

COMMENTS OF TEXAS ADVANCED ENERGY BUSINESS ALLIANCE ON TCEQ'S DRAFT BENEFICIARY MITIGATION PLAN FOR TEXAS

Texas Advanced Energy Business Alliance (TAEBA) submits these comments regarding the Draft Beneficiary Mitigation Plan for Texas¹ prepared by the Air Quality Division of the Texas Commission on Environmental Quality (TCEQ) and issued for public comment on August 8, 2018.

TAEBA is an association of local and national advanced energy companies seeking to make Texas's energy system more secure, clean, reliable and affordable. Advanced energy encompasses a broad range of products and services that constitute the best available technologies for meeting energy needs today and tomorrow. Among these are energy efficiency, demand response, energy storage, natural gas electric generation, solar, wind, hydro, nuclear, advanced vehicles, biofuels, and smart grid. As a multi-technology association having members that participate in Texas markets in a variety of ways, TAEBA brings a unique business voice to the conversation around advanced transportation. In the advanced transportation sector, our membership includes manufacturers, electric vehicle charging infrastructure providers, grid integration solution firms, and companies providing supporting technologies and software services. Other members provide the electricity that is used to power electric vehicles.

In TAEBA's initial comments offered prior to development of the draft plan,² we recommended that TCEQ consider three guiding principles when developing its plan:

- **Focus on the big picture** by adopting an integrated and long-term view of the transportation landscape and its emissions profile versus a narrow focus on the near-term cost-effectiveness of emission reductions;

¹ <https://www.tceq.texas.gov/assets/public/implementation/air/terp/VW/RG-537-Draft-for-Public-Review-180801.pdf>

² TAEBA comments to TCEQ regarding the Texas Beneficiary Mitigation Plan (Oct. 5, 2017) at 3.

- **Consider a range of goals and project benefits** by accounting for both direct and indirect emission reduction impacts and by looking for opportunities to overcome both price and non-price barriers to the level of advanced vehicle adoption that will transform transportation; and
- **Encourage innovative solutions** that stretch the impact of Mitigation Trust funding by engaging utilities, government agencies, industry representatives, and other key stakeholders, and by exploring opportunities to integrate Mitigation Trust projects with other incentives, programs, and projects.

As a business alliance, TAEBA is focused on the economic opportunity that advanced energy brings to the State of Texas, and we encourage TCEQ to take into consideration the benefits of advanced energy as it adopts a final plan. Our most recent report shows that more than 233,000 Texans are employed in advanced energy, which is more jobs than mining, oil & gas extraction, and double the number employed by auto dealers in the state.³ In fact, there are advanced energy jobs in all 254 Texas counties, demonstrating the geographic diversity of economic opportunity afforded by advanced energy in the state. There are many reasons that advanced energy has been able to develop and become a more than \$16 billion economic engine in Texas, including a pro-business environment, light regulatory touch, competitive markets, and advances in technology. Policy decisions that remove barriers to advanced energy development are also key to continued economic growth in the state.

TAEBA generally supports the proposed plan and our comments below amplify areas of particular interest to our member companies. TAEBA also includes recommended modifications to the plan to further accelerate development of a 21st Century transportation system for Texas. We respectfully request adoption of a final plan consistent with these recommendations.

³ <https://www.texasadvancedenergy.org/news#more-texas-workers>



TAEBA Supports the Four Goals Established in the Draft Plan

The draft plan would establish four goals for the use of mitigation funds in Texas:

1. Reducing NOx emissions;
2. Reducing the potential for exposure of the public to pollutants;
3. Preparing for increased and sustained use of zero emission vehicles (ZEVs); and
4. Complementing other incentive funding programs.⁴

TAEBA supports the proposed four goals to guide Mitigation Trust spending. The first two goals are clearly appropriate given the public mission of TCEQ and the purpose of the Environmental Mitigation Trust Agreement for State Beneficiaries. TAEBA strongly supports the inclusion of a specific goal to prepare for increased and sustained use of ZEVs, and encourages increased emphasis on this goal in the Plan. By including preparation for expansion of ZEVs in the Texas economy, Texas will not only achieve emission reductions in the near-term, but will also accelerate the broader transformation of the transportation sector, creating jobs and expanding economic development across sectors while simultaneously driving much deeper emission reductions over the medium- and long-term. Finally, Goal #4, working in concert with other incentive programs such as Texas Emissions Reduction Program (TERP), is the best way to make the VW Mitigation Trust dollars stretch as far as possible to benefit the people of Texas.

TAEBA Supports TCEQ's Proposed Allocation of the Maximum Allowable Funds to Light-duty Zero Emission Vehicle Supply Equipment (EVSE), With Amendments to Further Accelerate Deployment of an EVSE Network

The draft report states that TCEQ proposes allocate the full 15% of funds allowed under the guidelines of the Mitigation Trust for equipment to supply electricity to ZEVs

⁴ TCEQ Air Quality Division, "Draft Beneficiary Mitigation Plan for Texas," (Aug. 8, 2018) at 3-5.



or hydrogen to hydrogen fuel cell vehicles.⁵ We especially support the allocation for EV charging infrastructure, the lack of which is a major barrier to EV adoption. This allocation includes electric vehicle charging infrastructure in public areas, workplaces, and multi-family residences, and along major transportation corridors of the state.⁶ Increasing electric and plug-in hybrid-electric vehicle adoption through the Mitigation Trust will help address several challenges that currently hamper deployment: a lack of charging infrastructure (which addresses range anxiety), upfront cost premiums (which will continue to fall as deployment ramps up and technology evolves), and consumer awareness. By addressing these challenges through the Mitigation Trust in parallel with other efforts, such as the programs under the Texas Emissions Reduction Plan (TERP), Texas will unlock additional opportunities for consumer adoption of electric vehicles and the associated further reductions in emissions, which can help meet state NOx reductions targets. We recommend that TCEQ begin the funds disbursement process by developing an assessment of current infrastructure and gaps, and including new build-out of DC fast chargers along highways and in high-use areas. By taking these steps, Texas can make significant progress toward a robust infrastructure network that will enable more widespread adoption of electric vehicles.

