#### MEMORANDUM

February 9, 2017

- TO: MEMBERS, PORT COMMISSION Hon. Willie Adams, President Hon. Kimberly Brandon, Vice President Hon. Leslie Katz Hon. Eleni Kounalakis Hon. Doreen Woo Ho
- FROM: Elaine Forbes Executive Director
- **SUBJECT:** Request authorization to accept and expend \$1,371,250 from the Bay Area Air Quality Management District Goods Movement Emission Reduction Grant Program Locomotive Project and to appropriate \$515,562 in available Fund Balance as the Port's funding contribution for the procurement of a \$1,886,813 state-of-the-art low-emissions locomotive to replace a 60-year old Port ALCO locomotive, subject to Board of Supervisors' approval

# DIRECTOR'S RECOMMENDATION: Approve the Attached Resolution

#### **EXECUTIVE SUMMARY**

The Port's rail tenant, San Francisco Bay Railroad (SFBR), currently leases two Port owned locomotives under Locomotive Agreement No. L-14502. SFBR pays \$1 per year for the use of these 68 year old locomotives and are fully responsible for the fuel and maintenance costs. SFBR relies solely on these two Port owned locomotives for their rail operations. The locomotives, built in 1946, have an emission rating of "Tier 0".

In January 2016, the Bay Area Air Quality Management District (BAAQMD) announced it was accepting grant applications for locomotive projects through its Goods Movement Emission Reduction Grant Program. This program is funded by and follows the guidelines of the California Air Resources Board's (CARB) Proposition 1B (Prop 1B) Goods Movement Emission Reduction Program. BAAQMD was additionally awarded grant funding from the U.S. Environmental Protection Agency's (EPA) Diesel Emission Reduction Act (DERA) 2016 National Clean Diesel Funding Assistance program to fund locomotive projects. On January 28, 2016, the Port submitted its grant application to BAAQMD for consideration to use grant funds to purchase a "Tier 4" "green" locomotive and replace an existing "Tier 0" 1946 locomotive which is currently in use. The cost of the new locomotive is \$1,886,813. On July 18, 2016, BAAQMD notified the Port of its decision to award the Port grant funds of \$937,500 under Prop 1B and \$433,750 under DERA for a total of \$1,371,250.

The BAAQMD grant funds will allow the Port to acquire a new "Tier 4" low-emissions diesel locomotive through Knoxville Locomotive Works (KLW) of Knoxville, Tennessee where it will be manufactured. Total purchase and delivery cost will be \$1,886,813. The Port intends to cover the remaining balance, as part of the grant approval process. Port staff will seek the Board of Supervisors' appropriation of \$515,562 in available Fund Balance.

In order to recoup the Port's \$515,562 grant match, the Port will lease the new low emission locomotive to SFBR at market rates. Port staff will be bringing a revised rail locomotive lease agreement with SFBR to the Port Commission for consideration later in 2017. The grant performance period requires delivery of the new locomotive and destruction of the Port's ALCO locomotive engine by the end of 2018.

The "green" Knoxville locomotive can reduce particulate emissions and carbon dioxide by more than 85% compared to the current 1946 "Tier 0" ALCO locomotive. Reductions in locally-generated particulate emissions and carbon dioxide will benefit the local environment in the Bayview-Hunters Point community. A low-emissions locomotive operating in San Francisco will attract positive attention from around the country and will advance the Port's mission of environmental stewardship.

In order for the Port to accept and expend grant funds of \$100,000 or more, the Port must receive Board of Supervisors' approval to accept and expend the funds. Therefore, Port staff seek Commission authorization to seek Board of Supervisors' approval to accept and expend these grant funds and to appropriate \$515,562 of Fund Balance.

#### **STRATEGIC OBJECTIVE**

The proposed resolution supports the goals of the Port's Strategic Plan as follows:

## Sustainability:

The new "green" locomotive can reduce particulate emissions and carbon dioxide by more than 85%. Reductions in locally-generated particulate emissions will benefit Port staff, tenants and the public, including the neighboring Bayview-Hunters Point community. Additionally, a reduction in carbon dioxide emission supports the Port's goals to reduce its contribution to climate change.

Livability:

Purchasing a new locomotive will help sustain the Port's freight rail operator's ability to ease traffic congestion along the waterfront while using state-of-the-art locomotive technology to reduce air emissions.

### BACKGROUND

The Port of San Francisco has regular rail traffic through its railyard situated on Cargo Way in the Southern Waterfront, based along the Southern Waterfront within the Bayview-Hunters Point community. For more than a decade the Port has contracted with San Francisco Bay Railroad (SFBR) to provide shortline freight railroad services and rail terminal operations. The Port owns two 60-year old ALCO locomotives which are leased to SFBR for their operations. SFBR has strived to be a good steward of the neighborhood by maintaining a clean and environmentally-compliant operation, by hiring its employees and subcontractors almost exclusively from the local community, and by seeking opportunities to improve the environment at the railyard and in the local community.

