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May 14, 2018

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

**Subject: Update on Innovative Clean Transit Discussion Document**

Dear Chair Nichols:

The Orange County Transportation Authority (OCTA) Board of Directors welcomes the opportunity to comment on the California Air Resources Board's (ARB) Update on Innovative Clean Transit Discussion Document (Update), dated March 27, 2018. For reference, OCTA submitted detailed comments on the initial version of the discussion document in a letter sent to the ARB on January 22, 2018. OCTA appreciates ARB's efforts to hear the concerns of transit agencies and consider changes to the regulatory framework, such as a potential exemption for cutaway buses and the possibility of delaying the purchase mandate. Overall, OCTA has concerns about the Update and continues to support the California Transit Association's (CTA) counterproposal, which would afford transit agencies the cost relief and flexibility necessary to successfully deploy zero-emission bus technology. CTA's plan would maintain the statewide commitment to zero-emission transit bus fleets by 2040, ARB's ultimate goal with the regulation, while allowing transit agencies to develop transition plans, funding early deployment of zero-emission technology, and ensuring that the regulation's mandates are supported by empirical data.

Like other transit agencies throughout the state, OCTA has proactively taken steps to transition to cleaner vehicle technology, including obtaining over ten hydrogen fuel cell buses, exclusively using renewable natural gas for the existing fleet, and integrating low nitrogen oxide engines, with about 20 percent of the fleet utilizing near-zero emission engines. Based on this experience, OCTA is concerned that the wide-scale adoption of zero-emission technology might leave transit agencies unable to meet riders' expectations. Bus testing procedures do not account for real-world conditions, such as passengers on board or the use of heating and air conditioning. Even more concerning, some buses, including zero-emission cutaway buses, have not undergone Altoona Testing. The Update requires that transit agencies purchase zero-emission technology that likely cannot meet the functional demands of transit agencies. Failure of this new technology to stand up to axle weight and useful life

Ms. Mary D. Nichols  
May 14, 2018  
Page 2

guidelines would exasperate already tight budgets for transit agencies that are facing declining revenues.


OCTA is pleased that the ARB is considering ways to make the regulatory framework more feasible for transit agencies, such as considering an exemption for cutaway buses. This one change would lower the estimated cost of converting the current fleet to zero-emission technology by \$47 million. This change also recognizes the lack of practical testing for this technology, allowing for reconsideration once the technology is more developed. OCTA looks forward to continuing its work with the ARB to find additional ways to improve the Update, which is expected to cost OCTA approximately \$395 million after removing the estimated cost of replacing cutaway buses. This estimate does not include any additional fueling or infrastructure costs, both of which are likely to be substantial. Powering OCTA's current fleet of over 500 buses with compressed natural gas uses approximately 5.3 megawatts of energy, while charging a similarly sized fleet of zero-emission buses would require about 62 megawatts of energy. This increase would likely require that OCTA charge zero-emission buses during peak hours, which would either be cost prohibitive or create significant logistical issues. OCTA is set to replace approximately 229 buses before the first year of the Update's purchase mandate, making the agency one of the most adversely affected in the state in terms of percentage of current operating fleet. CTA's counterproposal avoids these kinds of procurement issues while still mandating the implementation of zero-emission technology by 2040.

While the Update is an improvement upon the original proposal, there are further changes that the ARB could make to ensure a truly collaborative rulemaking process. CTA's counterproposal would establish benchmarks to prevent the transition to zero-emission bus technology from causing significant financial and operational hardship for transit agencies. The proposed benchmarks will ensure that the technology meets the expectations of this rulemaking. For instance, substandard battery life alone could lead to considerable maintenance costs and operational issues, while widespread battery malfunction or failure could bring buses to a halt. CTA's counterproposal also recognizes the potential for unpredictable difficulties that would necessitate delaying implementation. As many in California have seen in recent years, natural disasters can threaten the stability of entire regions, stretching budgets just to try to make communities whole again. In addition, federal and state funding programs may change in the future, making it nearly impossible to finance the deployment of this new technology. The CTA counterproposal would simply require the ARB to do an independent or peer-reviewed analysis of various benchmarks against real-world data to ensure that the transition to zero-emission bus fleets is not overly burdensome or unrealistic for implementing agencies by recognizing unforeseen hardships that may take place in the future.

Ms. Mary D. Nichols  
May 14, 2018  
Page 3

OCTA appreciates the time and effort ARB staff has taken to meet with transit agencies to discuss the Update. Going forward, OCTA hopes to continue discussions with the ARB to develop a collaborative solution that will help reduce emissions and improve transit service in the same way that CTA's performance-based standard would. Regrettably, the Update will make it more difficult for transit agencies to meet the needs of their riders, which directly contradicts the ARB's goals in pursuing the policy. If you or your staff have any questions regarding OCTA's comments, please contact Kristin Essner, Manager of State and Federal Relations, at (714) 560-5754, or [kessner@octa.net](mailto:kessner@octa.net).

Sincerely,



Darrell E. Johnson  
Chief Executive Officer

DEJ:djs  
Attachment

c: Members, California Air Resources Board  
Richard Corey, Executive Officer, California Air Resources Board  
Steve Cliff, Deputy Executive Office, California Air Resources Board  
Jack Kitowski, Chief, Mobile Source Control Division, California Air Resources Board  
Shirin Barfjani, Air Pollution Specialist, Mobile Source Control Division, California Air Resources Board  
Yachun Chow, Manager, Zero Emission Bus Truck and Bus Section, California Air Resources Board  
Platinum Advisors