BOARD MEETING DATE: April 3, 2015 AGENDA NO. 23

REPORT: Technology Committee

SYNOPSIS: The Technology Committee met on March 20, 2015. Major topics

included Technology Advancement items reflected in the regular Board Agenda for the April Board meeting. A summary of these topics with the Committee's comments is provided. The next Technology Committee meeting will be on April 17, 2015.

RECOMMENDED ACTION:

Receive and file.

John J. Benoit Technology Committee Chair

MMM:pmk

Attendance: Supervisor John J. Benoit participated by videoconference. Councilmember Judith Mitchell, Supervisor Janice Rutherford and Mayor Dennis Yates were in attendance at SCAQMD headquarters. Councilmember Joe Buscaino and Mayor Miguel Pulido were absent due to a conflict with their schedule.

APRIL BOARD AGENDA ITEMS

1. Recognize Funds and Issue Program Announcement for Heavy-Duty Vehicle and Transport Refrigeration Unit Engine Replacement Projects

In October 2014, U.S. EPA notified SCAQMD that an award had been approved under a Fiscal Year 14 Diesel Emissions Reduction Act (DERA) solicitation in the amount of \$753,476 for on-road heavy-duty vehicle and school bus replacement projects. In addition, in a prior U.S. EPA award, \$480,833 remains unspent. Staff is proposing that the unspent funds be used to solicit projects to replace transport refrigeration units (TRUs). These actions are to recognize \$753,476 from the U.S. EPA DERA award and issue a Program Announcement to solicit proposals for onroad heavy-duty vehicle and TRU engine replacement projects with funding of up to \$920,833. This action is also to reimburse the General Fund for administrative costs of up to \$38,476 necessary to implement the U.S. EPA DERA grant. School bus

replacement awards using the remaining \$275,000 will be considered by the Board separately at a later date.

Mayor Yates asked if one large company could apply and get all the funding for trucks. Staff responded that each truck is evaluated based on its mileage and engine model year, so that a single owner operator has as much chance of receiving funds as a large fleet.

Moved by Mitchell; seconded by Yates; unanimously approved.

2. Adopt Resolution Recognizing Funds and Accepting Terms and Conditions for FY 2013-14 Carl Moyer Multidistrict Program Award, and Issue Program Announcement for Carl Moyer Multidistrict Program

As agreed in a Memorandum of Understanding signed between CAPCOA and CARB on May 1, 2013, the Carl Moyer Multidistrict Program funds will be alternatively designated between the Bay Area and the South Coast AQMD from FY 2012-13 (Year 15) through FY 2015-16 (Year 18). As such, the SCAQMD is to implement the FY 2013-14 Multidistrict Program. These actions are to adopt a resolution recognizing \$3 million in Carl Moyer Multidistrict Program grant awards from CARB with its terms and conditions for FY 2013-14 and to approve the release of a Program Announcement for the FY 2013-14 Carl Moyer Multidistrict Program.

Supervisor Benoit asked for an explanation regarding the MOA between CAPCOA and CARB for the multidistrict funds. Staff responded that it was an agreement to distribute the funds among the districts fairly in the northern parts of the state implemented by Bay Area AQMD and the districts in the southern part of the state implemented by SCAQMD.

Moved by Mitchell; seconded by Rutherford; unanimously approved.

3. Cosponsor Regional Universities for U.S. DOE EcoCAR 3 Competition and Solar Decathlon

EcoCAR 3 is an advanced plug-in hybrid passenger vehicle design-and-build competition sponsored by U.S. DOE and General Motors and managed by Argonne National Laboratory. California State University Los Angeles (CSULA) is the only competitor in California of 16 North American universities chosen to redesign a stock 2016 gasoline Chevrolet Camaro into a hybrid vehicle. The 2015 U.S. DOE Solar Decathlon challenges 17 U.S. and international university teams to create solar-powered houses that are cost-effective, energy efficient, attractive and incorporate EV charging into their energy use profile. This year's event will be held at the Great Park in Irvine and Team OC is the only Southern California competitor consisting of students from University of California Irvine (UCI) plus three local colleges. These actions are to execute agreements from the Clean Fuels Fund (31) with CSULA to

enter the DOE EcoCAR 3 competition in an amount not to exceed \$100,000 over four years and UCI to compete in the 2015 DOE Solar Decathlon in an amount not to exceed \$50,000.