Toward that end, SFBR (under its prior name, LB Railco) applied for and received two BAAQMD-sponsored Carl Moyer grants in 2005 to install new, clean-burning engines in its mobile lift cranes, thereby replacing old, polluting engines. In 2008, SFBR partnered with CARB to study the benefits of using biodiesel in the Port's aging ALCO locomotives, and then implemented the use of biodiesel when the finding of the CARB report indicated that the fuel would yield improved air quality.

The Port applied for BAAQMD grant funding to purchase a low-emission locomotive to replace one of the Port's old (1946 vintage) ALCO locomotives to further improve the air quality at the railyard and in the Bayview-Hunters Point neighborhood.

## **BAAQMD GRANT PROGRAM**

BAAQMD's Goods Movement Emission Reduction Grant Program Locomotive Project is a partnership between CARB and the local air quality agencies to quickly reduce diesel emissions and health risk from freight movement along California trade corridors. Projects funded under this program must achieve early or extra emission reductions not otherwise required by law or regulation. BAAQMD has at least \$15 million in California Prop 1B funding available for projects.

Equipment eligible to receive BAAMQD grant funding includes replacement locomotives for diesel-powered freight locomotives with no or minimal emissions control technology (i.e., uncontrolled, or meeting "Tier 0" through "Tier 2" standards). The Port's 1946 ALCO locomotives are considered "Tier 0" meaning they were produced prior to 1973 and are not required to meet current U.S. EPA air emissions standards. Tier 4 emissions control requirements came into effect in 2015 and are required for all new locomotives.

In January 2016, the Bay Area Air Quality Management District (BAAQMD) announced it was accepting applications for locomotive projects through its Goods Movement Emission Reduction Grant Program. This program is funded by and follows the guidelines of the California Air Resources Board's (CARB) Proposition 1B (Prop 1B) Goods Movement Emission Reduction Program. BAAQMD was additionally awarded grant funding from the U.S. Environmental Protection Agency's (EPA) Diesel Emission Reduction Act (DERA) 2016 National Clean Diesel Funding Assistance program to fund locomotive projects.

## **GRANT AWARD & USE**

On July 18, 2016, BAAQMD notified the Port of its decision to award the Port grant funds of \$937,500 under Prop 1B and \$433,750 under DERA. The Port will be required to contribute the remaining \$515,562 required to purchase the \$1,886,813 "green" locomotive.

The grant performance period requires delivery of the new locomotive and decommissioning of the Port's ALCO locomotive engine by the end of 2018.

## Terms and Conditions of Grant

The Grant agreement with the BAAQMD contains the following material terms and conditions for use of the grant funds:

- 15 year use of the new locomotive
- Locomotive to be maintained according to manufacturer warranty requirements.
- Locomotive to be insured.
- Port must indemnify BAAMQD and CARB (Grantor) for use of the grant funds and implementation of the grant-funded project.
- Port to decommission old "Tier 0" Alco locomotive engine.
- Completion of new locomotive delivery and testing as well as decommissioning of old Alco engine by December 2018.
- BAAQMD logo shall be affixed to the locomotive

The locomotive will be acquired through Knoxville Locomotive Works (KLW) of Knoxville, Tennessee where it will be manufactured. KLW began designing its line of green locomotives in 2008. KLW's goal was to manufacture a simple locomotive that provides superior benefits and economic value in comparison to other low-emissions locomotives. Some of the features of the KLW "green" locomotives include: Single-engine design that is simple, reliable, and preferred over multi-engine alternatives; EPA compliance with emissions reductions of up to 85%; reductions of up to 65% in fuel consumption; reductions in oil consumption by up to 75%; increasing starting tractive effort up to 40%. The Richmond Pacific Railroad is in the process of acquiring two of the same model KLW locomotives through this grant program.

This grant comes at a propitious time, as the Port has nearly completed \$4 million in construction improvements to the freight rail infrastructure between the Caltrain mainline and the Port, largely funded through a Federal Railroad Administration grant. These improvements will facilitate expanded freight rail operations and more extensive use of the new locomotive. A low-emissions locomotive operating in San Francisco will attract

positive attention from around the state, the country, and the world. If one of the goals of BAAQMD and CARB is to spread best practices about new technologies available to clean up diesel emissions, the City and Port of San Francisco would be an excellent place to "showcase" that technology.

### **FUNDING**

The \$1,886,813 locomotive will be funded by \$937,500 Prop 1B and \$433,750 DERA grants, and \$515,562 proposed funding from the Port's available Fund Balance. Staff proposes recovering the Port's capital investment through monthly use payments by the operator. Port staff will separately recommend to the Port Commission an updated lease agreement with terms for SFBR to operate, maintain, and lease the new locomotive.

