Clean Truck Fund Rate Public Workshop

Workshop Summary

August 1, 2019

Welcome

- Port of Los Angeles provided opening remarks.

Clean Truck Fund Rate Presentation

- The Port of Long Beach and Port of Los Angeles (Ports) began with a discussion of the Clean Trucks Program (CTP) background, including a history of the original program and factors that influences the success
- Near-term milestones necessary for establishment of the Clean Truck Fund Rate (Rate) were presented: including the release of the 2018 Truck Feasibility Assessment (completed), establishment of the rate collection mechanism (in process), completion of the Clean Truck Rate study (in process), and California Air Resources Board (CARB) adoption of the near-zero emission manufacturing standard (anticipated spring 2020).
- The Rate establishment process and timeline were outlined. The public engagement process includes focused stakeholder breakout meetings, two public workshops, discussion of the Rate at the Clean Air Action Plan (CAAP) quarterly stakeholder meetings, and a periodic information booth at the Clean Trucks Center. It is anticipated that the Boards will consider the resolution on the Rate in November 2019, and then after CARB adopts its' near-zero emissions (NZE) standard in early-to-mid 2020, the Boards would consider the tariffs to implement the Rate.

Discussion Questions and Comments

Questions for discussion were posed by the Ports and divided into categories:

1. **Balancing Priorities**
   - Several commented regarding the urgency to fast track conversion of trucks to Zero-Emissions (ZE) in order to protect public health, and expressed frustration at the fact that ZE should not be viewed as a long-term goal; it is the urgent priority
   - South Coast Air Quality Management District identified the need for near-term emission reductions to meet the 2023 State Implementation Plan (SIP) commitments to the federal government and stated that NZE technologies could secure these reductions without undermining the port's ZE goal. There are huge consequences for the State if not met. Need to maximize the emission benefits by setting a Rate that will accelerate the turnover of trucks.
   - A comment was made that there is no preference for ZE or NZE as long as we do not continue along a diesel pathway. There is urgency to move away from diesel as these emissions are carcinogenic and impact the frontline communities and the entire air basin. Additionally, while the region faces federal mandates for 2023 and 2031 emissions reductions, if the Ports

don't set clear strategies to get to 100% ZE, combustion technologies will be preferred by industry.

- It was suggested that while ZE is the goal, "renewable gasses" should be considered as well. Renewable hydrogen should be allowed and renewable natural gas for the interim NZE technologies. A forum to discuss the technical facts and feasibility of RNG was proposed.
- A comment was made that RNG and bio methane is misleadingly labeled to be as good as or even better than electricity for greenhouse gas reductions and should not be pursued. RNG for use of SIP emission credits was called simply a paper exercise as it is likely sourced outside of California. Others suggested that these fuels do have real benefits, are in fact produced here in California and available at fueling stations today; allowing the Ports to achieve their goals in a way that is also convenient to truckers.

2. Potential effect on business

- The concern was raised regarding the sequencing between the development of a state standard, federal standard and the setting of a Rate at the Ports. The Port responded that a manufacturing standard is needed to implement the rate; while a national standard would be best, as long as the standard is legal (i.e. either a national standard or a CARB standard with a federal waiver) it can be relied upon for the Rate
- It was suggested that the costs to reach the ZE goal need to be borne not by the community or truckers, but those doing business and moving freight – the cargo owners. Truck drivers also commented that they don't want the Rate to be forced onto the trucking community. They have customers that expect them to pay the PierPass fee up front and get reimbursed later. The Rate needs to be charged to the beneficial cargo owner (BCO) and the collection mechanism needs to ensure that the BCO pays the Rate directly and doesn't allow the drivers to pay. The Rate collection mechanism shouldn't prevent truckers from picking up their container and incurring "dry run" costs if the BCO hasn't paid the Rate.
- The question was raised regarding the impact of the Rate on the Ports and goods movement. It was suggested that what can cause diversion is not only costs, but also operational disruption. Because natural gas and hydrogen are more similar operationally to diesel, these fuels will have less disruption to the industry compared with battery electric technologies. Natural gas and hydrogen are capable of operating at long-range and will have bigger impact by resulting in more ZE and NZE vehicle miles traveled.
- It was suggested that an exodus of independent owner operators is likely to happen when the Rate is implemented, which will lead to the large licensed motor carriers purchasing new trucks and passing that cost onto the BCOs through higher drayage costs.
- Several drayage truck drivers spoke regarding issues of misclassification (i.e., labeled as contractors of trucking companies yet treated as employees) and how the companies required drivers to purchase LNG trucks that have durability and reliability issues and the repair costs were a hardship. The result has been a loss of wages due to the prolonged down-time of the trucks and the difficulty in getting repairs done.

- Truck companies indicated that the operating costs of new technology are high and they don't want to pass these costs onto drivers. They additionally have concerns about finding mechanics and even drivers to operate these new technology vehicles, which would impact their ability to stay in business.
- The concern of the Clean Truck Rate study should be more than just the cost of the rate and needs to include cargo diversion and operational impacts.
- A question was raised about what will be done to reward the early adopters. The Ports responded that early adopters get the opportunity to take advantage of incentives that may not be around for the life of the program. Also, the BCO's wouldn't be charged a rate for trucks that meet the ZE standard.
- US Hybrid noted they appreciate the Ports attempt to adopt a clean truck rate and raising the bar as successes locally will effect on a global scale.

