



**Metropolitan Transit System**

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September 21, 2018

California Air Resources Board, Members  
1001 I Street  
Sacramento, CA 95814

**RE: Response to the Initial Statement of Reasons for the Proposed Innovative Clean Transit Regulation**

Dear Chair Nichols and Members of the California Air Resources Board:

The San Diego Metropolitan Transit System (MTS) submits these comments in regards to the California Air Resources Board (CARB) proposed Innovative Clean Transit Regulation (ICT Rule). MTS supports the State's efforts to develop and implement a comprehensive strategy to continue to meet air quality standards, reduce emissions, and meet Climate Action goals. We appreciate the CARB staff's efforts to work with all stakeholders and create a rule that would accomplish those goals without degrading transit service in the State. However, as we believe the proposed ICT Rule would have a profound impact on MTS's operations and ability to provide transit to the growing San Diego urban area, we respectfully submit these comments and ask that the Board consider postponing action on the ICT Rule.

**MTS's Commitment to Clean Transit**

MTS operates transit services over 3240 total square miles in San Diego County, and provides an environmentally-friendly transportation option to ten cities, the unincorporated County, and the international border. Along with its extensive light rail network, MTS operates 602 heavy duty buses, 96 percent of which have been replaced with Compressed Natural Gas (CNG) buses in keeping with our commitment to cleaner fuel technology. Our agency has long been a partner with CARB in meeting and exceeding its goals, having been one of the first systems to select the alternative clean fuels path and CNG in the early 2000's. MTS has aggressively invested over \$70 million in transforming our bus fleet to CNG. MTS now purchases 100% renewable natural gas (RNG), deploys low-NOx near-zero engines, and is even transitioning our entire smaller mini-bus and paratransit bus fleets (over 200 additional buses) to the clean alternative fuel of propane. More recently, MTS's Board of Directors signaled its commitment to zero emission technology and launched a Zero Emission Bus (ZEB) pilot to test the technology and to help overcome some of its shortcomings prior to system wide deployment. Combining these efforts with our electric light rail system, MTS is a proud leader in providing a transit system for San Diego that is already at near-zero emissions.



## Comments Regarding the ICT Rule

MTS appreciates the opportunity to work with CARB staff, the California Transit Association (CTA), and other stakeholders on this proposed rule. However, MTS has significant concerns with the proposed ICT Rule and the potentially devastating effect its implementation in its current form could have on public transit for San Diego.

**The most significant concern with the proposed ICT Rule is the cost impact. The increase in capital and operating costs due to the proposed rule would have potentially devastating consequences for our system, as well as for transit across the state.** We fear that this additional cost burden will significantly reduce and limit our ability to provide needed transportation to the disadvantaged and low-income, transit dependent communities that we serve. MTS has a rich history of being one of the most efficient, cost effective transit systems in the country, maximizing the amount of transit service we can provide within limited, existing resources. Significantly increasing MTS's costs will result in service reductions. MTS will be forced to trade service for proposed ICT Rule compliance and implementation costs. Reducing service will subsequently have negative effects in achieving emissions reduction goals, as less available transit will lead to increases in personal vehicle miles traveled.

We believe that the proposed rule is based on overly aggressive projections and assumptions. We believe that almost every component used in the proposed ICT's Attachment I, Cost Updates, is understated and/or overly optimistic and not consistent with the "real world" data that has consistently been provided to CARB staff by CTA, its member transit systems, and MTS. This includes everything from bus prices, daily operating ranges of ZEBs, resulting bus replacement ratios, infrastructure costs and impacts, and the cost of electricity as a fuel. In addition to the significant underestimation of the costs of the proposed rule, the supporting cost analysis also includes extremely aggressive, speculative assumptions with regard to Low Carbon Fuel Standard (LCFS) revenue in the latter years of the analysis.

Attachment I, Cost Updates, section E. Statewide Costs states that adoption of the proposed rule will result in \$1.5 billion in savings by 2050 for transit systems. However, a more detailed view of CARB staff's estimate shows that the projected costs to transit, from 2020 to 2040 (the full implementation date of the proposed rule), is actually over \$2 billion (with just under \$1 billion offset by projected, estimated LCFS revenue). Using "real world" actual data from transit systems, CTA and MTS have completed a comprehensive analysis of the costs and estimate that the proposed rule will actually cost transit systems between \$2 to 4 billion in additional costs between 2020 and 2040. Specifically for MTS, we project our incremental, additional costs between 2020 and 2040 to be in the range of \$300 - \$450 million, in today's dollars.

