BOARD MEETING DATE: March 3, 2017 AGENDA NO. 31

REPORT: Technology Committee

SYNOPSIS: The Technology Committee met on February 17, 2017. Major

topics included Technology Advancement items reflected in the regular Board Agenda for the March Board meeting. A summary of these topics with the Committee's comments is provided. The next Technology Committee meeting will be held on March 17,

2017.

RECOMMENDED ACTION:

Receive and file.

Joe Buscaino Technology Committee Chair

MMM:pmk

Attendance: Councilmember Joe Buscaino and Supervisor Janice Rutherford participated by videoconference. Supervisor Sheila Kuehl, Mayor Pro Tem Larry McCallon, Councilmember Judith Mitchell and Councilmember Dwight Robinson were in attendance at SCAQMD headquarters.

MARCH BOARD AGENDA ITEMS

There being no objection, the Committee took Item #4 on consent. On the motion of Kuehl, seconded by Mitchell, the committee unanimously approved agenda item 4.

Ayes: Buscaino, Kuehl, McCallon, Mitchell, Robinson and Rutherford

Noes: None Absent: None

1. Execute Contract to Develop and Demonstrate Electric School Buses with Vehicle-to-Grid Capability

DOE recently awarded the Blue Bird Body Company, Inc. \$4,902,237 for the development and demonstration of electric school buses with vehicle-to-grid (V2G) capability. Blue Bird Body Company proposes to develop and manufacture V2G all-battery electric school buses and demonstrate them in the Rialto Unified School District (USD). Staff proposes to cost-share this project. This action is to execute a contract with Blue Bird Body Company for the development, manufacture and demonstration of electric school buses in an amount not to exceed \$1,900,000 from the Lower-Emission School Bus Fund (33).

Councilmember Mitchell asked if the technology developed under this project is transferable to other vehicles or applications. Staff affirmed that the technology can be transferred to similarly-domiciled fleets, such as UPS.

Mayor Pro Tem McCallon inquired about NOx reductions between a CNG school bus and electric school bus, and if all school buses were electric. Staff responded that the anticipated reductions would be the difference between current CNG engines and zero emissions. Staff further emphasized that the reductions would be greater when replacing older diesel buses. Executive Officer Wayne Nastri suggested that staff report back to the Committee on cumulative potential NOx reductions, as well.

Moved by Robinson; seconded by Kuehl; unanimously approved.

Ayes: Buscaino, Kuehl, McCallon, Mitchell, Robinson and Rutherford

Noes: None Absent: None

2. Execute Contract to Develop and Demonstrate Medium-Heavy Duty (Class 5-7) Plug-in Hybrid Electric Vehicles for Work Truck Applications

DOE recently awarded \$2,932,193 to Odyne Systems, LLC, for the development and demonstration of a medium-heavy duty (Class 5-7) plug-in hybrid electric vehicle (PHEV) for work truck applications. Odyne proposes to develop and demonstrate medium-heavy duty (Class 5-7) PHEV work trucks with reduced fuel consumption and fully electrified jobsite functions. Staff proposes to cost-share this project. This action is to execute a contract with Odyne Systems, LLC, for the design, manufacture and demonstration of medium-heavy duty (Class 5-7) PHEV work trucks in an amount not to exceed \$900,000 from the Clean Fuel Fund (31).

Moved by Mitchell; seconded by Kuehl; unanimously approved.

Ayes: Buscaino, Kuehl, McCallon, Mitchell, Robinson and Rutherford

Noes: None Absent: None

3. Create Special Revenue Fund, Recognize and Transfer Funds, Execute Agreement for SCAQMD to Act as Supplemental Environmental Project Implementer for Installation of Air Filtration Systems, Execute Contract and Reimburse General Fund for Administrative Costs

CARB and the Burlington Northern Santa Fe Railway Company (BNSF) are executing a Supplemental Environmental Project (SEP) agreement to install air filtration systems at school(s) in a local Environmental Justice community. Both parties have requested SCAQMD act as the SEP Implementer. These actions are to: 1) create the Air Filtration Fund (75); 2) recognize up to \$625,000 from BNSF into the Air Filtration Fund (75); and 3) transfer up to \$625,000 as a temporary loan from the Clean Fuels Fund (31) to the Air Filtration Fund (75). Furthermore, these actions are to execute an agreement with BNSF for SCAQMD to act as the SEP Implementer for this project, execute a contract with IQAir North America for installation of air filtration systems in an amount not to exceed \$593,750 and reimburse the General Fund for administrative costs up to \$31,250 from the Air Filtration Fund (75).

Councilmember Robinson recused himself due to financial interest in the Burlington Northern Santa Fe Railway Company that is materially affected by this item.

Supervisor Rutherford suggested that staff evaluate a similar air filtration program for residences located in San Bernardino. Staff committed to evaluate potential opportunities and funding sources and report back to the Committee.

