, publicly accessible hydrogen fueling infrastructure. This action is to execute three contracts to upgrade existing hydrogen fueling infrastructure at a total cost not to exceed \$6,445,000 from the Hydrogen Fueling Infrastructure Network Fund (63). The remaining funds are to reimburse administrative costs.

COMMITTEE: No Committee Review; the February 21, 2014 Technology Committee meeting was cancelled.

**RECOMMENDED ACTIONS:**

1. Authorize an additional temporary loan in an amount of \$6,345,000 from the Clean Fuels Fund (31) to the Hydrogen Fueling Infrastructure Network Fund (63) for a total loan of \$6,445,000 to be repaid upon reimbursement under the provisions of the CEC grant award;
2. Authorize the Chairman to execute contracts with the following entities from the Hydrogen Fueling Infrastructure Network Fund (63):
  - a) Equilon Enterprises LLC dba Shell Oil Products to upgrade the existing hydrogen fueling infrastructure in Torrance in an amount not to exceed \$2,476,000;
  - b) Air Liquide Industrial U.S. LP to upgrade the existing hydrogen fueling infrastructure at LAX in an amount not to exceed \$2,630,000; and
  - c) H2 Frontier, Inc. to upgrade the existing hydrogen fueling infrastructure at the City of Burbank in an amount not to exceed \$1,339,000.

3. Authorize the Executive Officer to reimburse the SCAQMD General Fund an additional amount not to exceed \$100,000 for a total amount not to exceed \$244,316 from the Hydrogen Fueling Infrastructure Network Fund (63) for administrative costs necessary to implement the CEC grant award.

Barry R. Wallerstein, D.Env.  
Executive Officer

MMM:LW

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### **Background**

In June 2013, the Board recognized revenue in the amount of \$6,690,828 from CEC's AB 118 Program into the Hydrogen Fueling Infrastructure Network Fund (63) to upgrade existing hydrogen fueling infrastructure. The intent of the funding was to have the SCAQMD conduct a competitive bid and execute contracts with successful bidder to upgrade existing, publicly accessible hydrogen fueling stations. In November 2013, the Board released RFP #P2014-09 to solicit proposals to upgrade and refurbish existing, publicly accessible hydrogen fueling stations. The intent of the RFP was to upgrade as many stations as possible with the available funds.

### **Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFP and inviting bids was published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin.

Additionally, potential bidders may have been notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the RFP was e-mailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (<http://www.aqmd.gov>). Information is also available on SCAQMD's bidder's 24-hour telephone message line (909) 396-2724.

### **Bid Evaluation**

Nine proposals were received before the bidding closed at 5 p.m. on December 20, 2013. The bids were reviewed by a diverse panel in accordance with criteria contained in the RFP. The panel was composed of two SCAQMD Program Supervisors as well as two CARB and three CEC representatives. The panel breakdown was as follows: six Caucasian, one Hispanic; one female, six male.

The panel scored the proposals according to the criteria outlined in the RFP, without an oral interview. Those proposals receiving a score of at least 76 out of 95 were

considered technically qualified and eligible for contract awards. Based on the scores in the attachment, and the cost effectiveness of the proposed projects, staff is recommending awards to Air Liquide, Equilon Enterprises and H2 Frontier.

## **Proposal**

### Air Liquide Industrial U.S. LP

Air Liquide's proposal for the LAX facility would enhance the existing hydrogen fueling infrastructure. Air Liquide proposes upgrading the existing LAX East- Clean Energy site by installing a Steam Methane Reformer (SMR) and a C100 Market Development hydrogen fueling station at the public retail CNG station located at 10400 Aviation Blvd in Los Angeles. Air Liquide plans to both own and operate the station.

Air Liquide has extensive knowledge in the manufacturing, distribution and storage of hydrogen and is one of the largest worldwide industrial suppliers. It operates hydrogen pipeline networks in the U.S. and Canada and has several large production facilities in California for both hydrogen and industrial gas manufacturing. Air Liquide also recently invested in a new industrial gas manufacturing facility in Etiwanda within the County of San Bernardino. Founded in 1902, Air Liquide has revenues of approximately \$18 billion and is one of the world leaders in industrial and medical gases. Its core business is to supply oxygen, nitrogen, hydrogen and many other gases, services and innovative solutions to most industries. In the hydrogen sector, Air Liquide produces around 22,000 tons of H<sub>2</sub> per year for the refining, steel, glass, chemical and food industries. It operates a large distribution network, which includes gaseous tube trailers, liquid trailers, cylinders and bundles but also the largest European hydrogen pipeline network.

