

JPB CAC

**CORRESPONDENCE
AS OF**

March 14, 2023

Givens, Patrice

From: Roland Lebrun <ccss@msn.com>
Sent: Monday, March 13, 2023 4:32 PM
To: Mandelman, Rafael (BOS)
Cc: SFCTA Board Secretary; Board (@caltrain.com); Transbay Info; SFCTA CAC; cacsecretary [@caltrain.com]; CHSRA Board; TJPA CAC
Subject: SFCTA March 14 Board agenda item #10 Elimination of Caltrain diesel locomotives
Attachments: California Air Resources Board (CARB) Proposed In-Use Locomotive Regulation.pdf

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Dear Chair Mandelman and Directors,

Thank you for the opportunity to:

1. Bring to your attention multiple issues with Caltrain's current plans for a transition to Zero-Emission Vehicles (ZEVs) as outlined in a November 7 2022 letter to the California Air Resources Board (<https://www.arb.ca.gov/lists/com-attach/27-locomotive22-UzAHYAFsV3BSJgVk.pdf> attached for your convenience).
2. Introduce a solution to **eliminate all diesels in San Francisco by 2025 followed by a complete vacation of the 4th & King railyard as soon as the PAX and the DTX are fully operational.**

1) Caltrain comments on Proposed In-Use Locomotive Regulation followed by my responses:

Caltrain: *"In order to continue to serve communities between Tamien and Gilroy, Caltrain must continue to operate diesel service until such time that funding, manufacture and federal safety certification can be achieved for ZE equipment that can be placed into service. **At 2025 service levels, this would require five new trainsets.**"*

Response: It is unclear why five new \$60M trainsets (total cost \$300M) would be required when the remaining diesel locomotives could be replaced with six \$5M Battery-Electric Locomotives (total cost \$30M).

Caltrain: *"Caltrain is pursuing a request to the California State Transportation Agency for funding of a pilot project for one battery-equipped electric multiple unit (BEMU), which could charge along Caltrain's electrified territory and then run battery-powered service to Gilroy." "There is no ZE equipment yet approved for use in the United States for railroads regulated by FRA and the first customer of each type will bear the burden of a procurement process of up to ten years."*

Response: It is unclear why anyone would ever consider *"bearing the burden of a procurement process of up to ten years"* to **cripple Stadler EMUs acceleration/deceleration characteristics and energy consumption by lumbering them with over 100 tons of batteries.**

Caltrain: *"Zero-emission locomotive technologies discussed in Appendix F of the proposed regulation are also not yet commercially available and may not comply with federal Buy America requirements"*

Response:

- **BNSF tested these locomotives between Stockton and Barstow (350 miles) over a 3-month period in 2021** for a total of 13,500 miles without any significant failures.
<https://www.wabteccorp.com/locomotive/alternative-fuel-locomotives/flxdrive>
- Union Pacific ordered 10 locomotives in January 2022 for delivery in fall 2023. Unlike Stadler EMUs, these locomotives are designed and manufactured in the United States:
<https://www.wabteccorp.com/newsroom/press-releases/union-pacific-railroad-makes-largest-investment-in-wabtec-s-flxdrive-battery-electric-locomotive>
- *“Wabtec has developed a range of battery and electric dual-mode locomotives for customers in regions that have overhead electric catenary systems, which can **provide zero emission high traction efficiency in electrified and non-electrified networks**”.*

Caltrain: *“There is no funding attached to this regulation and thus, passenger rail agencies will have no assistance or recourse to comply.”*

Response:

- *“Wabtec’s FLXdrive battery electric locomotive pilot is part of a grant project with the California Air Resource Board (CARB), BNSF and the San Joaquin Valley Air Pollution Control District.”*
- *“BEL is part of California Climate Investments, a statewide program that puts **billions of cap-and-trade dollars** to work reducing greenhouse gas emissions, strengthening the economy and improving public health and the environment— particularly in disadvantaged communities.” <https://www.wabteccorp.com/locomotive/alternative-fuel-locomotives/flxdrive>*

Market Analysis and Assessment of Commercial Availability:

