



Westlands Solar Park Comment on California Independent System Operator's 2020-2021 Transmission Planning Process - November 17th Meeting

The Westlands Solar Park (WSP) appreciates the opportunity to provide these comments on the California Independent System Operator's 2020-21 Transmission Planning Process. WSP comments on the ISO's November 17, 2020 meeting discussing the preliminary policy and economic assessments. The primary focus of our comments is on the new Gates-Midway 500 kV line needed to mitigate an overload on the existing 500 kV line as shown in the on-peak deliverability results. The ISO's tariff supports classifying this new line as a Category 1 policy-driven solution. WSP sees a significant need for this new transmission line and regulatory certainty around Sensitivity Portfolio 1. Finally, we continue to observe issues with the resource portfolios studied that the ISO must consider when making determinations this transmission planning cycle. We call upon the ISO (and all regulatory agencies) to immediately begin planning for the electric grid and associated infrastructure that California will require to meet our carbon reduction goals and support the electricity requirements of a future thriving low-carbon economy.

Need for Transmission, Regulatory Certainty, and Tariff Support

The policy-driven study results this cycle will be particularly important – Sensitivity Portfolio 1, the 2019 Reference System Portfolio, is being proposed as the Base Case for the 2021-22 TPP, with updates to the 2019 RSP including a more recent IEPR load forecast.¹ The CPUC will transmit portfolios that are foundationally similar to the 2019 RSP for at least the next two transmission planning cycles. This provides the ISO with policy and regulatory certainty around transmission development needs so that the ISO should categorize the Gates-Midway line as a Category 1 line in this TPP cycle.

This new 500 kV line is an important addition because the Central Valley will play an increasingly significant role in the solar development needed to meet the state's SB 100 mandates, and this requires new transmission lines in the region that must be planned and developed now. Given this significant transmission need emerges from studies of the more policy-certain Sensitivity 1, the ISO must seriously consider classifying this upgrade as a Category 1 transmission solution that can proceed as a least-regrets policy-driven solution.

¹ *Administrative Law Judge's Ruling Seeking Comments on Portfolios to be Used in the 2021-22 Transmission Planning Process*, Attachment B: Descriptions of the Proposed Portfolios for the 2021-2022 TPP, at B-2, Oct. 20, 2020, available at: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M348/K821/348821204.PDF>.

The new Gates-Midway 500 kV line meets all the criteria the ISO tariff considers for qualifying as a Category 1 project.² Commercial, regulatory, and environmental reasons support a Category 1 finding. There is strong commercial interest in the region which will likely grow if new transmission is planned.³ The Central Valley will play an important role in California's energy future because the limited environmental impact of developing solar and transmission resources on disturbed lands rather than sensitive desert environments, and California policies and laws like the Sustainable Groundwater Management Act will only increase the amount of disturbed lands that can be developed.⁴ In addition, there are many proponents of more aggressive emissions targets, such as a 38 MMT emissions target to accelerate the 2019 RSP decarbonization target of 46 MMT, which makes the finding of a new major transmission line under the 46 MMT target a least-regrets need with little risk of stranded investment.⁵ No other proposed mitigation would provide similar benefits to this new 500 kV line – Remedial Action Schemes are largely the ISO's solution for overloaded facilities but a RAS will not increase the transfer capability needed in the region.⁶ Finally, this upgrade would unlock a significant amount of deliverable megawatts in a renewable zone, one that could be further expanded in the future, and one that would bring a lot of value to a market currently struggling for more resource adequacy resources.⁷

Planning Around Resource Portfolio Concerns

The fact this TPP's Sensitivity 1 is likely next year's Base Case highlights some of the issues with the early stages of the Public Utilities Commission's Integrated Resource Planning process, an evolving planning process that has struggled to reflect the most up-to-date assumptions and modeling results in base case portfolios transmitted to the ISO. Of course, the ISO studies the portfolios provided, but the ISO has the responsibility to ensure reliability and plan for future grid needs, so it cannot let issues in the IRP hold up the needed development of the grid. The CPUC's recommended portfolios are starting to catch up to more current portfolios and planning assumptions, but the ISO should act on early signs of need such as significant findings in the policy-driven studies.

LSA and SEIA submitted a compelling comment earlier this year arguing that the last TPP cycle showed a need for Category 1 transmission upgrades.⁸ WSP shares the concerns expressed in that comment and finds the issues addressed still relevant in this TPP cycle. The amount of renewable curtailment being observed on the system today is already alarming, and it continues to grow. And energy-only assumptions included in IRP portfolios are concerningly high and not reflective of what load-serving entities are procuring or what interconnection customers are requesting, which is problematic for

² See CAISO tariff § 24.4.6.6(a)-(j).

