

November 9, 2017

Ms. Katherine Garrison
Mobile Source Control Division
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Zero-Emission Airport Shuttle Bus Measure

Dear Ms. Garrison:

On behalf of the California Airports Council (CAC), representing the commercial service airports in the state, I write to transmit our recommendations as you move forward with development of the zero-emission airport shuttle bus regulation. We appreciate the collaborative approach taken by the California Air Resources Board (CARB) throughout this process, offering continued opportunity to participate in the development of the statewide regulation.

Airports have long been environmental stewards seeking clean technologies to operate for the benefit of passengers, workers and the local community. Under voluntary action, airports have worked to reduce emissions from sources under their direct control, such as facilities energy-use and fleet fuel-use, while also focusing on understanding new opportunities with their business partners to facilitate reductions in emissions from sources not within their control, including aircraft, ground support equipment and transportation vehicle emissions. Examples of this partnership include electrifying gates for parked aircraft, facilitating the deployment of cleaner airport-owned on-road fleets, deploying electric ground support equipment in partnership with airlines, and supporting the integration of clean vehicles to the region by converting to alternative fuels and installing alternative fueling infrastructure accessible to the public for electric and renewable natural gas. With multiple air quality planning efforts underway, CARB seeks to place additional regulation on airports by transitioning airport shuttle buses to zero-emission technologies as stated in California's 2016 State Implementation Plan. We understand California's need to reduce emissions in the state, but by following a regulatory pathway, airport flexibility is limited in achieving the overarching goal. We offer the following suggestions to ensure a manageable foundation for the rule.

Most importantly, we urge CARB to implement this measure through voluntary agreements. If a mandate for this equipment is imposed, then airports will lose access to federal funds specifically designated to support environmental improvements at airports. Under the Federal Aviation Administration's (FAA) Voluntary Airport Low Emission (VALE) and Zero Emissions Airport Vehicle (ZEV) grant programs, airports nationwide have access to federal dollars that assist with projects that go above and beyond existing environmental regulation. It will be especially difficult for airports to fund

the zero-emission technology (for both vehicles and infrastructure) going forward if California actions result in airports being ineligible for FAA grants. In FY2016 almost 50% of the VALE funds went to California airports. There are other state funds for which airports could apply, but historically, airports have not been competitive in the solicitation process, and if funds are awarded, they are not adequate in supporting the project costs. By entering a voluntary agreement for an extended period, airports can maintain access to vital resources while committing to meet the goal of shuttle bus electrification.

Due to the cost of electric buses and necessary charging infrastructure, we are also requesting CARB to consider two exemptions to be included within any zero-emission airport shuttle bus measure proposed going forward:

- **The first exemption would be for low-use and reserve shuttle buses.** These low-use and reserve shuttles are used as substitutes for short-term periods during, for example, when other vehicles in the shuttle fleet are undergoing maintenance and repair. This exemption would only cover reserve and low-use vehicles that travel less than 10,000 miles annually. Given airports use low-use and reserve vehicles on a temporary basis for a short duration, it is not financially feasible for airports to spend hundreds of thousands of dollars purchasing a zero-emissions bus that will see minimal operation throughout the year.
- **The second exemption would be for non-hub airport facilities.** The large, medium and small-hub airports in the state generate over 90% of passenger traffic for California. Non-hubs are typically located in rural areas, which economically, face significant constraints in converting their shuttle fleets to zero-emission vehicles. In fact, most non-hub airports do not have an airport-controlled fleet and the minimal offerings of local non-airport controlled providers will likely cease operations to the airport altogether rather than pay for the new technology estimated at over \$700,000 per bus and charger to convert shuttle vehicles to zero emission vehicles.