Caltrain: *“The proposed regulation relies on the existence of freight test programs, and in particular, the availability of low horsepower switcher locomotives as the basis for presuming passenger rail equipment needs can be met.”*

Response: *“Wabtec’s FLXdrive battery electric locomotives currently have a maximum output of 4,400 HP (800 HP more than Caltrain’s most powerful diesel locomotives: <https://www.caltrain.com/about-caltrain/statistics-reports/commute-fleets>)”*

Conclusion: Caltrain have failed to consider a solution that would use Battery-Electric Locomotives (BELs) to extend electrified Caltrain service into non-electrified territory as follows:

1. Existing Bombardier bi-level cars would operate between San Francisco and Gilroy as at present with a BEL recharging while under the wire and capable of operating in battery mode between Tamien and Gilroy (and eventually Salinas).
2. Stadler EMUs would operate autonomously between San Francisco and Tamien but would couple to a fully-charged BEL at Tamien prior to continuing the trip to Gilroy (and eventually Salinas). Northbound BELs would decouple from EMU trainsets at Tamien and recharge while awaiting the next southbound train headed for Gilroy.

- Coupling video: <https://youtu.be/y1dAFbvrFGY?t=25>

- Coupling/Decoupling videos: <https://youtu.be/LMvgCPmqYT0?t=181>

Recommendations:

- 1) Terminate *“Pursuing a request to the California State Transportation Agency for funding of a pilot project for one battery-equipped electric multiple unit (BEMU), which could charge along Caltrain’s electrified territory and then run battery-powered service to Gilroy. If funded, this option would take three to five years to come into service due to the need for design review and test approval by the*

Federal Railroad Administration (FRA) in addition to normal manufacturing timelines and special consideration for procuring ZE parts that do not currently have a supply chain." effective immediately.

- 2) Reach out to the FRA and the Pueblo testing facility (<https://www.ttcitech.com/government-research-partnerships>) to **expedite the certification of BELs for passenger rail.**
- 3) Issue an RFP to US BEL manufacturers (currently Wabtec and Progress Rail) for BELs with a 60-mile off-wire range.

Respectfully presented for your consideration.

Roland Lebrun

cc: The Honorable Liane Randolph Chair, California Air Resources Board
Members, California Air Resources Board
Dr. Steven Cliff, Executive Officer, California Air Resources Board
Heather Arias, Chief, Transportation and Toxics Division, California Air Resources Board
Jamie Callahan, Chief of Staff, Office of Chair Liane Randolph, California Air Resources Board
San Francisco County Transportation Authority Board of Directors
Transbay Joint Powers Authority Board of Directors
Peninsula Corridor Joint Powers Board of Directors
California High Speed Rail Authority Board of Directors
Transportation Agency for Monterey County
San Francisco County Transportation Authority Citizens Advisory Committee
Transbay Joint Powers Authority Citizens Advisory Committee
Caltrain Citizens Advisory Committee
Caltrain Bicycle and Active Transportation Advisory Committee

Bills with Action Taken

Below are bills that Caltrain took a position on this that were signed by the Governor at the end of the 2022 Legislative Session:

SB 922 (Wiener) – CEQA Exemptions for Transit. This bill would permanently extend statutory exemptions from the CEQA requirement for clean transportation projects, including charging and facilities for zero-emission rail, station-area improvements, and first/last mile connections for bike and ped. This bill is a follow up to SB 288 (Wiener, 2020) which Caltrain supported. *Support.*

The Governor signed this bill on September 30.

SB 942 (Newman) Low Carbon Transit Operations Program: Free or Reduced Fare Transit Program. This bill would exempt transit agencies using program funding for the continuation of a free or reduced fare transit program from the requirement to demonstrate that reductions in GHG emissions can be realized through the continuation of the program. It would also allow the transit agency to continue to use those funds for the purpose without time restriction and require reapplication to the program every three years. *Support.*

The Governor signed this bill on September 30.

Proposed Regulation

California Air Resources Board (CARB) Proposed In-Use Locomotive Regulation.

