



Subcommittee on Investigations and Oversight

HEARING CHARTER

Environmentalism Off the Rails: How CARB Will Cripple the National Rail Network

June 13, 2024

2:00 p.m.

2318 Rayburn House Office Building

Purpose:

On Thursday, June 13, 2024, the Investigations and Oversight Subcommittee will hold a hearing titled “Environmentalism Off the Rails: How CARB Will Cripple the National Rail Network.” On April 27, 2023, the California Air Resources Board (CARB) approved a rule that aims to achieve zero emissions from diesel-powered locomotives and increase zero-emission technology in the rail industry. The hearing will focus on the national impact the CARB rule will have and discuss the feasibility of making freight rail zero-emissions (ZE) should the rule receive a Clean Air Act (CAA) waiver from the Environmental Protection Agency (EPA).

Witnesses:

- **Mr. Ian Jefferies**, President and Chief Executive Officer, Association of American Railroads.
- **Mr. Chuck Baker**, President, American Short Line and Regional Railroad Association.
- **Mr. Alan Abbs**, Legislative Officer, the Bay Area Air Quality Management District
- **Dr. Tyler Dick**, Texas Railway Analysis & Innovation Node (TRAIN), University of Texas Austin

Overarching Questions:

- What is the current greenhouse gas (GHG) impact of the National Rail Network?
- What are the expected short- and long-term public policy impacts on the nation if the EPA provides California this waiver?
- Where is all-electric train engine technology in the development process?
- What is the feasibility of electrifying the California rail network?
- What is the feasibility of electrifying the nation’s rail network?

BACKGROUND

Currently, around 40% of freight-bearing long distances travelled across state lines are those travelled by freight trains.¹ Running almost 140,000 route miles, U.S. freight is considered the safest, largest, and most cost-effective freight system in the world.² Seven Class I railroads, 22 regional, and 584 local/short line railroads operate the nearly \$80 billion freight rail industry with revenues of more than \$490 million.³ With more than 167,000 jobs provided to the U.S. economy, the rail industry provides incredible benefits to the transportation industry in our country through reduction of congestion on federal highways, maintenance costs of public infrastructure, fuel consumption, and greenhouse gases.⁴

The rail industry operates on what is called the National Rail Network, which connects all the major operators and smaller short line railroads across the country.⁵ All owner/operators regularly share track and locomotives. Just because a particular engine or rail line is owned by one railroad does not mean that other operators do not share use.⁶ Often times a locomotive that is owned by a Class I will end up pulling loads being transported by another Class I.⁷ Therefore, operators do not stop to change engines at different rail lines let alone state borders. Given these nationwide operational practices, the rail industry is concerned that the In-Use Locomotive Regulation recently issued by the CARB will likely force a majority, if not all, national rail operators into compliance with the In-Use rule, regardless of how much business they do in California. Consequently, the rail industry will be forced to expend hundreds of millions, if not billions, of dollars to convert the entirety of their locomotive fleets to those that are either powered by the grid, on-board batteries, or hydrogen-fuel cells.

IN-USE LOCOMOTIVE RULE:

As a continuation of California's environmental agenda, the In-Use rule would impose several requirements on the state, and incidentally, the nation's rail industry.⁸ However, to proceed, EPA must grant California a waiver under the CAA to allow the state to regulate emissions typically done at the federal level.⁹ If the waiver is granted, CARB's rule would impose five main obligations on the rail industry with the overall objective of phasing out fossil fuels.¹⁰ Given the national implications in allowing California to issue a regulation of this nature will have on the national network, numerous stakeholders¹¹ have voiced strong opposition in comments to EPA against granting a waiver for this rule. Specifically, the components of the rule are as follows:

¹ Data Center, ASS'N OF AM. R.R.S., <https://www.aar.org/data-center/#data-facts> (last visited June 10, 2024).

² See *Freight Rail Overview*, FED. R.R. ADMIN., <https://railroads.dot.gov/rail-network-development/freight-rail-overview> (last visited June 10, 2024).

³ *Id.*

⁴ *Id.*

⁵ See *National Rail Plan*, FED. R.R. ADMIN., <https://railroads.dot.gov/rail-network-development/planning/systems-planning/national-rail-plan> (last visited June 10, 2024).

⁶ See *Understanding the 3 Systems That Make Up the National Rail Network*, SEMINOLE GULF R.R., <https://www.floridarail.com/news/understanding-the-3-systems-that-make-up-the-national-rail-network/> (last visited June 10, 2024).