³ See tariff § 24.4.6.6(a).

⁴ See tariff § 24.4.6.6(e).

⁵ See tariff § 24.4.6.6(i).

⁶ See tariff § 24.4.6.6(j).

⁷ See tariff § 24.4.6.6(c), (d), and (f).

⁸ LSA and SEIA comments on CAISO Draft 2019-2020 Transmission Plan, Feb. 21, 2020: <http://www.caiso.com/Documents/LSAComments-2019-2020TransmissionPlanningProcess-Feb072020Meeting.pdf>.

transmission planning because assuming more EO than will appear on the system likely underrepresents the impact that new generation resources will actually have on the grid. Because the unfounded EO assumptions are likely underrepresenting the grid impact of the future resources planned for, which only delays the inevitable need for transmission expansion rather than avoiding it, the ISO must seriously consider recommending any new transmission lines appearing in studies now as needed to mitigate overloads and avoid excessive curtailment of renewables needed for state policy goals.

Conclusion – Reaching California GHG Goals, 2030 and Beyond

Again, WSP sees a strong need for increased transmission capacity in the Central Valley and believes the TPP must identify new Category 1 transmission solutions that will significantly increase the region’s transfer capability. WSP supports the ISO taking immediate action to begin planning for a new 500 kV Gates-Midway line, at minimum, because these upgrades will be needed to meet the state’s 2030 renewables requirement. Furthermore, based on studies from the SB 100 implementation report and the CARB decarbonization studies, the state will need multiple new transmission upgrades to meet our ambitious 2045 emissions mandate. And the amount of new solar expected by 2045 in current IRP planning⁹ – over 67,000 MW – is nearly five times the amount of baseline solar assumed by the IRP in 2020 and involves a rapid escalation in new resources coming online between 2030 and 2045.¹⁰ Without significant in-state transmission upgrades to increase the system’s transfer capacity, there is no way the amount of solar appearing in the IRP can be developed. Planning for long lead time infrastructure projects needs to begin immediately, and new transmission cannot come soon enough as renewable resources are already facing increasing levels of curtailment.¹¹ As a state we cannot wait much longer to begin the planning and permitting process for least-regrets transmission facilities that will be required under any potential low-carbon future.

Issues with the IRP and the inherent conservative nature of grid planning may require that the ISO soon extend beyond a 10-year study horizon to adequately prepare for

⁹ *Administrative Law Judge’s Ruling Seeking Comments on Portfolios to be Used in the 2021-22 Transmission Planning Process*, Attachment B: Descriptions of the Proposed Portfolios for the 2021-2022 TPP, at B-3, B-6, Oct. 20, 2020.

¹⁰ Inputs & Assumptions: 2019-2020 Integrated Resource Planning, at 28, Feb. 2020, *available at*: <https://www.cpuc.ca.gov/General.aspx?id=6442459770> (Table 18 indicates that the IRP assumes 14,413 MW of baseline solar in the CAISO BAA in the year 2020).

¹¹ See Cal. Independent System Operator, Managing oversupply webpage, *available at*: <http://www.caiso.com/informed/Pages/ManagingOversupply.aspx>. In the first five months of this year alone, California had already curtailed over a million megawatt-hours of renewable energy. Cal. Independent System Operator, Managing oversupply webpage, Wind and solar curtailment by day, June 10, 2020, p. 3, *available at*: http://www.caiso.com/Documents/Wind_SolarReal-TimeDispatchCurtailmentReportJun10_2020.pdf (Year-to-date renewable energy curtailed as of this June 10 report was 1,172,434 MWh.). Even accounting for the impact COVID-19 has had on demand this year, there has been a clear and growing reliance on curtailment over the past several years. To put things into perspective, this level of in-state renewable curtailment in just the first five months of 2020 offset the avoided curtailment benefits the Western Energy Imbalance Market had provided over its 5 years of operation (accounting EIM benefits through the first five months of 2020). Western EIM Benefits Report, First Quarter 2020, April 30, 2020, p. 16, *available at*: <https://www.westerneim.com/Documents/ISO-EIMBenefitsReportQ1-2020.pdf> (Through March of 2020, the EIM purports to have been responsible for 1,098,890 MWh of avoided renewable curtailment.).

California's ambitious emissions reduction goals. Current planning efforts are leaving less than a decade for transmission approval and development, which is insufficient time for long lead time development to take place. When a policy-driven study of regulatory-certain portfolios shows the need for a significant new transmission line, the results must be taken seriously and brought forward for development. Such is true of the new Gates-Midway 500 kV line resulting from the 2019 RSP.

We appreciate the ISO's consideration of these comments. WSP looks forward to continued engagement in this process.

Dated: December 1, 2020

Respectfully submitted,

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