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SHOREPOWER TECHNOLOGIER REGULATORY REVEW COMMISSION

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ENVIRONMENTAL QUALITY BOARD

Dear Board Member,

As Director of Eastern Operations for Shorepower Technologies, LLC formerly Shurepower, LLC, I would like to contribute some comments regarding your diesel vehicle idling and auxiliary power systems proposed regulations.

It was interesting to note your demographics showing that 95% of the idling in Pennsylvania is attributed to mandated Hours of Service (HOS) rest periods for long-haul heavy duty diesel trucks. Barring the recent sluggishness in the economy, the number of heavy-duty trucks on the road is expected to continue to increase over time. Parking for these trucks to service our nation will have to be addressed, adding to the amount of local emissions at truck stops, service centers, distribution centers, rest areas, etc.

Since the California Air Resource Board has proposed more restrictive idling regulations for this segment of the transportation industry, other States are looking at increasing or implement similar idling regulations. This would include Pennsylvania and Rhode Island. New Mexico is planning to address this issue and New Jersey will eliminate idling in electrified parking spaces in May of this year.

As you know, there are several important reasons to reduce and preferably eliminate diesel truck idling, such as: reducing this country's dependence on foreign oil; reducing inflationary fuel costs to the trucking industry that trickles down through our economy and increases pressure on trucking company margins and profitability: reducing, and in the case of Shorepower Electrified Parking Spaces(EPS), eliminating local diesel emissions that pollute our air and are associated with a myriad of health problems: assisting drivers in getting a better nights rest as a public safety concern: reducing the emission of green house gases (GHG) that contribute to global warming.

All of these issues will increasingly pressure this country and the trucking industry to work together to develop viable alternatives to comply with idling regulations. Standardization of these idling regulations among the States will also be an issue. I believe that the pressing needs to reduce idling and the work that has already been done by some States and CARB will move us to adopt stringent rules to assure effectiveness. I would include the proposed Pennsylvania regulations in this group. Ultimately, we should strive to eliminate the practice of idling heavy-duty trucks. This effort will also have to include enforcement. Eliminating idling during HOS rest periods will be the most effective, as shown by your study results, to effect this change in the heavy-duty truck segment and it can be accomplished in a relatively short period of time.

Anti-idling technologies are quickly coming to market, from auxiliary power units (APUs: both diesel engine and battery based), to on-board and off-board EPS systems. Shorepower Technologies represents an on-board electrified parking space solution. We believe that this is the most viable, long-term approach to reduce heavy-duty diesel truck idling for several reasons. Grid electrical power to deploy this technology exists nearly everywhere trucks park for their HOS rest periods, such as service centers, truck stops, distribution centers, even at drivers' homes. Shorepower EPS completely eliminates local diesel emissions and noise. All class 8 truck manufactures offer shore power capability on their vehicles as standard or optional equipment. An increasing percentage of Class 8 trucks on the road today are shore power capable and the manufacturers of this equipment anticipate that this trend will continue. Shorepower EPS is the lowest cost technology to deploy and operate, presenting the best case for a viable, sustainable business model. Shorepower EPS is compatible with many APUs on the market. Nearly all battery based APUs have a shore power connection. Many diesel engine APUs have shore power connections standard or as an option. Although diesel APUs use fuel at a lower rate than a main truck engine, they still use fuel. An APU is also another engine that the owner has to maintain, and they produce diesel emissions which CARB has now included as part of their regulations. Onboard systems are also more energy efficient than off-board systems. Last but not least, truck owners can and are outfitting their trucks for shore power with the simple addition of a heavy-duty extension cord.

Another issue concerns the incentive programs being created to assist the trucking industry with the purchase of on-board idle-reduction equipment. My sense is that these programs are targeting the APU market. Therefore, instituting an additional incentive to influence the purchase of APUs with electric bypass (shore power connections) should also be considered. This will level the playing field and will permit further reductions in diesel fuel use and local diesel idling emissions.

The increasing interest and investment from the auto industry in Plug-in Hybrid Electric Vehicles (PHEVs) and Electric Vehicles (EVs) present an associated need: plug-in infrastructure. The same Shorepower EPS infrastructure used for heavy-duty trucks can also be used for PHEV and EV battery charging, thus increasing the fuel efficiencies of these vehicles. This point will become even more relevant as battery technologies improve and become more cost effective.

Shorepower EPS can also address the need to reduce emissions from Trailer Refrigeration Units (TRUs). CARB has implemented new regulations to reach this objective. Using shore power to shut down a TRUs diesel engine when parked is a qualifying standard under CARB regulations. Both Carrier Transicold and Thermo King manufacture TRUs with electric bypass as an option. Carrier Transicold has also recently introduced a new and innovative hybrid-electric TRU, the Vector 1800 MT, which has shore power as a standard feature.

Lastly, the greater efficiency of on-board shore power idle reductions technology, compared to other idle-reduction systems, will lend itself to the eventual incorporation of renewable sources of electricity to help meet the electric demand. With improvements in solar panels and vertical access wind turbines, I believe it is only a matter of time before one of these technologies, or both, are implemented in an EPS project.

I apologize for the length of my comments, but I hoped to make a case to support the increased idling regulations that Pennsylvania has proposed, along with some related considerations to expand the argument. It is certain that diesel idling is a wasteful, unhealthy, expensive practice. However, the implementation of idle reduction regulations necessitates the development of alternatives. I believe that the transportation industry and policy planners should consider all the ramifications and take a coordinated, sensible, and forward looking approach to accomplishing our desired goals of reduced dependence on oil, lowering GHG emissions, lowering transportation costs, and creating a healthy, safe environment for our communities and drivers. The results of an effective, comprehensive idle reduction effort can be an important element in implementing the objectives of Governor Rendell's Energy Independence Strategy.

Sincerely,

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