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The Honorable Mary Nichols Chair, California Air Resources Board 1001 I Street Sacramento, CA 95814

Re: Comments on the 30-day Notice for the Amendments to the Proposed Advanced Clean Trucks Regulation

Dear Chair Nichols and Board Members,

bp appreciates the opportunity to respond to some of the changes proposed in the Advanced Clean Trucks (ACT) Regulation. We applaud California's policy leadership in helping to accelerate the transition to cleaner fuels in the medium and heavy-duty commercial sector. We are submitting these comments to share our views on why we believe that to reap the benefits of this transition over the near, medium and long term, the ACT Regulation should incorporate incentives for transitioning to low NOx trucks fuelled with renewable natural gas that can be cost effectively deployed in large numbers today.

bp is one of the largest producers and distributors of RNG vehicle fuel in the State of California. We believe that the limited demand for RNG fuel in trucking fleets in California seriously imperils the continued investment in capture and beneficial use of biogas on farms as it reduces the market opportunity for these projects to participate in the State's low carbon fuel standard. Amending the ACT Regulation to incentivize deployment of low NOx trucks fuelled with RNG will not only provide more immediate air quality benefits to Californians. It will also ensure continued investment in RNG production from California's substantial organic waste streams. RNG project developers must have confidence that their product will have an end market to make the substantial investments required to capture biogas and produce RNG.

To help accelerate the transition as quickly, effectively and efficiently as possible the California Air Resources Board (CARB) should support all advanced clean truck technologies and not just zero emission tailpipe formats. There is no dispute that low NOx RNG fuelled trucks are technically available and cost-effective; accordingly, a sales/production mandate should be included within the final draft of the Advanced Clean Trucks (ACT) rule. CARB has made it clear that replacing the current fleet of older diesels is a key goal of the ACT regulation. The addition of low NOx trucks to the ACT regulation would be a significant improvement and responsive result for the Board, as the low NOx technology is ready now.

Staff Amendment #2: Amend to Commonly Used "Near Zero" Definition

(1516) "Near-zero-emission vehicle" <u>or "NZEV"</u> means one of the following:

(A) A<u>n on-road</u> plug-in hybrid electric vehicle which has the same definition as that in 40 CFR section 86.1803-01, amended on July 1, 2011, incorporated by reference herein, that achieves a minimum all-electric range as defined in section 1963(c)(1). or



(B) An <u>on-road</u> hybrid electric vehicle that has the capability to charge the battery from an off-vehicle conductive or inductive electric source and achieves a minimum allelectric range as defined in section 1963(c)(1).

This proposed definition of "near zero" is another different and conflicting regulatory and statutory definition that is confusing stakeholders, industry and government. These are the commonly held and generally used definitions:

- **Zero Emission:** battery electric or fuel cell electric powered vehicle (i.e. no tailpipe)
- Near Zero: anything that meets or exceeds 0.02 g/bhp-hr NOx
- Low NOx: anything that meets the CARB low NOx rule, which is currently drafted as 0.05 g/bhp-hr NOx for engines sold in California, or an optional 50-state certification of 0.1 g/bhp-hr NOx (another way to say this is anything between the near zero Emission level of 0.02g NOx and the federal EPA standard of 0.2g/bhp-hr NOx)
- **PZEV** is a vehicle that has the ability to operate partially in zero emission mode. This would be a consistent definition to what is used in the light-duty vehicle sector.

This general PZEV definition is what should be used in the ACT rule, not the proposed "near zero" definition that would add widespread confusion. "Near zero emission" has been used for years by the collective clean fuel industry, air quality and energy agencies, and other stakeholders – at every level – to refer to a medium- and heavy-duty vehicles that achieve the 0.02g NOx certification level.

This definition is also most consistent with CARB's official policy to "use zero emission vehicles (ZEV) everywhere feasible, and near-zero emission vehicles with renewable fuels everywhere else." Conversely, an ACT Regulation that promotes ZEVs where feasible and only vehicles that have partial zero emission operations everywhere else would not be consistent with CARB's policy. It's important to note that there is not any commercially available technology in the marketplace today that has the ability to *both* operate in partial or limited zero emission mode *and* meet the range and hauling capacity requirements of our trucking fleets. There are not any OEMs commercializing a medium- or heavy-duty truck technology that is intended to operate in limited zero emission mode that will be available and meet the range and hauling capacity requirements of trucking fleets at any time in the next few years.

As shown by October's over-subscription of the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP)—within less than one week—it is clear that the state will not be able to keep up with the incentive demand for clean trucks and buses or supply the substantial deployment of clean trucks on California's roads that are needed to meet Federal attainment goals or state regulatory programs through financial incentives. Given the recent budget issues for the state, this situation is made even worse. This is all the more reason why including more affordable low NOx trucks that meet a 0.02 gram NOx standard must be included within the final ACT rule's definition of "near zero". Failure to include low NOx with hybrid trucks poised to receive credit as CARB staff propose under the ACT rule will result in no meaningful clean truck adoption at California's ports in the near- to mid-term. Such an outcome should not be allowed to happen under CARB's watch.

For all of the above reasons, we strongly encourage CARB to include low NOx engines that meet a 0.02 g NOx value into the "near zero" definition of the ACT rule. Our industry would also be supportive of CARB staff requiring the use of renewable natural gas (RNG) or renewable propane to qualify for said definition if need be. The majority of natural gas vehicles in the state already run on RNG largely due to the state's successful low carbon fuel standard (LCFS) and the propane industry plays an increasing role in renewable energy for heavy duty vehicles.

Limiting the ACT rule's definition of "near zero" to only vehicles capable of achieving zero emission tailpipe miles is too limiting at this point in time and will result in negative and real public health consequences. Furthermore, it is now more important than ever to support and advance gaseous technology platforms as by doing so could help move hydrogen-dependent technologies forward. Make the ACT Rule bolder and include low NOx set at 0.02 g NOx in ACT's near zero definition.

Thank you for your time and consideration.

Sincerely,

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