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TO: All Interested Parties

SUBJECT: POSTPONEMENT OF THE PURCHASE REQUIREMENT FOR
ZERO-EMISSION BUSES UNDER THE TRANSIT FLEET RULE

The purpose of this advisory is to memorialize the postponement of the purchase requirement for zero-emission buses (ZBus) under the existing Transit Fleet Rule (California Code of Regulations (CCR) title 13, sections 2023 et seq.) until the California Air Resources Board (ARB or Board) has developed and approved new purchase requirements through a public hearing process set to take place no later than July 2012.

Under the current regulations, large transit agencies (those with a fleet size of 200 or more urban buses) are required to acquire 15-percent of all new annual urban bus purchases as ZBuses. The purchase schedule begins with model year 2011 for agencies on the diesel path and model year 2012 for agencies on the alternative fuel path and continues through 2026. However, at the July 23, 2009, Board meeting in San Diego, California, a technology update was provided to the Board on the commercial readiness of ZBus with the recommendation to postpone the purchase requirements and establish technology performance metrics that can be used to assess commercial readiness and trigger a future purchase requirement for affected transit agencies. Based on the information presented and public testimony received, the Board approved Resolution #09-49 directing ARB staff to prepare amendments to CCR title 13, sections 2023 et seq. to do the following:

1. Delay the purchase requirement of ZBuses;
2. Research and develop commercial-readiness metrics to be used as purchase-implementation criteria to initiate the ZBus purchase requirement;
3. Implement the ZBus purchase requirement once commercial readiness has been achieved based on the pre-determined metrics, and allow for a proper lead-time and ramp-up period to eventually reach a 15-percent annual replacement cycle; and
4. Report back to the Board no later than July 2012 on progress towards ZBus commercialization.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

With the current regulations still in effect requiring the purchase of ZBuses as early as 2011 and the Resolution #09-49 approved by the Board on July 23, 2009, directing ARB staff to postpone the purchase requirement through regulatory modifications no later than July 2012, there is the potential for transit agencies to be non-compliant with established CCRs while ARB staff is preparing amendments to amend the 2011 purchase requirements.

Therefore, this Regulatory Advisory is being released to inform all large transit agencies affected by the ZBus purchase requirement that ARB does not intend to enforce the ZBus purchase requirement as required under CCR title 13 sections 2023 et seq. until after the Board has developed and approved new purchase requirements through a public hearing process set to take place no later than July 2012.

Background

In February 2000, the Board acted to reduce emissions from public transportation by establishing a new fleet retrofit and modernization rule for transit agencies and more stringent emission standards for new urban bus engines and vehicles. Subsequently, California has seen lower nitrogen oxide emissions and an 85 percent reduction in particulate matter from transit buses. Under the fleet rule, each transit agency was required to select a compliance path – either the “diesel” path or the “alternative fuel” path. The regulations also included requirements for transit agencies to demonstrate ZBus with the goal of developing zero emission transit fleets. A ZBus is defined as producing zero exhaust emissions of any criteria or precursor pollutant under any and all possible operational modes and climates. Buses that meet these requirements include battery electric buses, electric trolley buses with overhead twin wire power supply, and hydrogen fuel cell buses.

The ZBus regulation contains three primary elements:

1. Diesel path transit agencies are required to initiate a ZBus demonstration,
2. 15 percent of new bus purchases are required to be ZBuses, and
3. Large transit agencies whose fleet size exceeds 200 urban buses are affected.

There are currently 10 transit agencies whose fleet size exceeds 200 buses. They range from LA Metro with almost 2700 buses to Golden Gate Transit with 209 buses. The transit agencies affected by the ZBus regulation operate 6,800 urban buses which represent about half of the statewide urban bus population.

Why is ARB postponing the purchase requirement?

The ZBus regulation was modified first in 2004 and again in 2006. The most recent modifications, approved by the Board in 2006, included a delay in the ZBus purchase requirement to 2011 for diesel path agencies, and 2012 for alternative fuel path agencies. The Board also added an “advanced” or “second phase” demonstration for large transit agencies on the diesel path. The advanced demonstration requires a single transit agency to place in service 6 ZBuses or allows multiple transit agencies to participate jointly in demonstrating at least 12 ZBuses. The Board also directed staff to assess the results of the second demonstration as well as other information and report back by July 2009 on the feasibility of implementing the purchase requirement.

As a result, a 12 ZBus demonstration was planned by a joint partnership of 5 Bay Area transit agencies and originally scheduled to begin January 2009 with preliminary results expected for the July 2009 report. However, delays in securing funds and bus production have forced the demonstration timeline to slip. The first will not be delivered until late this year, and the twelfth arriving in July 2010.

This larger demonstration will provide an updated assessment of reliability, availability, and fleet integration with refueling infrastructure. Due to the delay in implementing the second demonstration and resultant lack of data demonstrating commercial feasibility, ARB staff recommended delaying the ZBus purchase requirement. ARB staff also recommended adding to the regulation pre-established performance metrics that will serve to trigger the mandatory purchase requirement when the technology reaches these performance milestones.

When Will the Existing Regulations be Amended Establishing New Purchase Requirements?

ARB staff anticipates developing regulatory amendments to modify the ZBus mandatory purchase requirements and presenting these amendments at a public meeting no later than July 2012. Prior to the public meeting, ARB staff will announce public workshops to share progress and foster stakeholder feedback on proposed regulatory amendments. These workshops will be formally announced and stakeholders can register to receive public notices through the ZBus list serve located at http://www.arb.ca.gov/listserv/listserv_ind.php?listname=zeb .

What Other Regulatory Amendments are Being Considered?

In addition to modifying the purchase requirement, ARB will consider placing performance milestones in the regulation to aid in measuring the commercial readiness of the technology and trigger implementation of the purchase requirement. Such performance metrics may include measures of reliability, durability, availability and cost. ARB will work closely with the transit agencies, industry, and the environmental community to develop a set of successful performance metrics and milestones.

For More Information

The transit fleet rule and ZBus regulation may be viewed at: <http://www.arb.ca.gov/msprog/bus/zeb/zbusregorderfinal.pdf>. Additional information including staff contacts, Board Resolution, and other regulatory documents are available at the following web site: <http://www.arb.ca.gov/msprog/bus/zeb/zeb.htm>

If you have further questions, please contact Mr. Craig Duehring, Air Resources Engineer, at (916) 323-2361 or at cduehrin@arb.ca.gov.

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

cc: Mr. Craig Duehring
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ZEV Infrastructure Section