#### **BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Consider Alternative-Fueled Vehicle Programs, Tariffs, and Policies.

Rulemaking 13-11-007 (Filed November 14, 2013)

### COMMENTS OF SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT STAFF IN RESPONSE TO ORDER INSTITUTING RULEMAKING AND SCOPING MEMO

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August 29, 2014

#### I. INTRODUCTION

On November 22, 2013, the California Public Utility Commission's (PUC) issued an Order Instituting Rulemaking (OIR) to Consider Alternative-Fueled Vehicle Programs, Tariffs, and Policies, R.13-11-007. In the OIR, the PUC invited parties to submit comments and to provide answers to specific questions identified in a Statement of Issues by August 29, 2014. The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to provide comments pursuant to the above-captioned OIR and submits the following in response.

#### II. BACKGROUND

The SCAQMD is the sole and exclusive local agency with responsibility for comprehensive air pollution control in the South Coast Air Basin (Basin). The SCAQMD has a duty to represent the residents of the Basin in influencing decisions of other public and private agencies whose actions might impact air quality. Despite substantial progress in reducing emissions, the Basin continues to have the worst ozone air quality in the nation, with substantial health impacts in a region with over 16 million residents. The region also exceeds the federal air quality standards for particulates.

Attaining federal ambient air quality standards for ozone remains this region's most daunting air quality challenge. The Clean Air Act establishes ambient ozone standards which must be attained in the Basin by 2022, 2023 and 2032. Attainment will require substantial additional reductions in regional emissions of nitrogen oxides: approximately two thirds reduction by 2023, and three quarters reduction by 2032. These needed emission reductions are beyond the benefits of adopted rules and programs, which have already cut NOx emissions from numerous sources by 90%.

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Mobile sources—such as on-road vehicles, ships and locomotives—create 80% of NOx emissions in the Basin. Heavy-duty trucks are the single largest contributor. The math of air pollution control is such that the region will need broad deployment of zero and near zero emission vehicles in order to attain federal ozone standards.

Electrification is one strategy that holds promise to achieve the needed reductions. For trucks, promising technologies include: battery electric; hybrid electric with all-electric range (AER); fuel cell; and potentially, natural gas with advanced aftertreatment and advanced transmissions. Many of these technologies are beginning to be deployed in the light duty vehicle sector. Key upcoming needs include broadening deployment of such advanced technologies for light-duty vehicles, and transferring such technologies to the medium and heavy-duty truck sectors. Key hurdles to overcome in the medium and heavy-duty truck sectors include funding of vehicle technology demonstrations and eliminating the "chicken and egg" problem of ensuring that fueling and charging infrastructure are available to support the needs of vehicle operators.

The SCAQMD is doing its part by providing millions of dollars in funding for collaborative projects to demonstrate and deploy advanced technologies and fueling/charging infrastructure. But air quality regulators cannot by themselves ensure that the needed transition occurs in the timeframes required to meet the aforementioned federal standards. Continued progress will require coordinated action by vehicle manufacturers, fleet operators, energy providers, utilities, energy regulators and others. In particular, state policies and requirements that create hurdles to such coordinated action should be modified and this process as implemented by the PUC affords an opportunity to accomplish that.

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#### **III. COMMENTS**

The SCAQMD respectfully submits the following in response to issues number 2 [increasing the role of utilities in the deployment of infrastructure for plug-in electric (PEV) vehicles] and number 3 [increasing the role of utilities in education and outreach to support PEV adoption] as identified in the Phase I Scope: Statement of Issues in the OIR.

# A. Issue 2: Should the Commission consider an increased role for the utilities in PEV infrastructure deployment and if so, what should that role be? ... What else should the Commission consider when evaluating an increased role for utilities in EV infrastructure deployment?

Yes, utilities should have an increased role in PEV infrastructure deployment.

Substantial additional numbers of charging stations are needed to establish a critical mass of infrastructure needed for broad and robust markets for zero emission vehicles, and to reduce per unit vehicle and infrastructure costs through large scale deployment. Installing charging infrastructure—whether at a residence or workplace—involves a number of challenges for an operator, including information acquisition, planning, permitting, construction, and funding. Utilities have unique expertise and—due to their direct, sustained access to a large customer base—are in a unique position to provide support and assistance in overcoming such challenges.

We also wish to emphasize that, while electrification of light-duty vehicles will provide significant air quality benefits, medium and heavy-duty vehicles are the largest sources of NOx emissions. They must be a key part of our region's air quality strategy. *Concerted and expeditious planning and action by utilities will be needed to create charging infrastructure for trucks, and to spur their deployment.* PUC policies should recognize these needs and support utility efforts to support charging infrastructure for *both* passenger and freight vehicles. Experience with electrification of light-duty vehicles can also help inform and pave the way for electrification of larger vehicles.

Finally, PUC policies should allow and encourage utilities' involvement while maintaining market competitiveness. Investor owned utilities (IOU) should have an important role, but competition and fair opportunity for all parties (IOU's, other private stakeholders, public utilities etc.) can help to spur beneficial innovation and scale. This process, however, does not need to be overly prescriptive in the utilities' role in PEV infrastructure at this stage and should instead evaluate each of the IOU's PEV plans independently and on their individual merits.

# **B.** Issue 3: What education and outreach activities must the utilities provide to support further customer PEV adoption? What existing resources are available for these activities and what additional resources are needed?"

Education and outreach regarding needs for, and potential benefits of, electric vehicles will be key to broad deployment. Again, utilities are also uniquely positioned to communicate such information. They are also uniquely situated to disseminate information needed to plan, develop, permit, and fund electric vehicle infrastructure. PUC policies should allow and encourage such actions.

## **IV. CONCLUSION**

For the reasons stated above, the SCAQMD staff recommends that the PUC establish policies that overcome regulatory barriers and encourage electric utilities to play a significantly greater role in supporting the deployment of electric vehicles—including those used in passenger and in freight transport.

Thank you for considering these views and for this opportunity to submit comments in furtherance of developing California's policies on alternative-fueled vehicles. The SCAQMD looks forward to continued participation in this process and to providing more detailed comments on the specific plans of the utilities, including those not under PUC jurisdiction, as we believe this proceeding will have significant impacts on PEV rollout throughout our region. If you have any questions or comments regarding the above, please feel free to contact me at 909.396.2100 or via email at bwallerstein@aqmd.gov.

Dated: August 29, 2014

Respectfully submitted,

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