Here are just a few of the major cost components that MTS is experiencing with our pilot that support our concern for the cost of this proposed rule. These costs are based on costs we have incurred and existing contracts:

- Bus purchase prices. MTS purchases forty foot CNG / RNG buses for \$525,000. The forty foot, battery electric pilot buses have a price of \$890,000, a difference of \$365,000,

69% additional cost per bus. This comes from the competitively procured Commonwealth of Virginia contract.

- Infrastructure. MTS's costs to install six depot chargers at our bus facility is almost \$600,000, almost \$100,000 per bus, which does not include any large scale upgrades to transformers, the grid service, or other utility based pieces that a full deployment will require.
- Electricity vs RNG costs. MTS is a large consumer of both RNG for the bus fleet and electricity as a result of our light rail system. Not including LCFS for either RNG or electricity, MTS's cost for RNG is about \$0.16 per mile. MTS pays about \$0.225 for a kilowatt of electricity, pushing the projected cost per mile for electricity using CARB staff's calculations to about \$0.5175 per mile. The annualized increase in fuel costs for a 100% deployment of ZEB's would be \$8.6 million additional operating / fuel costs.

This fundamental concern about cost is exacerbated by the inclusion of \$1.6 billion in LCFS credits/revenue from 2041 to 2050 (note that the current LCFS statutory authority expires in 2030). We believe that including this LCFS revenue twenty-five to thirty years into the future is both risky, and inappropriate.

As MTS considers the magnitude of the costs to full ZEB deployment within this proposed rule, the cost benefits to achieving zero emissions for MTS are even more diminished based upon the already near-zero emissions footprint of MTS. Given this, for MTS the actual cost per pound of Green House Gas (GHG) that would be reduced with the implementation of this proposed ICT Rule is disproportionate and exorbitant.

MTS's additional concerns with the proposed rule include the following, which are being detailed within the CTA's communication:

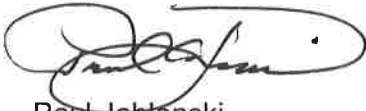
- The inclusion of smaller, cutaway buses by 2026. This will increase costs for these already expensive transit services and further erode our ability to provide existing levels of transit service to San Diego.
- The omission of benchmark provisions from the proposed rule. Benchmarking would allow for analysis and a reset if the aggressive, speculative assumptions on cost factors do not materialize over the next few years.
- The ability to design, implement and pay for the massive infrastructure to support 100% ZEB deployment is not adequately considered. In fact, today there is no urban transit facility with infrastructure to meet the needs of a 100% ZEB fleet.
- Transit agencies are concerned that once a rulemaking occurs we will no longer be eligible for the funding incentives that we currently use to offset the higher cost of ZEB purchases.

- The ICT Rule does not address the extremely high cost of electricity, especially in Southern California, as well as potential shortages of availability in heavily urbanized areas. In addition to calling for a new ratemaking to provide lower rates to transit agencies operating ZEBs, we believe that the ICT Rule should include a strategy for addressing such things as availability and time of use pricing to minimize financial and operational impacts of moving toward 100 percent electrification.

## Conclusion

MTS supports the comments submitted by the CTA and other transit systems. Consistent with these comments, we request that the Board delay a decision on the proposed ICT Rule, and instead direct CARB staff to continue to work with the transit industry in developing a more effective and realistic strategy that will further the emissions reduction goals, while also protecting the ability of transit systems to continue to meet the demands of our communities by providing effective, efficient public transit. MTS is committed to continuing to work with the ARB staff and the CTA to create a strategy and ICT Rule that will achieve the CARB and State goals, but will also support and further the deployment of public transit in our communities, and avoid the unintentional consequences of devastating transit service to our most vulnerable riders and citizens.

Respectfully Submitted,



Paul Jablonski  
Chief Executive Officer

cc: Richard Corey, Executive Officer, California Air Resources Board  
Steve Cliff, Deputy Executive Officer, California Air Resources Board  
Jack Kitowski, Chief, Mobile Source Control Division, California Air Resources Board  
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