⁷ See *id.*

⁸ CAL. CODE REGS. tit. 13, § 2478 *et seq.* (2023).

⁹ See Clean Air Act of 1970 § 209(b)(1), 42 U.S.C. § 7543.

¹⁰ See CAL. CODE REGS. tit. 13, § 2478.4 *et seq.* (2023).

¹¹ See, e.g., Wis. Mfr. & Com. Chamber, Comment Letter on In-Use Locomotive Regulation Request for EPA Authorization (Apr. 3, 2024), <https://www.regulations.gov/comment/EPA-HQ-OAR-2023-0574-0079>; Rail Customer Coal., Comment Letter on In-Use Locomotive Regulation Request for EPA Authorization (Apr. 22, 2024), <https://www.regulations.gov/comment/EPA-HQ-OAR-2023-0574-0144>; Ga. Gen. Assembly, Comment Letter on In-Use Locomotive Regulation Request for EPA Authorization

Spending Account: The rule would require each rail company to create a trust spending account that they will be required to fund based on the emissions created by their locomotive operations in California using a formula crafted by CARB. Essentially, the more emissions a locomotive produces, the more money that must be contributed to the account. The funds in this account can only be used for the purchase, lease, or rent of “cleaner” technology, infrastructure, or ZE locomotives and equipment.¹²

In-Use Operational Requirements: Beginning in 2030, the rule bans the operation of any locomotive over 23 years old, as measured by the manufactured date of the engine, from operating in the state of California. This will effectively prematurely decommission over 15,000 otherwise-useful locomotives. ZE locomotives are exempt from this rule.¹³

Idling Limit: All locomotives, including those with automatic shutoff devices, will be limited to idling for no longer than 30 minutes, unless otherwise exempted.¹⁴

Registration and Reporting: All locomotives operating in the state are required to register with CARB. Locomotive activity such as emission levels and idling data is also required to be reported annually to CARB, along with an annual administrative payment.¹⁵

Alternatives Under the Regulation: There are two main alternatives to the requirements:

Alternative Compliance Plan: The Alternative Compliance Plan (ACP) is an alternative to the Spending Account, the In-Use Operational Requirements, or both, that operators may choose to use. To qualify for the ACP, the operator must “achieve emission reductions equivalent to or greater than those under the Regulation.”¹⁶ Approved ACP’s are valid for five years and must reduce GHG, NOx, and Pm emissions in California in amounts “equivalent to or greater than the reductions that would have been achieved during the Five-Year Verification Period by the Locomotive Operator directly complying with” the Spending Account, In-Use Operational Requirements or both.¹⁷ According to CARB, examples of an ACP could be if “operators elected to electrify trucks[, switcher locomotives,] or cargo handling equipment that operate in and around their rail facility to reduce ... diesel” emissions to nearby exposed communities.¹⁸

Alternative Fleet Milestone Option (AFMO): The AFMO provides yet another alternative to the Spending Account and In-Use Operational Requirements. Compliance with the AFMO requires that

(Apr. 19, 2024), <https://www.regulations.gov/comment/EPA-HQ-OAR-2023-0574-0114>; Nat’l R.R. Const. and Maint. Ass’n, Comment Letter on In-Use Locomotive Regulation Request for EPA Authorization (Apr. 5, 2024), <https://www.regulations.gov/comment/EPA-HQ-OAR-2023-0574-0144>; Am. Forest & Paper Ass’n, Comment Letter on In-Use Locomotive Regulation Request for EPA Authorization (Apr. 22, 2024), <https://www.regulations.gov/comment/EPA-HQ-OAR-2023-0574-0139>.

¹² CAL. CODE REGS. tit. 13, § 2478.4 (2023).

¹³ *Id.* at § 2478.5.

¹⁴ *Id.* at § 2478.9.

¹⁵ *Id.* at § 2478.10-11.

¹⁶ *Locomotive Fact Sheets*, CAL. AIR RES. BD., <https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california/locomotive-fact-sheets> (last visited June 10, 2024).

¹⁷ CAL. CODE REGS. tit. 13, § 2478.7(b) (2023).

¹⁸ *In the Matter of California’s Request for Authorization Pursuant to Clean Air Act Section 209(e) for the In-Use Locomotive Regulation*, CAL. AIR RES. BD. (Nov. 7, 2023), <https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/locomotive22/authorizationsdoc.pdf>.

