**From:** Brian Yanity
**To:** ARB Clerk of the Board
**Subject:** Proposed Repeal of the In-Use Locomotive Regulation
**Date:** Monday, June 16, 2025 5:07:19 PM

**CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.**

Dear board members and staff of the California Air Resource Board:

The Rail Passenger Association of California and Nevada (RailPAC) is a 501c3, all-volunteer group of railroad professionals and advocates that has campaigned for improved mobility since 1978. RailPAC has long advocated for increased rail transportation as an environmental solution, and for rail electrification.

RailPAC supports the Repeal of California Air Resources Board (CARB)'s In-Use Locomotive Rule. This may seem counterintuitive coming from an organization that has long supported rail electrification, but we feel that approving CARB's proposed locomotive regulations is by default approving CARB's hydrogen rail strategy, instead of proven rail electrification technology. The problem with the hydrogen strategy is that it is technologically risky, has significant environmental impacts (including GHG emissions) and likely not economically viable, which means a continuation of diesel locomotives well past 2050.

Clearly diesel locomotive pollution around California railyards and busy mainlines in populated areas can be quite severe, with direct public health impacts. And while the State of California should be able to protect its own citizens from the harmful effects of locomotive emissions, the path that CARB has chosen will not succeed in reducing diesel locomotive pollution. The preferred long-term option for 'zero-emissions' rail propulsion at CARB and Caltrans, and among some freight railroads, is hydrogen. CARB's hydrogen-focused initiative will not fulfill the zero-emission goal. RailPAC has been very critical of this, as described in more detail in the April 2024 white paper titled "RailPAC Analysis of California Air Resources Board (CARB) Reports and Policies on Rail Transportation", which can be downloaded at this link:
https://calelectricrail.org/wp-content/uploads/2025/06/RailPAC-CARB-rail-white-paper-2024.04.04.pdf

California needs a clear statewide plan for electrifying rail using proven, reliable technology. CARB, Caltrans and the railroads have not been supportive of conventional rail electrification using overhead 'catenary' wire, or overhead contact system (OCS). If they had embraced this proven zero-emissions rail propulsion technology, used for all types of rail operations around the world, the current dispute between the parties could have been avoided. Overhead catenary systems are the global gold standard and the only technology able to meet the long-term requirements of high-volume mainline freight and passenger systems. Both the BNSF Railway and the Union Pacific Railroad have both publicly stated that CARB's rules requiring zero-emissions locomotives by 2035 are an undue burden because practical heavy-duty electric freight locomotives "do not yet exist". Incredibly, CARB itself has long perpetuated this same false assumption, as detailed in the above-linked RailPAC white paper.

Notably, CARB ignores the significant impact of mode shift (from highway to rail) on both criteria and GHG emissions. In their insistence on hydrogen as a "zero emissions" rail propulsion technology, CARB seems to view the current level of railroad transportation in

California (both passenger and freight) as static and never increasing; or even worse, decreasing because trains are seen as a pollution problem to be regulated and restricted.

CARB has asserted recently, in several recent planning and policy documents, the critical importance of reducing vehicle miles travelled (VMT) in California. However, CARB has never really recognized the need to accomplish this in part by increasing the overall number of regional/intercity passenger and freight trains in California. Substantial VMT reduction cannot possibly be achieved without greatly shifting much passenger and freight transport now on roads to rails. CARB is effectively actively against modal shift.

CARB of course assumes that electric trucks would be 100% powered by renewable energy, yet the 2016 CARB locomotive report tried to denigrate electric freight rail by implying new coal-fired plants would have to be built to power it. "Zero-emissions trucks" all have an embedded GHG emissions footprint for their manufacture and mining of materials. The lifecycle GHG emissions of "zero-emissions" trucks will thus will not be zero.

Particulates from tire and road wear are a significant source of particle pollution from trucks and a problem completely avoided by trains. CARB and Caltrans need to consider tire and road wear pollution in their environmental evaluation of trucks.

CARB, EPA and other regulatory agencies should emphasize the key pollution and grid benefits of mode shift. Like the auto companies, the railroads should get credits for initiatives to shift traffic from truck to rail, especially local intrastate California traffic like container shuttles to inland ports. The agency's proposed locomotive rules effectively punish a passenger operator for running more service with diesels, no matter how many cars said service would take off the road.

CARB has repeatedly emphasized that they only care about tailpipe emissions at the vehicle, and not where the electricity or hydrogen comes from (or how much energy, water or emissions is used to produce it). CARB has also never publicly acknowledged the energy efficiency difference of rail vs. road travel. Why does CARB not mention how much more electricity it would take to move the same tons of cargo via electric rail vs electric truck? Or how much electricity it takes to make "green" hydrogen? Or how hydrogen itself (even if it comes from green sources) is a potent greenhouse gas, which inevitably leaks during storage and transport?

Thank you for this opportunity to comment on this matter.

Sincerely,
Brian Yanity, Vice President-South
Rail Passenger Association of California and Nevada (RailPAC)

--
Best Regards,

Brian Yanity
Vice President-South and Board Member
Rail Passenger Association of California (RailPAC)
www.railpac.org
Fullerton, CA