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Alameda-Contra Costa Transit District

Mike Hursh, General Manager

September 6, 2018

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

**RE: Innovative Clean Transit Draft Discussion Proposal**

Dear Chair Nichols:

On behalf of the Alameda-Contra Costa Transit District (AC Transit), I want to start by expressing our appreciation to the California Air Resources Board (CARB) staff for the significant time and attention spent on the development of the Innovative Clean Transit (ICT) rule. The proposed rule reflects considerable strides in addressing the real world constraints faced by AC Transit and all transit operators. Unfortunately, there remain critical elements that need to be addressed in order to implement a rule that recognizes the state of technology readiness and the financial balance between maintaining service levels while transitioning to a zero emission fleet.

In 2002, AC Transit began operating a hydrogen fuel cell electric bus. We now operate 13 hydrogen fuel cell electric buses and have two (2) hydrogen fueling stations at our Oakland and Emeryville bus yards – the latter having a dispenser accessible to the public for fueling passenger cars. An additional 10 hydrogen fuel cell zero emission buses are on order, which were sponsored by an \$8.5 million grant from the Air Resources Board. While vehicle and fuel costs remain a concern, the reliability of these vehicles has exceeded expectations. In addition, AC Transit will be receiving five (5) battery electric buses, and has been awarded funds to purchase an additional 45 zero emission buses. This will enable AC Transit to compare battery and fuel cell vehicles in real world side-by-side conditions, and generate the valuable data AC Transit needs to find the most cost effective balance in vehicle technologies.

AC Transit's leadership in the development of zero emission bus technology underscores its commitment to transitioning to 100% zero emission buses. However, AC Transit continues to have concerns regarding the uncertainty with the scalability, the uncertainty with the technology, and, the uncertainty with the financial ability to implement this rule. For AC Transit to maintain service levels while addressing this uncertainty, we urge you to amend the draft rule to include the following:

- The biggest risks to our transit service lies in projecting the cost and technological capabilities of zero emission buses (ZEB) 5, 10, or 20 years out. Consistent with the Transit Fleet Rule, we ask that the rule be amended to include cost and performance benchmarks that would be reviewed prior to the commencement of the purchase mandate, and periodically thereafter and that such benchmarks be used to determine how the

regulation proceeds. In particular, establishing these benchmarks must be based on an independent review of the vehicle technology and the fueling/charging demands for large scale deployments.

- The Hybrid and Zero Emission Truck & Bus Voucher (HVIP) provides a simplified and successful process for offsetting the cost of a zero emission bus. However, given the scale of the proposed transition, the strict timeline, and unknown delays in vehicle production and infrastructure implementation, the HVIP funds must be available as an incentive and compliance program. In addition, CARB must clearly request that the Legislature create an infrastructure funding program. Without a secure source for infrastructure investments in fueling/charging facilities, maintenance facilities, and storage capacity, the ability to meet the goals of this rule is questionable at best.
- We appreciate the inclusion of “off ramps” in the proposed rule that allow extensions or exemptions if specified conditions occur. This includes an exemption from ZEB purchases based on financial hardships. A financial hardship exemption should also extend to the purchase of alternative diesel fuel. While CARB is working toward the commercialization of alternative diesel fuel, it is unknown if there will be a stable supply and reasonable price for alternative diesel fuel. It is also uncertain if engine warranties allow the use of alternative fuels.

AC Transit took the first step toward zero emission buses with the development of its prototype fuel cell vehicles. Much has changed since that first vehicle went into service, but there remains considerable uncertainty as we scale up the use of zero emission buses. AC Transit supports moving toward a zero emission fleet, but this must be carefully balanced with our limited financial resources, and not undercut our highest priority of providing public transit service to all.

Therefore, on behalf of AC Transit, thank you for your time invested in this issue, and I urge your favorable consideration of these amendments. If you have any questions or require more information, please do not hesitate to contact me at (510) 891-4753.

Sincerely,



Michael Hursh  
General Manager

Cc: Senator Nancy Skinner  
Senator Bob Wieckowski  
Assemblyman Tony Thurmond  
Assemblyman Rob Bonta  
Assemblyman Bill Quirk  
Assemblyman Kansen Chu  
AC Transit Board of Directors  
Beverly Greene, Executive Director of External Affairs, Marketing & Communications  
Sal Llamas, Chief Operating Officer