Public charging infrastructure should adhere to open standards as a requirement for receiving funds through the Mitigation Plan. There are several elements of interoperability standards when it comes to electric vehicles and EVSE, but they generally fall into three categories: the physical connection between the EVSE and vehicle, payment systems, and data and communications protocols. Charging networks that have been deployed to date with public funds have too often lacked true payment system interoperability. For example, some require customers using a network to have a membership in a private network in order to pay for charging their vehicle. The resulting balkanized system makes it difficult for drivers to move from a charging station in one network to a station in another network. Requiring that payment systems for

⁵ Draft plan at 11.

⁶ Draft plan at 4.



publicly-funded EVSE have standardized options, at the minimum having the ability to use credit cards via a card reader or telephone option, will ensure that no driver has the experience of pulling up to a station that is publicly-funded only to find themselves unable to charge their vehicle.

Basic open standards for data communications ensure that publicly-funded, publicly available charging equipment from different vendors can communicate information in the same manner, which allows a network owner/operator to expand the network at any point using any vendor's equipment. At the same time, it reduces the risk for the investors in public networks in the event that a vendor goes out of business in the future because it allows for other vendors to take over the network and add new charging equipment, knowing that all the units on the system can still communicate.

With respect to specific locations for charging infrastructure, the draft plan states that TCEQ may “prioritize funding for applicants that own the land and the facility at which the equipment will be installed and will have a vested interest in the use of the equipment.”⁷ TAEBA appreciates TCEQ's intent with this provision to encourage development for applicants that own the land or facility because those applicants may have more of a vested interest in the long-term sustainability of the site. However, with many charging locations, especially public charging sites, this preference has the unintended consequence of excluding many possible site locations, substantially limiting the pool of applicants. Often, a site host is not a landowner or facility owner. In a retail location, for example, a charging provider may have an agreement with the tenant – such as a grocery store – but must also seek landlord approval. The actual landowner is very rarely involved in such discussions. TCEQ can still meet its goal of encouraging long-term sustainability of the sites by slightly changing this requirement so that an owner or operator of a charging station – not only a landowner – may apply. This provision would ensure that an applicant has sufficient “skin in the game” and is invested in the long-term viability of the charging location.

⁷ Draft plan at 27.



TAEBA Supports Inclusion of Projects to Promote Vehicle Electrification

The draft plan calls for allocating 81% of funds to eight mitigation categories, including Class 4-7 local freight trucks, Class 8 local freight trucks and port drayage trucks, Class 7-8 refuse vehicles, school buses, transit and shuttle buses, electric forklifts and port cargo handling systems, electric airport ground support equipment, and ocean-going vessel shore power.⁸ In general, where the proposed incentives would allow for either replacement or repowering with electric, diesel, or alternative fuels (e.g., CNG, propane, hybrid), TCEQ proposes differing levels of incentives, with the electric incentive being the highest, at 60% of replacement or repowering costs, including costs of charging infrastructure.⁹ TAEBA supports TCEQ's efforts to encourage use of more advanced technologies, particularly electric vehicles and associated infrastructure, and agrees that these incentives should be weighted accordingly to ensure that adequate incentives exist to promote replacement and repowering with all-electric vehicles and infrastructure. Electric vehicle options (including hybrid and hydrogen fuel-cell vehicles) exist in all vehicle segments from small, low-speed neighborhood and utility vehicles to large, heavy-duty vehicles and adoption of these vehicles should be promoted. Due to the low and stable costs of fuel (electricity), reduced maintenance needs, longer vehicle lifespan, and zero tailpipe emissions, electric trucks and buses should be prioritized in these funding categories and can help accelerate Texas' transition to an advanced energy economy.

We further support the allocation of funding to switch from diesel drayage trucks, yard trucks, and delivery trucks to electric alternatives, with infrastructure built in to support the transition, as well as transitioning airports to electric vehicles for ground transport, tarmac operations, and freight transport. Electric shore power at ports will also help meet the program goals as stated in the draft plan. Similarly, investing in electric school bus fleets and electric public transit bus fleets will yield benefits that go far beyond the initial emission reductions by supporting infrastructure build-out and

⁸ Draft plan at 6-9.

⁹ Draft plan at 27-37.



delivering savings over time from reduced fuel and maintenance costs, benefitting the communities where they operate as well as passengers, drivers, and other vulnerable residents.

Conclusion

The Mitigation Trust fund provides a unique opportunity for Texas to invest in projects that will reduce transportation emissions across the state. TAEBA appreciates the hard work put in by the TCEQ Air Quality Division Staff to create this Draft Beneficiary Mitigation Plan for Texas. Carefully targeted investment of the Mitigation Trust funding allocated to Texas and an increased focus on providing greater cost shares to electric transportation options will not only directly reduce NOx emissions and reduce the potential for exposure of the public to pollutants, but also will lay the groundwork for a more transformative shift, putting Texas on track to develop a 21st century advanced transportation system.

Respectfully submitted,



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