Metropolitan Transit System

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OCT 18 2006
AIR RESOURCES BOARD
CLERK OF THE BOARD

October 18, 2006

Doctor Robert F. Sawyer
Chairman
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Proposed Amendments to the Zero Emission Bus Regulations

Dear Dr. Sawyer:

The San Diego Metropolitan Transit System (MTS) appreciates the opportunity to comment on the California Air Resources Board (CARB) proposed amendments to the Zero Emission Bus (ZEB) Regulations. CARB Board Member Ron Roberts would normally share our comments with you in person, but he is unable to attend the meeting and suggested that I write to you and your fellow Board Members regarding the impact of this proposal on MTS.

MTS operates transit services over 3240 total square miles in San Diego County, and provides an environmentally-friendly transportation option to ten cities, the unincorporated County, and the international border. Along with its extensive light rail network, MTS operates 725 buses, half of which have already been replaced with Compressed Natural Gas (CNG) buses in keeping with our commitment to cleaner fuel technology. It is our goal to replace the entire fleet in the next seven years. MTS has embraced CARB's commitment to CNG vehicles at a considerable cost to the transit system, a cost that we continue to absorb today.

MTS generally agrees with the recommendation to postpone the ZEB purchase requirement. The current ZEB regulations were intended to spur the market into creating hydrogen fuel-cell technology that could be affordable and easily placed into revenue service by transit operators throughout the state. Tests being conducted by California transit operators have indicated that the technology is not close to being affordable, durable, or reliable, and thus warrants delay in implementation.

However, MTS does not believe that these recommendations go far enough in light of realistic expectations for the future of this technology. Based on initial evaluation, we believe that financial, economic and air quality impacts have not been adequately addressed in making the recommendations. The projected financial impact caused by the purchase and operation of ZEBs is overly optimistic, given current experience. The cost of using hydrogen is significantly higher than CNG or diesel, at least five times more expensive. The fuel range for hydrogen buses is only 150 miles between fills, which

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makes it difficult to use this technology in revenue service. The fuel cells and tanks required for this type of propulsion system add significant weight to the vehicles, which prevents full use of the bus for transporting passengers, and thus requires more buses to accomplish the same number of CNG or diesel bus passenger trips. Preventative maintenance service is required every 80 hours of operation, and the fuel cells require several costly replacements during the 12 year lifecycle of the buses. Further analysis is needed to accurately predict the cost to implement these regulations.

Construction of hydrogen fueling and maintenance facilities also carries a considerable cost. This cost would compound the financial impact already being felt by alternative fuel path operators such as MTS who only recently incurred the additional cost of constructing CNG infrastructure and operating CNG vehicles. Each of these financial impacts deserve more consideration before introducing alternative fuel path agencies into the Advanced Demonstration Program, or requiring implementation of the ZEB purchase requirement.

The prohibitive cost associated with creating a hydrogen infrastructure and purchasing and operating hydrogen vehicles will necessitate a delay in new bus purchases, a cut in bus service to our communities, and the delay of future light rail expansion in San Diego County. The result will be a significant and quantifiable adverse impact on air quality and the economy. Therefore, the economic and air quality impacts of a reduction in public transportation service should be considered prior to enforcing implementation of the ZEB program, and the staff report does not adequately address these impacts. For instance, while the report has concluded that there will be minimal impacts on employment, the reduced service caused by the ZEB program would result in a loss of employment for drivers and other transit personnel, as well as those who rely on transit to get to work. Additionally, reduced service will potentially cause increased single-passenger auto use, and result in an increase in emissions, plus an increased need to build more roads. These impacts should be taken into consideration when determining how far to postpone implementation of the purchase and operation requirements.

While we appreciate CARB staff's acknowledgement of these issues, and the attempt to base the purchase requirement on a sliding scale if ZEB cost, durability and reliability thresholds are not met by the new deadlines, we believe that adequate information exists today to support postponing the purchase requirement later than 2012, and request that you and your fellow Board members consider this option. In lieu of this, please postpone your decision on the amendments until a later meeting in order to allow a more thorough analysis of the financial, economic and air quality impacts, and to allow staff additional time to work with the affected transit operators.

Sincerely,

Paul Jablonski
Chief Executive Officer

CC CARB Members
Catherine Witherspoon, Executive Director