

DOCKETED

Docket Number:	21-SIT-01
Project Title:	21-SIT-01, SB100 Implementation Planning for SB100 Resource Build
TN #:	239282
Document Title:	Horizon West Transmission Comments - SB100 July Transmission Workshop
Description:	N/A
Filer:	System
Organization:	Horizon West Transmission
Submitter Role:	Public
Submission Date:	8/11/2021 4:16:32 PM
Docketed Date:	8/11/2021

*Comment Received From: Horizon West Transmission
Submitted On: 8/11/2021
Docket Number: 21-SIT-01*

SB100 July Transmission Workshop Comments from Horizon West

Horizon West's comments are provided in the uploaded .pdf file.

Additional submitted attachment is included below.

August 11, 2021

California Energy Commission, Public Utilities Commission, and California Independent System Operator

Dear Commissioners and Staff:

Horizon West Transmission (HWT), formerly known as NextEra Energy Transmission West, LLC (NEET West), is a subsidiary of NextEra Energy Transmission, LLC, a leading competitive transmission company in North America. Founded in 2014, Horizon West is the designated developer for two projects in California and the first non-incumbent to be awarded competitive transmission projects in California. Horizon West is a certificated electrical utility in California.

HWT commends the ongoing effort that the California Energy Commission (CEC), Public Utilities Commission (CPUC), and California Independent System Operator (CAISO) are putting into the SB100 study next steps to establish policy directions that will enable California to meet its SB100 goals.

We appreciate the opportunity to offer these comments in response to the discussion at the Transmission Next Steps Workshop held on July 22, 2021.

Summary of Comments

In these comments, HWT identifies a significant transmission solution to mitigate potential transmission limitations that will impede the high levels of solar called for within the eastern Riverside region to help achieve California's environmental and climate goals.

HWT also encourages the CEC, CPUC and CAISO (Agencies) to vet with stakeholders detailed assumptions regarding mapping SB100 portfolios to transmission buses, and HWT supports the combined consideration of low-cost renewable areas with land use and other environmental impacts.

In-CAISO Transmission Solutions Will Also be Critical to Reaching SB100 Goals

To reach the SB100 goals will require massive deployment of renewables – both within and outside California. For example, even in the no-combustion scenario¹ that has a disproportionately low solar buildout, still requires construction of over 50 GW of new utility-scale solar.

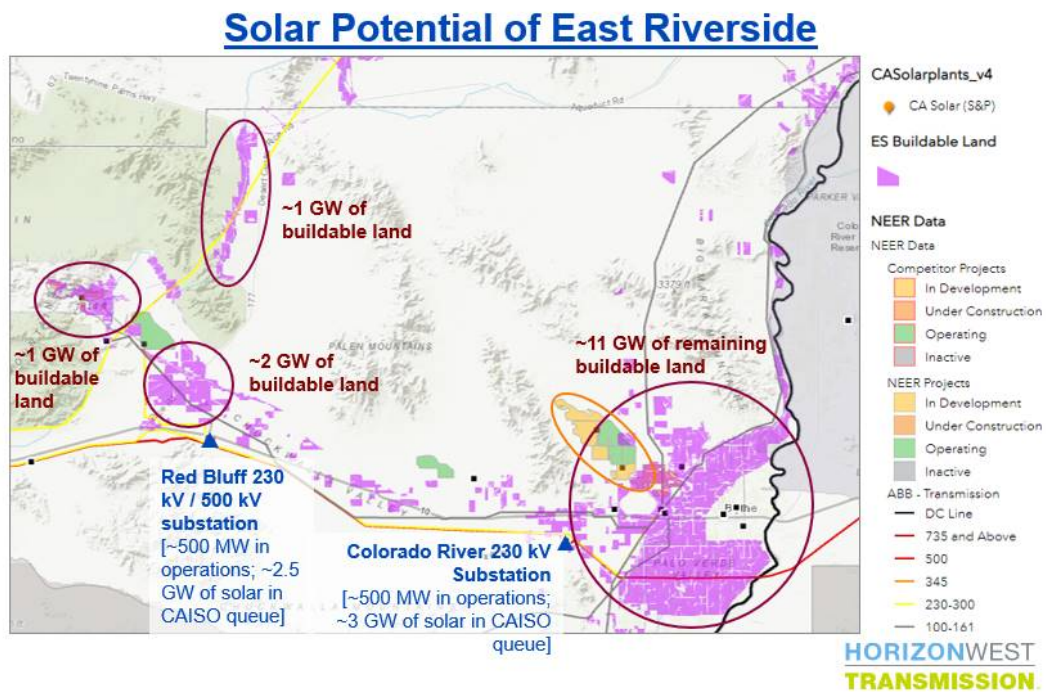
¹ The CAISO intends to study the no-combustion scenario in its 20-year planning outlook. CAISO July 27, 2021 2021 – 2022 Transmission Planning Process Stakeholder Call – see presentation, slide 78.
<http://www.caiso.com/Documents/Presentation-2021-2022TransmissionPlanningProcess-Jul27-2021.pdf>
Horizon West Transmission, LLC

Riverside county in southern California is uniquely positioned to support a large portion of that future buildout given its strong solar irradiance (e.g., as detailed by the National Energy Renewable Lab), ample buildable land suitable for solar generation, and many projects in the queue showing strong commercial interest. However, transmission constraints impacting Riverside, and the desert region generally, pose a material barrier to realizing the benefits of this solar buildout. RESOLVE models have represented combined southern California and southern Nevada transmission constraints which limit the delivery of renewable energy in total from renewable-rich resources in this region to loads in California.

