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WCCTC - CalETC Comments to the 2022 IEPR Update Commissioner Workshop

Additional submitted attachment is included below.

West Coast Clean Transit Corridor / California Electric Transportation Coalition Comments to the IEPR Commissioner Workshop on Updates to the California Energy Demand 2022-2035 Forecast (Docket Log 22-IEPR-03)

12/29/2022

To: California Energy Commission

RE: IEPR Commissioner Workshop on Updates to the California Energy Demand 2022-2035 Forecast (Docket Log 22-IEPR-03) held on December 7th and December 16th, 2022

The West Coast Clean Transit Corridor (WCCTC) is an informal group of West Coast Utilities who are actively promoting the development of charging infrastructure to support long distance travel for electric vehicles of all types (Light-Medium-Heavy Duty Vehicles) across the Western United States and Canada. The group was formed in 2019 and began studying electrification of long-distance truck travel and goods movement along the Interstate-5 Transportation corridor. An initial feasibility report was completed in 2020 ¹. The utilities supporting the WCCTC from north to south include: BC Hydro, Puget Sound Energy, Avista, Snohomish Public Utility District, Seattle City Light, Tacoma Public Utilities, Lewis County Public Utility District, Clark Public Utilities, Portland General Electric, Eugene Water & Electric Board, Springfield Utility Board, Pacific Power, Redding Electricity Utility, Northern California Power Agency, Sacramento Municipal Utilities District, Silicon Valley Power, Pacific Gas & Electric, Southern California Public Power Agency, Southern California Edison, San Diego Gas & Electric.

The California Electric Transportation Coalition (CalETC) is a non-profit association committed to the successful introduction and large-scale deployment of all forms of electric transportation. Our Board of Directors is comprised of electric utilities, and our membership includes major automakers, manufacturers of zero-emission trucks and buses, electric vehicle charging providers, autonomous electric vehicle fleet operators, and other industry leaders supporting transportation electrification.

The WCCTC and CalETC acknowledge that the IEPR has been rightfully focused on generation resource adequacy and reliability to meet the critical electricity needs for the state. However, as more and more sectors of our economy will be electrified to meet the state's climate change goals, delivery of that electricity through safe and reliable transmission and distribution infrastructure for these new applications will become equally critical. To that end, the comments below focus on topics related to transmission and distribution infrastructure resources that we believe warrant discussion in future iterations of the IEPR. We believe that ensuring that the state has adequate and reliable grid infrastructure will be critical to meeting California's greenhouse gas reduction goals and establishing a pathway for other jurisdictions to follow.

¹ West Coast Clean Transit Corridor Initiative Final Report, June 2020

⁺https://westcoastcleantransit.com/resources/Final%20Report%20Files.zipJune

The WCCTC members and CalETC strongly support the state's ambitious greenhouse gas reduction and transportation electrification goals and we look forward to continuing to work closely with the Energy Commission and other stakeholders to ensure that these goals become reality.

Thank you for this opportunity to provide comment,

Bill Boyce

West Coast Clean Transit Corridor Secretariat

Bill Boyce Consulting LLC

Laura Renger

Executive Director

California Electric Transportation Coalition

Comment #1: The WCCTC and CalETC applaud the change in electric transportation energy forecasting from the historical consumer preference modeling to Scenario 3 that aligns with the CARB policy drivers.

WCCTC and CalETC were pleased to see the adoption of the "Scenario 3" for electric vehicle market penetration based on CARB's Advanced Clean Cars II, the Advanced Clean Trucks and the soon to be adopted Advanced Clean Fleets policies, which require aggressive zero-emission vehicle adoption timelines. These strong policy levers will lead to a significant increase in consumer adoption of electric vehicles and must be considered for planning purposes. As noted in the report, the consumer preference modeling approach does not reflect the rapidly changing light duty electric vehicle marketplace especially given the influence of recent Federal policy that supports transportation electrification.² Aligning the IEPR forecast with CARB's regulatory targets will help enable utilities to plan for and build infrastructure in advance of the coming demand.

Comment #2: Recommendation to add additional transportation electrification elements to the California Energy Planning Library Graphic.

- a. We specifically recommend that the AB2127 Electric Vehicle Charging Infrastructure Assessment and the SB671 Clean Freight Corridor Efficiency Assessment be included in the "Reports" section of the CA Energy Planning Library. These reports reflect the important aspects of transportation electrification, are where the in-depth analyses are being conducted to project what the electricity delivery infrastructure needs will be to meet our goals and will be critical for enabling adoption.
- b. In addition, we believe that some elements of transmission and distribution infrastructure needs assessment should be added to the document to start acknowledging and tracking the infrastructure that will be required for transportation electrification and electrification of other sectors. Going forward, the "delivery" resources will become just as important as generation resources given the large scale of new electricity applications being dictated by policy. The long lead times to get the electricity delivery infrastructure in place should be highlighted and tracked in state policy plans like the IEPR given that underperformance in this area will mean that the state could miss its goals.

Comment #3: Recommend that Transportation Electrification related distribution system expansion should be added to the Emerging Topics Area.

Available distribution system capacity to meet transportation electrification needs especially in the medium and heavy-duty vehicle sectors has been identified as a critical issue in medium-and-heavy-duty policymaking at CARB. Truck yards and truck stops have not historically been large users of electricity and the current policies are now calling for upwards of 32 GW of capacity needed to meet these policy targets.² Many of these locations such as truck stops will require upwards of 20 to 30 MW of new capacity to meet the refueling needs of future over the road trucking^{1.} Grid expansion and strategies to

² The consumer preference modeling approach appears to be rooted in a 2017 based study as noted in the 2021 IEPR, and it is unclear whether the 2017 study was updated for the draft 2022 IEPR.

meet these new applications will be critical in meeting California's goals. This topic is emerging and needs to be acknowledged in the energy sector through formal planning processes which are dependent on documents like the IEPR for guidance and prioritization.

Comment #4: Recommend co-location of new transmission corridor development on primary transportation corridors to support future transportation electrification.

To meet future transportation electrification energy needs more electrical capacity will be needed on major transportation corridors. Much of those transportation corridors are in areas without widely available electrical capacity, especially in rural areas. When new transmission capacity is developed, the transmission corridors should be co-located along transportation corridors to enable delivery of electricity to those areas. Historically, transmission and transportation corridors have been planned for separately. Now that the transportation sector is electrifying, new capacity and energy delivery are needed to meet these loads. Projected energy and capacity needs, along the major transportation corridors, will require new transmission and distribution infrastructure on a standalone basis, given that a major fueling depots could need upwards of 30 MW of new electricity every 50 miles along a transportation corridor. As such, transmission expansion planning for delivery of renewable electricity along transportation corridors where part of that electricity will be needed would provide a lower cost solution across two sectors. In addition, there are also some initiatives to co-locate communication infrastructure into the major transportation corridors in expanding broadband access into rural areas. Supporting both communication and transmission corridor expansion into transportation corridors simultaneously would help defer the cost of either expansion on a standalone basis. The WCCTC and CalETC would like to acknowledge NGI Consulting³ for promoting this Next Generation Highways concept for several years.

² Medium- and Heavy-Duty Electric Vehicle Forecasting & Load Growth Guidehouse Study for CalETC-California Municipal Utility Association, October 21, 2021; https://caletc.com/assets/files/20211029-CalETC_CMUAMHDEVForecastingandLoadGrowth-FinalDeliverable.pdf

³ NGI Consulting, Next Generation Highways Concept: https://www.buildngi.com/work-1/nextgen-highways or www.nextgenhighways.org