### Equilon Enterprises LLC dba Shell Oil Products US

Shell companies have developed hydrogen fueling stations around the world, including eight stations in the U.S. There are three stations in Southern California located in Newport Beach, West Los Angeles and Torrance. Equilon Enterprises proposes to upgrade Shell's Torrance pipeline station, which currently receives hydrogen from a pipeline owned and operated by Air Products and Chemicals, Inc., but which produces insufficient quantities of hydrogen. Shell is proposing to upgrade the facility to produce 200 kg/day (4x the current amount available) and to install dual dispensers, a new cooling block and refrigeration systems and two additional compressors.

### H2 Frontier, Inc.

H2 Frontier proposes to undertake a rebuild of ageing equipment including existing compression equipment, desulfurization equipment, pumps, motors and a new dispenser delivery system with accurate metering to meet requirements of the CDFA Division of Measurement Standards. The proposed dispenser will be capable of point-of-sale transactions and perform fill data collection. These new systems will dramatically reduce overall operational costs and improve performance.

H2 Frontier, a California company, has 15 years of experience in California with installation, technical support, operation, and maintenance of hydrogen fueling stations.

H2 Frontier has been involved in numerous hydrogen station projects and is currently under contract to the SCAQMD, CARB and NREL for the operation of the City of Burbank hydrogen fueling station. Under their operation and maintenance, H2 Frontier has established the Burbank station as having the best up-time operations for any public station in California. H2 Frontier also recently won a CEC grant award for the design, installation and operation of a hydrogen fueling station at the Hyundai facility in Chino.

Since the goal is to have fully commissioned and operational stations within 12 months of contract execution, although on a case-by-case basis the SCAQMD's Project Officer may allow longer timelines, there is insufficient time to refine and re-release the solicitation document due to the impending OEM rollout of fuel cell vehicles. Consequently, to best utilize the funds received from the CEC and to ensure a more robust network of fueling stations as well as a competitive bidding environment, staff is recommending awards to these three qualifying bidders, with the caveat that during contract negotiations staff will make every effort to ensure reasonable prices for services and equipment. And if contract negotiations result in cost savings, staff will return to the Board to consider award amendments and/or additional awards.

### **Benefits to SCAQMD**

The SCAQMD supports hydrogen infrastructure and fuel cell technologies and recognizes that light-, medium- and heavy-duty vehicles must achieve zero or near-zero emissions if the region hopes to meet state and federal air quality attainment standards. This project would help ensure that sufficient hydrogen infrastructure is available to fuel the impending OEM roll out of fuel cell vehicles over the next few years. While the CEC funding was recognized into a special fund, it complements the Technology Advancement Office's Clean Fuels Program and is included in the *2013 Clean Fuels Program Plan Update* under "Develop and Demonstrate Distributed Hydrogen Production and Fueling Stations."

### **Resource Impacts**

The CEC's \$6,690,828 revenue was recognized into the Hydrogen Fueling Infrastructure Network Fund (63). Of this amount, \$6,446,511 is dedicated for project funding and \$244,317 is to reimburse administrative costs. The temporary loan from the Clean Fuels Fund (31) will be used to pay for the costs of the project before SCAQMD can seek reimbursement. The loan will be repaid upon reimbursement from the CEC grant through the Hydrogen Fueling Infrastructure Network Fund (63). Recommended contract awards from Fund 63 total \$6,445,000 as follows: 1) award to Equilon Enterprises in the amount of \$2,476,000; 2) award to Air Liquide in the amount of \$2,630,000; and 3) award to H2 Frontier in the amount of \$1,339,000. The small unallocated balance (\$1,511) of the CEC revenue may be awarded in future, subject to Board approval.

### **Attachment**

Proposals Received in Response to RFP #P2014-09

**PROPOSALS RECEIVED IN RESPONSE TO RFP # P2014-09**

<b>Firm Name</b>	<b>Technical Approach Score</b>	<b>Contractor Qualifications /Previous Experience</b>	<b>Applicant and Team Member Roles, Capabilities and Facilities</b>	<b>Total Points</b>	<b>Total Cost (\$Million)</b>	<b>Proposed Award (\$Million)</b>
H2 Frontier, Inc	33.83	33.17	24.17	91.17	\$1.39	\$1.339
Equilon Enterprises LLC dba Shell Oil Products	30.67	33.17	24.17	88.01	\$2.85	\$2.476
Air Products and Chemicals, Inc	28.83	33.17	23.33	85.33	\$5.19	
Air Liquide Industrial U.S. LP	30	30.17	22.83	83.00	\$2.93	\$2.630
Mebtahi Station Services, Inc.	28	32.17	20.00	80.17	\$2.44	
SunLine Transit Agency	29	29.5	21.67	80.17	\$1.44	
SunLine Transit Agency	25.17	26	16.00	67.17	\$1.59	
Cal State LA University Auxiliary Services, Inc.	21.67	21	15.67	58.34	\$1.34	
GTM Technologies	14.83	16.5	10.33	41.66	\$0.214	
				<b>TOTAL</b>	<b>\$19.38</b>	<b>\$6.445</b>