Moved by Kuehl; seconded by Mitchell; unanimously approved.

Ayes: Buscaino, Kuehl, McCallon, Mitchell and Rutherford

Noes: None Abstain: Robinson Absent: None

4. Transfer Funds, Execute Contract to Develop and Demonstrate Vessel Performance Management Software and Equipment and Amend Award

The California State University Maritime Academy proposes to demonstrate a technology capable of harvesting high altitude wind energy while employing a vessel performance optimization system. The first two phases of the project includes the design and installation of the performance management software and

equipment followed by demonstration of the equipment with performance evaluation of its fuel and emissions reductions capabilities. Staff proposes to cost-share phase 2 of this project with the California State University Maritime Academy, Maritime Administration and Bay Area Air Quality Management District. These actions are to transfer \$50,086 from the BP ARCO Settlement Projects Fund (46) into the Clean Fuels Fund (31), and execute a contract with the California State University Maritime Academy for the design and demonstration of vessel performance management software and equipment in an amount not to exceed \$50,086 from the Clean Fuels Fund (31). Finally, this action is to amend a contractor's name from Ricardo Solutions to Ricardo, Inc., for a prior award.

5. Approve and Adopt Technology Advancement Office Clean Fuels Program 2016 Annual Report and 2017 Plan Update and Resolution, and Receive and File and Approve and Adopt Revised Membership of Technology Advancement and Clean Fuels Advisory Groups

Each year by March 31, the Technology Advancement Office must submit to the California Legislative Analyst an approved Annual Report for the past year and a Plan Update for the current calendar year. Staff has reviewed the Clean Fuels Program with the Clean Fuels Advisory Group, the Technology Advancement Advisory Group and other technical experts. Additionally, the 2017 Clean Fuels Program Draft Plan Update was presented to the Technology Committee for review and comment at its October 21, 2016 meeting. This action is to approve and adopt the final Technology Advancement Clean Fuels Program Annual Report for 2016 and 2017 Plan Update as well as the resolution finding that proposed projects do not duplicate any past or present programs. This action is to also receive and file membership changes to the Technology Advancement Advisory Group and approve and adopt membership changes to the SB 98 Clean Fuels Advisory Group.

Councilmember Mitchell inquired about the reasoning behind increased funding allocation for the engine systems. Staff responded that the increased funding allocation will further support efforts for near-zero heavy-duty engine development efforts, especially for large displacement engines, and provide support for the state and federal efforts towards lower heavy-duty engine standards.

Supervisor Kuehl commented that secondary use and safe practices for recycling of batteries should be evaluated, considering the growth in battery electric vehicles. Staff indicated that secondary use of batteries is already underway, especially for stationary energy storage.

Councilmember Robinson provided support for the type and scope of projects that are part of the Clean Fuels Fund.

Moved by Robinson; seconded by Mitchell; unanimously approved.

Ayes: Buscaino, Kuehl, McCallon, Mitchell, Robinson and Rutherford

Noes: None Absent: None

6. Other Business

There was no other business.

7. Public Comments

There were no public comments.

Next Meeting: March 17, 2017

Attachment

Attendance

ATTACHMENT

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT TECHNOLOGY COMMITTEE MEETING Attendance – February 17, 2017

Councilmember Joe Buscaino (via videoconference)	SCAQMD Governing Board
Supervisor Sheila Kuehl	_
Mayor Pro Tem Larry McCallon	SCAQMD Governing Board
Councilmember Judith Mitchell	_
Councilmember Dwight Robinson	SCAQMD Governing Board
Supervisor Janice Rutherford (via videoconference)	
Mark Abramowitz	
David Czamanske	Board Consultant (Cacciotti)
Ron Ketcham	Board Consultant (McCallon)
Diane Moss	Board Consultant (Kuehl)
Wayne Nastri	SCAQMD Staff
Derrick Alatorre	SCAQMD Staff
Fabian Wesson	SCAQMD Staff
Ruby Fernandez	SCAQMD Staff
Matt Miyasato	SCAQMD Staff
Fred Minassian	SCAQMD Staff
Naveen Berry	SCAQMD Staff
Dean Saito	SCAQMD Staff
Seungbum Ha	SCAQMD Staff
Drue Hargis	SCAQMD Staff
Joseph Impullitti	SCAQMD Staff
Patricia Kwon	SCAQMD Staff
Joseph Lopat	SCAQMD Staff
Vicki White	SCAQMD Staff
Patrick Chandler	SCAQMD Staff
Gregory Rowley	SCAQMD Staff
Angelica Enriquez	
Pat Krayser	SCAQMD Staff
Timothy Lippman	Los Angeles County
Katy Young	
Tom Gross	Southern California Edison
Susan Stark	Tesoro