3. Truck purchasing decision factors

- The comment was made by a trucking company that NZE truck costs are so high, that unless the Rate is very high they will continue to utilize diesel trucks as it makes financial sense. The Rate would need to be much higher than the previous $35/TEU. Even insurance is higher on the NZE trucks. There is additional concern that with only one ultra-low NOx engine available that can be reliably used in drayage operation, how will this possibly support the demand?
- There were several comments regarding the use of incentives to purchase new trucks. The question was raised regarding how the funds collected will be given to the licensed motor carriers (LMC) and truck owners to purchase cleaner trucks, to which the Ports responded that the funds will be directed back to the trucking industry to support implementation of the cleaner trucks and that the details of the funding/incentive mechanism are still to be determined, but the Ports will be asking for public feedback as the proposals are developed.
- Clean Energy expressed that funding programs are available from multiple entities and will provide assistance. Funding opportunities but can come and go so companies should be prepare to take advantage of such as they arise.

4. Adoption of new technologies

- The sentiment was expressed multiple times by truck companies and operators that the first natural gas engines from Cummins did not meet the expectations and requirements for drayage operation, and that has tainted truck drivers' impressions of LNG technology in general and how can they be expected trust the next round. A representative from Cummins-Westport responded that the 8.9L natural gas engine that was first used in heavy-duty trucks was admittedly too small for drayage operation. There is now a 12L engine that Cummins manufactures and that has been used in a demonstration project with several fleets that has gone over 700,000 miles in the last year. The demonstration trucks were supposed to be turned in at the end of the demonstration period, but every fleet testing the trucks wants to keep them they are so happy with them. There is also a 15L third party natural gas conversion that Cummins is aware of and that apparently has reliability issues, but because it is not a Cummins natural gas engine there isn't anything they can do to assist the drivers of those truck conversions. Cummins-Westport has offered to hold a public

technology forum to discuss the state of natural gas truck technology directly with the trucking community.

- Several truck drivers expressed concerns with the high cost of the natural gas trucks, which are over $300,000 out the door and then have higher insurance costs and potential reliability issues. The Ports responded that more information is needed from the trucking industry on what they are thinking about the technology today. The Rate development will be informed by multiple sources of information, including the 2018 Truck Feasibility Assessment as well as demonstration projects, which are a key part of learning how these trucks truly perform in port drayage service.
- One technology provider indicated that the Ports need to keep moving towards their goal, but that the industry needs to be patient with the developing technology as there will be "growing pains."
- Infrastructure was noted by several speakers as a particular challenge for ZE trucks today, and that the challenges seen during the last clean truck program are likely to be different from those that will occur with this iteration, in large part because of the difference in technologies. TransPower mentioned that infrastructure readiness is critical in the next few years and noted that there are ZE Peterbuilt trucks with a range of 150 miles that present an opportunity for short-haul applications.
- UCLA Luskin Center indicated that they have released a report on ZE trucks for the Ports, and that according to their own assessment, these trucks will begin to be available in 2020. As such, the Ports need to be aggressive to get to ZE.
- Clean Energy asked what they and Cummins needed to do to reach TRL 9 in the Port's Feasibility Assessment. They believe they have reached that grade already. They also supply RNG for where LCFS credits can be applied.

5. Other rate and general truck comments

- One truck driver expressed concern with automation and the fear that truck drivers are losing their jobs to automated trucks. The Ports responded that automation is not a feature of this program.
- One truck driver commented regarding the lack of efficiency at the Ports and the long wait times to get into the terminals. The Ports responded that one intent of the Clean Truck Program is improving efficiency and turn times. The Ports are looking to improve the reservation systems to keep the trucks moving; improving turn times and being able to do more turns also enables truck drivers to better afford cleaner trucks.
- Several asked about terminal equipment and why more isn't being done to convert that equipment to ZE rather than making the trucking community bear the burden of a truck program. The Ports responded that there are even more aggressive goals for terminal equipment (ZE by 2030) than that for drayage trucks (ZE by 2035). There are also multiple programs in place to reduce emissions across the Ports, with both Port run and CARB programs to reduce emissions for terminal equipment, ocean going vessels, and harbor craft.

- The Ports emphasized that the strategies are emission reduction focused and are technology neutral; multiple technologies deployed in tandem may be the solution.
- It was asked if the Rate would apply to container moves only or also apply to trucks moving other cargo (bulk, breakbulk, etc). The Port responded that CTP focuses on container and the Rate is TEU-based. It is possible however that other truck moves may be captured in the future.
- The need for idle-control shut down as well as overall efficiencies to be defined was discussed. The focus on overall VMT should be prioritized as well.
- It was noted that the Ports should analyze the full electrical demand and provide appropriate amount of electrical utility service.
- Workforce training for maintenance will be especially critical for successful deployments of trucks that can efficiently and safely serve the Ports.
- It was suggested by a few stakeholders that the Port should set benchmarks or prescriptive incremental steps or goals to show the true implementation and how on track they are to meet the ZE goal. Varying comments on whether to set benchmarks for quantity of trucks deployed, emission reductions, etc.