Carb’s In-Use Locomotive Regulation Rule Will Hurt the American Economy

Railroads have partnered with CARB to reduce emissions.

Railroads and the California Air Resources Board (CARB) worked collaboratively for years to reduce emissions from line haul and yard operations across the state. Initiatives such as zero-emission cranes, yard service vehicles and other technology are at work in yards across California and the nation as anti-idling systems, fuel management systems and the use of renewable fuels are simultaneously reducing locomotive emissions.

There is no clear technological path to a zero-emission future yet.

The industry is taking decisive action against climate change, including testing emerging technologies such as battery-electric and fuel-cell locomotives that may reduce GHG emissions and criteria pollutants. However, despite substantial investments and an industry-wide push to unlock a zero-emissions solution, a clear technological path has not emerged and will require additional research and development.

CARB’s new rule is entirely unworkable for freight railroads.

Despite sharing common goals, CARB disregarded its historical collaboration with the rail industry by finalizing the In-Use Locomotive Regulation. This rule, the first CARB regulation targeting the rail industry in the half-century of CARB’s existence, is based on unreasonable assumptions. Industry members emphasized ongoing efforts to develop zero-emissions technologies throughout the rulemaking process, highlighting that such locomotives are not yet commercially viable.

Despite the concerns raised, CARB proceeded with a rule which will impose significant financial and operational burdens on railroads both in California and nationally. The rule went into effect on January 1, 2024, although CARB must obtain approval from EPA before they can begin enforcing two key provisions of the rule. EPA is currently taking public comment on whether to approve or deny CARB’s request, with comments due to EPA on or before April 22. Here are just a handful of the problems with the rule:

1. **Mandates investments in locomotives that are not yet commercially viable.** The rule requires railroads to open and deposit funds into a “spending account” based on the Tier level and energy consumption for each locomotive operated in California in a calendar year. Railroads would generally be forced to purchase zero-emission technology and infrastructure that is not even currently available.

2. **Limits the useful life of over 25,000 locomotives.** The rule bans the operation of any locomotive that is 23 years or older from operating in California. Starting in 2030 for all switch, industrial, and passenger locomotives - and 2035 for line haul locomotives - older locomotives can only operate in the state if they are zero-emissions locomotives.

3. **Violates the Clean Air Act (CAA) prohibition on states regulating emissions from new locomotives.** Section 209(e) of the CAA, a preemptive provision, generally bars states from regulating emissions from new locomotives or engines, including remanufactured locomotives, (which the EPA cannot waive) and on all other locomotives (non-new) unless CARB secures a waiver from EPA. CARB’s rule unequivocally violates the CAA by attempting to change the locomotive fleet nationwide to new, zero-emission models.
4. **Violates the ICC Termination Act (ICCTA) of 1995.** When Congress passed ICCTA, it recognized that the federal government should retain exclusive control over the regulation of railroad operations due to its inherent interstate nature. ICCTA therefore prohibits states and localities from regulating rail operations, including locomotives. By specifically targeting the railroad industry, CARB’s rule runs afoul of ICCTA’s preemption sections.

**The rule has serious consequences for America’s economy.**

If this rule goes into full effect, it would create a negative chain reaction across our economy. Specifically, there are four areas of particular concern:

1. **The rule could be duplicated in many more states than just California.** Section 209 of the CAA gives other states the ability to adopt CARB’s emissions standards were EPA to approve CARB’s waiver request. CARB has already submitted its request for approval, and more states could follow with identical regulations if EPA grants approval.

2. **Railroads would pay huge compliance costs.** The CARB rule’s spending account provision significantly impacts all railroads operating in California. Estimates suggest that the Class I railroads there may be required to deposit as much as $800 million per year per railroad. And were EPA to approve CARB’s waiver request, other states could similarly promulgate regulations requiring railroads operating in their state to set up additional spending accounts.

3. **Some short lines would go out of business.** CARB has already acknowledged that the massive compliance costs could be too much of a burden for some short lines to bear, meaning that CARB anticipates those short lines would cease operating rather than comply.

4. **The supply chain could become less resilient.** CARB’s rule would force the railroads to utilize largely unproven technology to power the locomotives. Any issues with this technology could disrupt network efficiency and ultimately lead to supply chain disruptions. Americans have suffered through a broken supply chain for multiple years and the economy is only just starting to get back on track. Railroads were critical to helping fix the supply chain snarls from the last few years, and this rule could create new logistical challenges for the timely movement of freight.

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**Important to Remember**

The technology needed for zero-emission locomotives is not commercially available today.

In fact, the U.S. Department of Energy in its recent FY25 Budget Request document stated that its goal was to demonstrate a 50% reduction in greenhouse gas emissions by 2030.

This goal is far more reasonable than CARB’s expectation that locomotives are zero-emissions starting in 2030.