Moved by Yates; seconded by Mitchell; unanimously approved.

4. Recognize and Transfer Funds and Execute Contracts to Develop and Demonstrate Warehouse Rooftop Solar Systems, Energy Storage and EV Charging

The SCAQMD applied for and anticipates receiving a \$500,000 award from U.S. EPA under Section 105 of the Clean Air Act to sponsor Clean Air Technology Initiative projects. Staff proposes to utilize these funds to cosponsor the development and demonstration of advanced warehouse rooftop solar systems with storage and chargers for electric drayage truck operations. This action is to recognize \$500,000 from U.S. EPA and transfer \$598,908 from the Clean Fuels Fund (31), which includes SCAQMD's cost-share of \$98,908 and \$500,000 as a temporary loan, into the Advanced Technology, Outreach and Education Fund (17). This action is also to execute contracts from the Advanced Technology, Outreach and Education Fund (17) with the University of California San Diego to develop and demonstrate warehouse rooftop solar systems in an amount not to exceed \$498,908 and with Transportation Power, Inc. to develop and demonstrate EV charging infrastructure for electric drayage trucks at a cost not to exceed \$100,000.

Supervisor Benoit mentioned solar panels should be able to provide voltage support to the grid to help with stability. Staff responded a regulation in place within California currently does not allow the inverters to provide grid voltage support like they do in Europe and confirmed the warehouse systems being developed will be able to provide this capability when allowed. Mayor Yates noted that warehouse owners have questioned the cost effectiveness of solar panels. Staff replied that solar panel costs in the past couple of years have dramatically reduced and adding these other capabilities, such as demand response and energy storage, may make warehouse PV more viable.

Mayor Yates also asked if the electric catenary trucks had the capability to use stationary chargers. Staff confirmed that these trucks can charge on the catenary system and using stationary chargers.

Moved by Rutherford; seconded by Mitchell; unanimously approved.

5. Other Business

Staff mentioned that the Technology Advancement Office Clean Fuels Program Annual Report and Plan Update reviewed at last month's Technology Committee

was pulled from the March Board Meeting for minor adjustments and will be going back to the Board in April.

6. Public Comment Period

There was no public comment.

Next Meeting: April 17, 2015

Attachment Attendance

Attachment A – Attendance

Supervisor John J. Benoit	.SCAQMD Governing Board (via VT)
Councilmember Judith Mitchell	.SCAQMD Governing Board
Supervisor Janice Rutherford	.SCAQMD Governing Board
Mayor Dennis Yates	.SCAQMD Governing Board
Mark Abramowitz	.Board Consultant (Lyou)
Buford Crites	.Board Consultant (JBenoit)
Marisa Perez	.Board Consultant (Mitchell)
Andrew Silva	.Board Consultant (Rutherford)
Bob Ulloa	.Board Consultant (Yates)
John Olvera, Principal Deputy District Counsel	.SCAQMD
Matt Miyasato, STA	.SCAQMD
Henry Hogo, STA	.SCAQMD
Fred Minassian, STA	.SCAQMD
Laki Tisopulos, STA	.SCAQMD
Dean Saito, STA	.SCAQMD
Brian Choe, STA	.SCAQMD
Lisa Mirisola, STA	.SCAQMD
Aaron Katzenstein, PRDAS	.SCAQMD
Mary Leonard, FIN	.SCAQMD
Robert Paud, IM	.SCAQMD
Penny Shaw Cedillo, STA	.SCAQMD
Pat Krayser, STA	.SCAQMD
Andy Takata	.County of San Bernardino
Tom Gross	.SCE
Susan Stark	.Tesoro