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November 21, 2018

Mary D. Nichols, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Subject: Comments to the Proposed Amendments to the Innovative Clean Transit Regulation

Dear Chair Nichols and Members of the Air Resources Board:

On behalf of the San Francisco Municipal Transportation Agency (SFMTA), we hereby submit comments in response to the proposed amendments to the Innovative Clean Transit (ICT) regulation, released on November 9th.

SFMTA fully supports the proposed ICT regulation, which would help accelerate adoption of Zero Emission Buses (ZEBs) by transit agencies and reduce Greenhouse Gases (GHG) and other emissions through transit fleet electrification. SFMTA has been one of the national leaders in supporting sustainable, reduced and zero emission revenue transit vehicles and currently operates the largest fleet of zero emission electric trolley buses, running on 100% greenhouse gas (GHG) free electricity, in North America.

In 2013, SFMTA began the procurement process to replace its entire fleet with Hybrid Electric and Electric Trolley coaches, with an anticipated end date for the replacement cycle in 2019. SFMTA expects to replace its Hybrid Electric coaches, which have a 12 year service life, with Battery Electric coaches starting in 2025. This timeline aligns with SFMTA's Zero Emission Vehicle Policy, which was adopted by the SFMTA Board of Directors in May 2018, and should allow SFMTA sufficient time to deploy the necessary charging infrastructure to support the battery electric buses. SFMTA is fully committed to procuring Battery Electric Buses starting in 2025 with the goal of achieving a 100% zero emission fleet by 2035, in advance of the proposed 2040 ICT deadline. SFMTA has a robust plan in place comprising multiple, innovative projects to help ensure we meet or exceed our Zero Emission goals:



- Hybrid Electric “Green Zone” Program
 - In September 2018 SFMTA began procuring new electric hybrid buses with higher capacity on board battery systems in order to initiate a “Green Zone” program.
 - Full program deployment anticipated in early 2019
- Battery Electric Bus Pilot Program (9 buses)
 - RFP released in November 2018
 - Anticipated arrival of pilot buses in December 2019
 - Revenue service testing through December 2020
 - Planned release of the future procurement strategies and recommendation report, based on pilot results, in July 2021
- Hybrid Electric Conversion Program
 - Design criteria and technical specification developed by August 2019
 - Anticipated RFP release date in January 2020
 - Anticipated delivery of pilot conversion buses in August 2020
 - Testing of conversion buses in revenue service through August 2021
 - Feasibility report release anticipated in December 2021
- Trolley Extended Range Battery Replacement Program
 - Design criteria and technical specification developed by August 2019
 - Anticipated release date of RFP in January 2020
 - Pilot battery installation on trolleys anticipated in August 2020
 - Feasibility report to install extended range batteries on all trolleys released in December 2021

SFMTA is excited to pioneer the Hybrid Electric Conversion Pilot Program and realizes that the feasibility and success of such pilot is imperative to meet our goal to achieve a 100% zero emission fleet by 2035. In the unlikely scenario that the pilot is deemed not successful or feasible to implement, SFMTA will assess the feasibility of procuring battery electric vehicles earlier than 2025 and revise its Zero Emission Vehicle Resolution if needed.

SFMTA appreciates the changes the California Air Resources Board (CARB) has made to acknowledge Trolley Buses for the zero-emission bus bonus credits in the ICT regulation. This recognition provides flexibility for SFMTA to fully implement our established Zero Emission Vehicle Policy, as detailed in the May 2018 resolution, to procure Battery Electric Buses and achieve a 100% zero emission fleet by 2035. SFMTA acknowledges concerns of



potential delay of procurement of Battery Electric buses through utilization of the credits and supports the limited bonus credit period.

SFMTA operates buses in one of the most challenging topographies and requires that buses be able to operate on up to 23% grade with Gross Vehicle Weight Rating (GVWR). As a result, SFMTA also appreciates the addition of new language to address gradeability.

SFMTA looks forward to continuing to work in partnership with CARB to advance the goal of achieving zero emissions in our transit fleet and continuing to improve service for our more than 700,000 daily rides. Should you have any questions about our comments, please feel free to reach out to me at 415.701.4720 or Kathleen Sakelaris, Regulatory Affairs Manager, at 415.701.4339. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'E. Reiskin'.

Edward D. Reiskin
Director of Transportation

cc: Mayor London Breed, City & County of San Francisco
SFMTA Board of Directors
California Transit Association