Figure 1 shows the East Riverside area, including indications of the concentration of likely solar development in this region in relationship to the existing transmission facilities.

Figure 1

Transmission through Colorado River and Red Bluff likely requires upgrades to accommodate new solar



The East Riverside area transmission facilities span from the Devers Substation to the Palo Verde Substation in Arizona and serve as a major backbone for interconnection and delivery of renewable resources to the southern California load center. The East Riverside area ties to several neighboring utilities including Salt River Project (SRP), the Imperial Irrigation District (IID), the Metropolitan Water District (MWD), and the Western Area Lower Colorado control area (WALC).

Some transmission upgrades have already been triggered by renewable buildout in this region, and in other cases Special Protection Schemes (operational substitutions for “wires” solutions which often result in renewable curtailment) have been added to manage the increase in renewable energy flows.

Despite the implementation of these upgrades, the transmission system is constrained and limiting the deliverability and integration of significant renewable generation located across the southern California footprint. The CEC addressed the issue of the Desert Area Constraint in the Renewable Energy Transmission Initiative 2.0 (RETI 2.0) Final Plenary Report² as follows:

- There is substantial likelihood that the Desert Area Constraint will emerge as a serious issue prior to 2030, given the advanced planning and commercial interest in both additional renewable energy development in Southeastern California, as well as imports into the region.
- The Desert Area Constraint was identified as a potentially significant issue during the assessment of multiple Transmission Access Focus Areas (TAFAs) in CPUC RETI 2.0. The Desert Area Constraint affects deliverability of resources from a broad area in Southeastern California.
- Because of the breadth of the area, low-cost renewable resources affected, and the advanced degree of both commercial interest and land-use planning in these areas, the Desert Area Constraint should be a priority for further planning.

With the Desert Area Constraint emerging as a serious issue prior to 2030, and the difficulty associated with building new transmission needed to resolve this constraint, HWT proposed to the CAISO through an economic study request in the CAISO’s 2019 – 2022 Transmission Planning Process (TPP) that the Desert Area Constraint be addressed. Southern California Edison in its Pathway System Plan also forwarded upgrades in this area to the CAISO to study in the CAISO’s 2019 – 2022 TPP.

Specifically, HWT submitted a request for the CAISO to study a new 500 kV line between Colorado River and Mira Loma substations. The project would enable further development of solar resources in the Riverside Qualified Renewable Area, reduce congestion from other deliveries currently constrained by CAISO transmission, address the Desert Area Constraint as well as the Eastern LA Basin-Sub Area Local Capacity Requirement needs, and address other system issues.³ The corridor has no substantial wildfire risks. HWT encourages study of this single-circuit transmission project and the study of an alternative double-circuit enabled project.

² CEC, RETI 2.0 Final Plenary Report, Feb 23, 2017, http://docketpublic.energy.ca.gov/PublicDocuments/15-RETI-02/TN216198_20170223T095548_RETI_20_Final_Plenary_Report.pdf

³ HWT detailed these benefits in its Economic Study Request to the CAISO on October 14, 2019. Horizon West Transmission, LLC

HWT strongly encourages the Agencies to – in addition to seeking solutions from projects outside of the CAISO – promote upgrades within the CAISO such as those within this East Riverside area which will otherwise likely be significant bottlenecks to allowing high-value renewable energy to serve load centers and contribute to SB100 goals.

HWT Supports the Agencies’ Transparency and Stakeholder Engagement – Necessary for Renewable Bus-Bar Mapping

The Agencies through these workshops have provided stakeholders with significant opportunities to collaborate and provide input. HWT believes transparency with respect to these next steps and inclusion of stakeholder input will result in a complete and more optimal SB100 renewable fleet and transmission solution. Critical to transmission planning is the translation of the SB100 study renewable portfolios to locations sufficiently granular for the CAISO to conduct effective transmission planning. This mapping to transmission buses requires choices in preferred renewable locations, land impact, and transmission feasibility. The CAISO seems to be already engaged in this process for solar resources.⁴

During the workshop, Shannon Eddy from the Large-Scale Solar Association emphasized the importance of including stakeholders in the mapping process. HWT strongly encourages the Agencies to vet the mapping proposals with stakeholders earlier in the process rather than simply after-the-fact, especially when implementing any bus mapping changes which could be infeasible for one reason or another.

⁴ CAISO July 27, 2021 2021 – 2022 Transmission Planning Process Stakeholder Call – see presentation, slide 82. <http://www.caiso.com/Documents/Presentation-2021-2022TransmissionPlanningProcess-Jul27-2021.pdf>

Land-Use Impacts Should be Incorporated into Assessments

Several environmentally focused organizations have been engaged in incorporating land use impacts for choices regarding renewable resource and transmission buildouts. Such an approach is important to ensure the solutions to the SB100 needs result in a reliable grid and satisfaction of carbon goals both at least cost and with minimal land and social impacts. HWT supports these efforts and encourages the Agencies to consider similar approaches, especially as the SB100 RESOLVE results are translated to actionable locations for presumed renewable buildout and resultant transmission decisions.

Horizon West appreciates the ability to contribute to the SB100 effort by submitting these comments and would be pleased to discuss these recommendations herein with the agencies in more detail.

Sincerely,

/s/

Alona Sias
Director, Strategy & Business Development