“by the year 2030, an operator must demonstrate that 50% of their operations are accomplished by Tier 4 or cleaner locomotives; beginning in 2035, 100% of operations must be accomplished by Tier 4 or cleaner locomotives; beginning in 2042, at least half of operations must be ZE; and finally, beginning in 2047, 100% of operations must be ZE.”¹⁹

NATIONAL CONCERNS:

Federal Preemption: From the early years of implementation, the regulation of railroads has always occurred through federal preemption directives.²⁰ The Interstate Commerce Commission Termination Act pre-empts or supersedes state and local regulation of rail transportation²¹ while the Constitution’s dormant commerce clause bars states from imposing substantial burdens on interstate transportation.²² Additionally, the CAA explicitly prohibits states from establishing emissions standards for new train engines.²³

California seeks to take advantage of the CAA’s preemption waiver, which directs the EPA to provide an opportunity for public hearing and comment to any state that has adopted emissions standards for new engines and grant a waiver if it deems those standards comparable to federal standards.²⁴ The EPA has yet to finally determine if CARB is entitled to a waiver under the CAA, as the public comment period on this action closed at the end of April.²⁵ If California receives a waiver from the EPA, the requirements that it implements for its state will not stop at its border given the national operational aspects of the U.S. rail industry.

Safety: Industry has warned that the locomotives required by California’s regulation have “not been sufficiently tested in prototype or operational service and [are] not commercially available on the market today.”²⁶ Even if these engines are designed in prototype form, years of testing are required to ensure safety. In previous hearings, the Committee explored the dangers associated with EV battery fires which would likely be analogous to a battery electric locomotive.²⁷ Despite the alleged alternative plans, the requirements set forth by the rule are concerning for industry as a whole within the timeline that CARB provides.

¹⁹ *Id.*

²⁰ See *The Local Regulation of Interstate Railroads*, LEAGUE OF CAL. CITIES (Apr. 30, 2021), <https://www.cacities.org/Resources-Documents/Member-Engagement/Professional-Departments/City-Attorneys/Library/2021/21-Spring/5-2021-Spring-PPT:-Conneran-I-Hear-That-Train-Muni.aspx> (“[f]ederal preemption insulates interstate rail lines and railroad facilities from state and local laws”); *Regulatory Jurisdiction Over Railroads*, IOWA DEP’T OF TRANSP., [https://iowadot.gov/iowarail/iowa-freight-rail/who-regulates#:~:text=Federal%20Railroad%20Administration%20\(FRA\)&text=The%20FRA%20formulates%20and%20enforces,use%2C%20track%20condition%2C%20etc](https://iowadot.gov/iowarail/iowa-freight-rail/who-regulates#:~:text=Federal%20Railroad%20Administration%20(FRA)&text=The%20FRA%20formulates%20and%20enforces,use%2C%20track%20condition%2C%20etc) (last visited June 10, 2024) (“[A]ll railroad operational procedures are subject to [Federal Railroad Administration] regulations”).

²¹ 49 U.S.C. § 10706 *et seq.*

²² U.S. CONST. art. I, § 8, cl. 3. (“[The Congress shall have Power...] to regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes...”) (capitalization in original); see *Overview of Dormant Commerce Clause*, CONST. ANNOTATED, https://constitution.congress.gov/browse/essay/artI-S8-C3-7-1/ALDE_00013307/ (last visited May 17, 2024).

²³ Clean Air Act of 1970 § 209(a), 42 U.S.C. § 7543.

²⁴ Clean Air Act at § 209(b)(1).

²⁵ California State Nonroad Engine Pollution Control Standards, 89 Fed. Reg. 14,484 (Feb. 27, 2024) (closing comment period on April 22, 2024).

²⁶ Press Release, Ass’n of Am. R.Rs., Railroads File Suit Against California Over Untenable Locomotive Rule (June 16, 2023), <https://www.aar.org/news/railroads-file-suit-against-california-over-untenable-locomotive-rule/>. *But see FLXdrive*, WABTEC, <https://www.wabteccorp.com/locomotive/alternative-fuel-locomotives/FLXdrive> (last visited May 17, 2024) (unveiling a prototypical battery-powered locomotive that can also still burn diesel is operators so choose).

²⁷ See *The Dangers of EV Fires for First Responders: Hearing Before the Subcomm. on Investigations & Oversight of the H. Comm. on Science, Space, and Tech*, 118th Cong. (2024), <https://science.house.gov/2024/2/investigations-oversight-subcommittee-hearing-examining-the-risk-the-dangers-of-ev-fires-for-first-responders>.