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Council of Governments

cta
County Transportation Authority

Public Comment for Agenda Item No. 7

Transit Committee Meeting

May 9, 2024
9:00 AM

LOCATION:
San Bernardino County Transportation Authority
First Floor Lobby Board Room
1170 W. 3rd Street, San Bernardino, CA

DISCUSSION ITEMS

Discussion-Transit

7. 2024 Update to the 10-Year Delivery Plan – Valley Transit Programs

Receive report and provide comments on the planned update to the 10-Year Delivery Plan for the San Bernardino Valley Metrolink/Rail Service Program and San Bernadino Valley Express Bus/Bus Rapid Transit Service Program.

Written public comment was received and is attached for your information.

From:	Brian Yanity
To:	clerkoftheboard
Subject:	Public comment on SBCTA May 9, 2024 Transit Committee Agenda Item 7: 2024 Update to the 10-Year Delivery Plan - Valley Transit Programs.
Date:	Tuesday, May 7, 2024 12:08:17 AM

Dear members of the SBCTA Transit Committee:

I am writing to voice my concerns about the recent project cost increases developments described by SBCTA May 9, 2024 Transit Committee Agenda Item 7 (packet page 200):

> "ZEMU conversion of three Arrow Service DMUs – When the State initially awarded a $30 million Transit and Intercity Rail Capital Program grant to develop the ZEMU technology, the State requested SBCTA convert the three DMUs procured for the Arrow Service. The 2021 Update included a project to convert all three DMUs to meet the goal of operating the entire Arrow Service corridor as a zero or low emission revenue operation. However, conversion of the vehicle will not be possible and purchase of new vehicles will be required, which significantly increases the cost of this initiative. The Board allocated $9.2 million of Zero Emission Transit Capital Program funds to this project, which when combined with the $7.5 million of existing funds will allow for the purchase of one vehicle, leaving an estimated unfunded need of $26.5 million."

Hydrogen-powered Stadler "ZEMU" costs are spiraling out of control, and the hydrogen rail pilot project is already severely overbudget. The total program cost for the one pilot ZEMU two-car multiple unit, fueling station and associated infrastructure and operations is now approaching $60 million, more than double the original estimate. The recent cost increase of $26.5 million demonstrates how hydrogen trains are an unproven, high-risk and very expensive technology. SBCTA should not purchase any more hydrogen trains, especially since the agency and Metrolink have not even seen the actual performance and operating costs of the first hydrogen train.

The experience of actual revenue passenger service in Germany has been a disaster, plagued by very high operating costs, poor reliability and breakdowns, and half the range as promised. All this has significantly harmed passenger service:
https://www.hydrogeninsight.com/transport/chaos-and-massive-disruptions-worlds-largest-hydrogen-train-fleet-suffering-teething-problems-in-germany/2-1-1403982

The EVB regional railroad in Lower Saxony, Germany was the first in the world to introduce a fleet of hydrogen-powered trains in 2022. Along with train breakdowns and teething problems causing severe strains on the railroad's finances and staff, a major cost factor was that as a result of market forces (supply/demand/market speculation), the price of hydrogen skyrocketed just as these trains were introduced. All of the hydrogen came from fossil fuel sources, and imported Russian gas at the outset. Lower Saxony's public transportation authority recently announced that no more hydrogen trains will be pursued, and that the remainder of the diesel fleet will be replaced with electric trains that use batteries combined with overhead wires:
https://www.railtech.com/rolling-stock/2023/08/09/german-hydrogen-pioneer-opts-for-battery-trains-for-remainder-of-fleet/?gdpr=accept

In southwestern Germany, the state of Baden-Württemberg, has come to the same conclusion, rejecting hydrogen rail propulsion, after an extensive study:
https://www.hydrogeninsight.com/transport/will-no-longer-be-considered-hydrogen-trains-up-to-80-more-expensive-than-electric-options-german-state-finds/2-1-1338438

Passenger service on the RMW regional rail line in the Frankfurt region deteriorated so badly due to the recent introduction of new hydrogen trains, that the railway offering free travel to passengers in April and May to regain public trust:
https://www.hydrogeninsight.com/transport/hydrogen-only-railway-line-will-provide-free-travel-to-all-passengers-for-two-months-as-compensation-for-complete-failure/2-1-1613792

A passenger railroad in Austria also recently ditched hydrogen rail plans in favor of overhead wire electrification:
https://www.hydrogeninsight.com/transport/technology-moves-on-austrian-railway-scraps-plans-to-replace-diesel-trains-with-hydrogen-powered-options/2-1-1620507

It is also very concerning that the source of the hydrogen for the SBCTA Arrow pilot hydrogen train has

not been publicly disclosed. Therefore, one can only assume that it comes from dirty fossil fuel sources, as does 99% of hydrogen produced in the world. Regular risky shipments of pressurized or liquefied hydrogen to the fueling station in San Bernardino by diesel truck will be necessary. Safety issues of hydrogen train operation, storage, transportation and production are still unresolved. Worst-case scenarios of large-amounts of a compressed, flammable gas could be catastrophic.

Instead of purchasing new hydrogen trains, SBCTA and Metrolink should explore converting the Arrow DMUs into battery+catenary electric propulsion instead. The San Bernardino Line should be electrified, at least in part, with overhead catenary wire. Brightline West recently stated to the media that it wished Metrolink would electrify the line, so that high speed trains to Las Vegas could reach LA Union Station. Also, capacity and reliability projects such as double-tracking and passing sidings on the San Bernardino Line are also a far better use of public funds than risky hydrogen technology.

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Best Regards,

Brian Yanity
Vice President-South and Board Member
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