This proposed regulation is intended to speed the transition to zero-emission vehicles away from diesel locomotives for rail operators in the state. As written, the proposed regulation would impact Caltrain and other passenger rail operators in the state by requiring a Spending Account which would encumber funds to be spent only on zero-emissions rail vehicles and not used for operating or maintenance costs. While Caltrain supports the goal of a zero-emissions future, the timing, specific provisions, retirement mandates, and technology availability in the regulation are all of concern. Caltrain submitted a comment letter on November 7 that details these issues. Caltrain has been meeting with CARB staff and sent letters to CARB in September 2021, December 2021, and September 2022 regarding this issue. Caltrain will continue to work with CARB staff in advance of the CARB hearing on this issue on November 18.

Grants

Transit and Intercity Rail Capital Program (\$900 million - \$1.2 billion in Cycle 6 for Existing Projects outside Southern California) The draft Transit and Intercity Rail Capital Program guidelines were released in late September. The Caltrain team is reviewing to formulate a plan for the application process.

Status: Guidelines released for comment. Caltrain submitted comments November 7.

Funding: This cycle, funding is regionally subdivided with \$1,831,500,000 available for Southern California, inclusive of the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura, and \$1,498,500,000 available for the rest of the state. The funding for the rest of the state is broken down in the following ways:

- Existing TIRCP Projects Leveraging Federal and Local Funds Reserve: \$900 million to \$1.20 billion
- New Projects: \$148.5 million to \$598.5 million
- Major Projects Project Development Reserve: up to \$150 million
- High Priority Grade Crossing Improvement and Separation Projects: \$70 million to \$210 million

Givens, Patrice

From: Adrian Brandt <adrian.brandt@gmail.com>
Sent: Saturday, March 4, 2023 5:52 PM
Subject: Don't shift transit capital/operating dollars to fund Caltrain grade seps, please

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Honorable Boardmembers and fellow Transit Advocates & Stakeholders!

I want to share some recent concerning observations with you.

I've noticed across several recent public meetings that some transit board members, particularly some new ones, are making worrisome comments advocating/suggesting cannibalizing whatever scarce Caltrain operating (and any other transit) funds possible for "absolutely essential" grade seps. Often the pandemic-reduced ridership and revenue is cited in the same breath portraying it as only prudent to cut operating budgets anyway (despite federal electrification funding conditioned on increased service). And I suspect they're not entirely alone and/or swaying their board colleagues' views (or "Overton window") on this "robbing Peter to pay Paul" scheme.

Note that Burlingame's "value engineered" (cost-reduced) Broadway grade sep is still estimated at around \$1/3 of a billion. Caltrain's entire electrification & system modernization with sleek, quiet, high-performance, state-of-the-art, zero emission Swiss trains was (originally) \$2 billion — or about the cost of just 6 Broadway-priced grade seps. It's obvious which of those two will more benefit transit riders, the Peninsula and entire region's economy, and the environment.

Unless they're on a downtown community-benefitting/connecting open-underneath fully-elevated viaduct, grade seps *primarily* benefit motorists who are annoyed & delayed by a crossing's daily "gate downtime" — which is (and likely always will be) just a fraction of most any ordinary traffic light's daily red cycle time ... an annoying pause to let hundreds of (sometimes even a thousand) "other" (non-driving) people to pass aboard a more environmentally-sustainable TOD-serving train.

To throttle back sustainable green transit service operating or capital funding, delaying or reducing its improvements or service to primarily reduce motorists' annoyance at occasional delays seems wrong. Little or no transit value for transit money. (And as in Atherton and over a thousand crossings across the US, needless horn blowing at crossings can be ended by implementing a safe CPUC- & FRA-approved quad-gate-protected "train horn quiet zone" — Google it! — typically for less than 1% of a grade sep's cost.)

While nobody is seriously (yet!) proposing it, fully grade separating the remaining ~40 (~70 if you include the Gilroy line) grade crossings could easily completely consume all Caltrain operating and capital dollars for *decades* without any train service or capital improvements actually benefitting its current or potential future riders.

