CalETC
California Electric Transportation Coalition

December 17, 2015

California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Support for the Draft Technology Assessment: Mobile Cargo Handling Equipment

The California Electric Transportation Coalition (CalETC) is pleased to provide comments on the California Air Resources Board's (CARB's) Draft Technology Assessment: Mobile Cargo Handling Equipment.

CalETC is a non-profit association promoting economic growth, clean air, fuel diversity and energy independence, and combating climate change through the use of electric transportation. CalETC is committed to the successful introduction and large-scale deployment of all forms of electric transportation including plug-in electric vehicles, transit buses, port electrification, off-road electric vehicles and equipment, and rail. Our board of directors includes: Los Angeles Department of Water and Power, Pacific Gas and Electric, Sacramento Municipal Utility District, San Diego Gas and Electric, and Southern California Edison. Our membership also includes major automakers, manufacturers of zero-emission trucks and buses, and other industry leaders supporting transportation electrification.

California has clear goals to transform the state's goods-movement systems to zero and near-zero emission technologies (see, e.g., *Governor Brown's 2013 ZEV Action Plan*, *Governor Brown's Draft 2015 ZEV Action Plan*, *Governor Brown's Executive Order B-32-15*, *SB 1204 (Lara)*, *ARB's Sustainable Freight Discussion Draft*, *CalSTA's and Caltrans' California Freight Mobility Plan*). California is a major hub for freight transport and with increasing freight activity, California's ports, intermodal rail yards, and warehouse distribution centers are a prime target for transition to zero and near-zero emission technologies.

Vehicles – in this case, cargo-handling equipment like forklifts, cranes, yard trucks, dozers, handlers, sweepers, railcar movers, etc. – using electricity as a fuel drastically reduce criteria, toxic and greenhouse gas pollutants. Combustion-engine vehicles will play an important role for some time to come, but traditional combustion engine vehicles deteriorate causing emissions to increase over time. Battery electric vehicles only get cleaner as more renewables are incorporated into the grid. As this Technology Assessment illustrates, manufacturers are already making many of these equipment types available in battery-electric versions.

For these reasons, CalETC supports staff's recommendations in the Draft Technology Assessment on Mobile Cargo Handling Equipment. Specifically, we support the following concepts and staff recommendations:

- Automation and electrification of cargo-handling operations as the most promising long-term technologies for container handling.

- Electrified non-automated and hybrid equipment as the most promising technologies for near-term container handling and bulk handling.

- Staff's recommendation to support and incentivize the installation of infrastructure for the automation and electrification of container terminal cargo-handling operations.

- Staff's recommendation to support incentives for both the demonstration and purchase of electric and hybrid container- and bulk-handling equipment.

As detailed in the Draft Technology Assessment, transitioning the goods- movement sector to zero-emission technologies will be challenging. It will require substantial public funding and leveraging the commitment of the industries, including electric utilities, cargo-handling equipment manufactures and others, who are supportive of transportation electrification. To this effect, we look forward to continuing to work with CARB staff to achieve the state's goods-movement goals.

Thank you for the opportunity to provide our support for this Draft Technology Assessment.

Regards,

Eileen Wenger Tutt, Executive Director
California Electric Transportation Coalition