In addition to these requested exemptions, the airports have a number of additional recommendations regarding any proposed regulation. First, through the working group process, CARB has defined the potential impacted shuttles as fixed-route operations within relatively close range of airports. To capture this proposed classification of movement, we recommend that CARB define the vehicles subject to any shuttle fleet regulation as courtesy and airline crew shuttles. These are terms used by airports to refer to free shuttle service to airport parking lots, and participating hotels, rental car areas, and local attractions. Courtesy and crew shuttles typically operate on frequent routes less than 15 miles long. By using these defined terms, confusion will be reduced as to the applicability of this measure. As mentioned in previous discussions with CARB staff, it would be extremely disadvantageous to require zero-emission shuttle buses for long distance routes, considering the technology is still in early stages and unable to confidently support continuous airport operations due to range and charging limitations.

Second, and as briefly mentioned above, a recurring concern of airports is limited product availability. Zero-emission shuttle buses are largely new technology, and in addition, the FAA has Buy-America requirements stricter than those of the Federal Highway Administration. Airport shuttles are constantly in-service, with some airports maintaining 24-hour operation. There needs to be product that is practical, affordable and reliable to meet the critical needs of an airport before millions are invested due to strict regulatory requirements. Airports are interested in the technology, but would like to see the market mature before completely transitioning their fleets to battery-electric. That said, airports appreciate the gradual implementation timeline conceptualized by CARB as it offers time for the market to evolve.

Third, the airports also have concerns that need to be discussed in future meetings regarding the impacts any regulation will have on non-airport controlled fleets, including availability of 480V power, real estate requirements, and provisions for emergency electrical generation including mobile charging in the event of a catastrophe like a major earthquake or flooding. The cost of ZEV fleets and vans, along with the necessary infrastructure improvements, will be a major inhibitor for local operators. CARB must take into consideration the fact that some airports have facility layouts that may include constrained spaces, making it difficult to accommodate electric shuttles and associated infrastructure. Furthermore, the ultimate implementation, for both airport and non-airport owned shuttles, will require significant charging capacity, and in some instances, the existing electrical infrastructure from the local electric utility, and within the airport, will need to be upgraded to support such charging equipment. If the local electric utility has to upgrade infrastructure to support airport deployment of zero-emission technologies, the airport and/or its tenants could be subject to very expensive capacity fees imposed by the electric utility company. We hope for continued discussions on these topics at the next working group meetings.

Fourth, it has been brought to our attention that enforcement is a concern of CARB. Airports urge CARB to consider using a self-reporting system for shuttle providers to register vehicles, which would make each operator responsible for its own fleet. Airports should not be held accountable for equipment that they do not own or control, and we would encourage language in the measure that recognizes that airports have no direct ownership or control of these shuttle fleets, absolving airports from responsibility for third-party fleets. While it has been found that most airports have a permitting process for commercial operators, only some require annual inspections of vehicles. During the annual inspection process, some airports could support CARB in ensuring that requirements are met before issuing a permit for the year. Also, in the past, airports have partnered with outside agencies to conduct law enforcement stings to check that commercial providers are meeting the standards in place. This is an option that can be revisited going forward to assist as CARB enforces the regulatory measure.

Finally, as for the future, airports cannot predict the growth of fleet sizes due to ever-changing variables that impact the level of operations. Each facility is unique, with varying configurations, passenger volumes, and workers affected at any point in time by the health of the economy. To accommodate passenger needs, airports are

continuously undergoing improvements to existing facilities and linking to local transit to improve regional connectivity. For example, some airports are replacing buses by consolidating rental car facilities and parking garages, and others are even incorporating electric trains. Factoring in the boom of new technologies such as Transportation Network Companies, makes an overall assumption difficult as to the future demand of shuttle operations. Airports are amenable to using a static growth projection due to the unpredictability of the market, but actual numbers will vary.

We value our ability to engage and participate with CARB through the development process. We remain committed to finding a framework that achieves the goals of CARB, airports and shuttle bus stakeholders, while maximizing funds available to implement these goals. Please contact Sarah Johnson with the California Airports Council at sjohnson@calairportsCouncil.org or 916.553.4999 with questions or comments about the above listed recommendations.

Sincerely,

A handwritten signature in cursive script that reads "Jim Lites".

Jim Lites
Executive Director

Cc: Scott Rowland
Anthony Poggi