Also, after watching his line of questioning at last Thursday's SMCTA presentation on Redwood City's citywide grade sep plans, a newly elected director clearly didn't sound OK with Redwood City possibly getting *all* or even most of its grade seps funded as one larger project ahead of other ones (perhaps in his home town?). He pushed to know that since funding will be tight, and everybody won't be able to do everything they want, which crossing was highest priority? (Answer: Whipple, of course ... but doing just that one is both difficult and nonsensical because they're all close together, due to construction/mobilization economies of scale, and due to the 2 crossings adjacent to the new 4-track

station consistent with Caltrain's business plan must be also be grade separated per CPUC policy proscribing new 4 track crossings.)

From monitoring LPMG and other meetings at which Caltrain's under-development Corridor Crossings Study is now regularly being presented, I'm sensing a growing LPMG sense that funding grade seps with transit funds is totally appropriate because grade seps are "oh so essential" for better train service and reducing GHG emissions (presumably from increasingly electric cars delayed at crossings). The crossing "accident" stats being cited are greatly inflated by including even pedestrian deaths, which are known to nearly all be intentional and therefore not strictly a matter of "safety" when these can just shift to other crossings or stations (as on grade separated systems like BART). Also realize that indeterminate deaths are all lumped in the accidental category ("accidental unless proved otherwise"), thereby inflating that already smaller category. I've suggested numerous times to introduce a 3rd category to track indeterminate deaths separately. (Even some past motorists' deaths appear plausibly intentional ... yet these are all automatically presumed and counted as accidental unless proven otherwise.)

There is also an oft cited false conception or narrative that grade seps will somehow "speed up" or "improve" train service for its current or future riders. For the record, to date, apart from the relatively rare/occasional crossing "incident" related delays, there has never been a Caltrain grade sep whose lack of existence slowed trains or prevented a service increase ... or whose completion sped up or increased or improved train service.

Most people, including many electeds that sit on transit boards, do not come from the transit advocate or rider community. Most or all of what they know from their daily, lived first-hand transportation experience has to do with driving. So it's hardly surprising when they sometimes have more of a motorist's "windshield perspective" on issues such as this. But to dip into or shift scarce transit operating or capital dollars to fund grade seps is not right or fair. Unless there is good transit value rationale for a particular project (e.g. new mid-line 4-track station to facilitate more & better train service), these should always be funded with other non-transit dollars (road, highway, earmarks, grants, purpose-specific taxes, benefit districts, etc.).

Thank you for your attention and ongoing thoughtful consideration of the foregoing points.

Questions, comments, doubts, disagreements? Always happy to discuss!

Respectfully,
Adrian Brandt
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650.568.1561

Givens, Patrice

From: Jeff Carter <jcartrain@aol.com>
Sent: Wednesday, February 15, 2023 4:23 PM
To: cacsecretary [@caltrain.com]
Cc: JCARTRAIN@aol.com
Subject: Comments To CAC From Jeff Carter 15-Feb-2023

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To Caltrain Citizens Advisory Committee 15-February-2023.

RE; Item 10, Ridership Charts.

Good Afternoon,

I recall that staff presentations to the CAC regarding the new website (over one year ago), that the new website would include more detailed ridership data. I have yet to see this on the new website?

The charts included with this months CAC agenda packet are great, however we don't have access to the raw data to create the charts, although some data is presented as part of the charts, it would be great to see more detailed data source.

The charts contain the following footnotes: Note that "methodology" is misspelled.....

Key Ridership Methodology Notes:

-Prior to April 2020 -Ridership was estimated using a Fare Media Sales Based Ridership Model (Note: Values may have been adjusted after thorough review of data)

-Starting April 2020 - Due to COVID-19 pandemic,ridership estimates methodology changed to limited conductor counts and Clipper data

-June 2022 forward- ridership estimates utilizing limited conductor counts and live Clipper data which causes slight fluctuations in ridership metrics, this data is static with 30-60 days.

Where can we see the “limited conductor counts” and “live Clipper data”?

Why is there no breakdown of ticket/fare media types sold (monthly, TVM, Clipper, and Go-Pass)?

Clipper data should provide origin/destination data?

This more detailed information would help people better understand ridership and fare media usage patterns. Some of these items have been on the CAC "suggested items" for quite some time?

I have received fare media sales data and ridership calculations in the past through the PRA process, however it has been awhile since my last correspondence and my recent (two) requests for updates in recent weeks have not been answered.

Regards,

Jeff Carter