### PROJECT SCHEDULE

The anticipated schedule is as follows:

Port Commission Accept & Expend approval Board of Supervisors' Accept & Expend approval Negotiate new Locomotive Lease Agreement with SFBR Negotiate locomotive purchase contract with KLW Finalize and Execute Grant and Use Agreement with BAAQMD Locomotive delivery to Port, tests, inspections, etc. Destruction of ALCO engine from Locomotive SFBR 25 February 14, 2017 March 2017 March 2017 March 2017 March 2017 Summer 2018 Fall 2018

## RECOMMENDATION

Port staff requests Port Commission authorization to accept and expend grant funds of \$1,371,250 from the Bay Area Air Quality Management District, Goods Movement Emission Reduction Grant Program Locomotive Project, to purchase a state-of-theart low-emissions locomotive to replace an existing 60-year old Port ALCO locomotive and to seek Board of Supervisors' approval to accept and expend the grant funds. Additionally, staff requests authorization to appropriate \$515,562 in available Fund Balance as the Port's funding contribution.

> Prepared by: Brendan O'Meara Maritime Marketing Manager

Prepared for: Peter Dailey Deputy Director, Maritime

#### PORT COMMISSION CITY AND COUNTY OF SAN FRANCISCO

### **RESOLUTION NO.** <u>17-08</u>

- WHEREAS, In January 2016 the Bay Area Air Quality Management District (BAAQMD) announced it was accepting applications for "green" locomotive projects through its Goods Movement Emission Reduction Grant Program Locomotive Project (the "BAAQMD grant program"); and
- WHEREAS, This BAAQMD grant program is funded by and follows the guidelines of the California Air Resources Board's Proposition 1B (Prop 1B) Goods Movement Emission Reduction Program, and was additionally funded by the U.S. Environmental Protection Agency's Diesel Emission Reduction Act (DERA) 2016 National Clean Diesel Funding Assistance Program; and
- WHEREAS, On January 28, 2016, the Port submitted its grant application requesting funds under the BAAQMD grant program to purchase a new Tier 4 stateof-the-art low-emissions locomotive to replace a 60-year old Port ALCO locomotive; and
- WHEREAS, The Port's BAAQMD grant application is the logical next step along the path of cleaning up the air at the railyard and in the Bayview-Hunters Point neighborhood; and
- WHEREAS, On July 18, 2016, BAAQMD notified the Port of its decision to award the Port grant funds of \$937,500 under Prop 1B and \$433,750 under DERA for a total of \$1,371,250 in grant funding; and
- WHEREAS, The grant funds will be applied to the purchase of the new Tier 4 stateof-the-art low-emissions diesel locomotive through Knoxville Locomotive Works of Knoxville, Tennessee at a total project cost of \$1,886,813; and
- WHEREAS, The BAAMQD grant award leaves a remaining sum of \$515,562 to acquire the Tier 4 locomotive, which the Port will fund from its available Fund Balance; and
- WHEREAS, The "green" Knoxville locomotive can reduce particulate emissions and carbon dioxide by more than 85%, and reductions in locally-generated particulate emissions and carbon dioxide will benefit the local Bayview-Hunters Point community and the Port; and
- WHEREAS, The grant performance period requires delivery of the new locomotive and decommissioning of the Port's ALCO locomotive engine by the end of 2018; and

- WHEREAS, In order for the Port to accept grant funds of \$100,000 or more, the Port must obtain the Board of Supervisors' approval to accept and expend the funds; now therefore be it
- RESOLVED, That the Port Commission hereby authorizes the Executive Director to seek the Board of Supervisors' approval to accept and expend the BAAQMD grant program funds; and be it further
- RESOLVED, That the Port Commission hereby authorizes the Executive Director to seek the Board of Supervisors' appropriation of \$515,563 in available Fund Balance from the Harbor Fund for acquisition of the new Tier 4 locomotive; and be it further
- RESOLVED, That the Port Commission hereby urges the Board of Supervisors to approve the Port's request for approval to accept and expend the BAAQMD grant and to appropriate the Port's capital contribution; and be it further
- RESOLVED, That the Port Commission, subject to the Board of Supervisors' approval, hereby authorizes Port staff to accept and expend the BAAQMD grant, and to execute and enter into the grant agreement with the Bay Area Air Quality Management District consistent with the material terms and conditions recited in the accompanying staff report, and any additions, amendments, or modifications to the grant agreement that do not materially decrease the Port's benefits or increase the Port's obligations or liabilities, and are appropriate and advisable to complete the proposed transaction, in such form as approved by the City Attorney.

*I hereby certify that the foregoing resolution was adopted by the San Francisco Port Commission at its meeting of February 14, 2017.* 

Secretary