



Comments of American Clean Power – California (ACP-California) on the 2020-21 Draft Transmission Plan

February 23, 2021

Introduction

In January of 2021, the American Wind Energy Association (AWEA) merged with a new organization to become the American Clean Power Association (ACP). The American Clean Power Association works to champion policies that will transform the U.S. power grid to a low-cost, reliable, and renewable power system. As a result of this merger, AWEA’s California affiliate, AWEA-California, is now American Clean Power – California (“ACP-California”), and will continue to represent companies that develop, own, and operate utility-scale wind, solar, storage, offshore wind, and transmission assets.

ACP-California appreciate the opportunity to comment on the Draft 2020-21 Transmission Plan and the presentation of materials during the February 9, 2021 stakeholder meeting. ACP-California’s comments focus on the CAISO’s Frequency Response review and on the need to improve the interaction between the California Public Utilities Commission (CPUC’s) Integrated Resource Planning (IRP) process and the Transmission Planning Process (TPP). We look forward to working with the CAISO on future efforts related to frequency response, the IRP-TPP interaction, and on the 2021-22 TPP.

There is a Need to Improve the IRP-TPP Interaction to Ensure Transmission is Approved for a Reliable and Clean Grid in the Future

ACP-California continues to believe that revisions are needed to the interaction between the CPUC’s IRP process and the TPP, such that the CAISO can begin to consider and approve transmission upgrades that will be needed to move the state closer to its clean energy goals. Unfortunately, the current process has stalled the review and approval of significant new transmission lines that will be needed to achieve the state’s goals and to ensure reliability of the system going forward.

In a December 2020 whitepaper previously shared with CAISO, ACP-California (then AWEA-California) suggested consideration of a number of reforms to the IRP-TPP processes. In part, we suggested that the CAISO’s TPP should look out 10 and 20 years into the future and should aim to identify “least regrets” transmission expansion opportunities and to quickly move forward with their approval and construction. The TPP should include evaluation of a range of potential resource portfolios in the 10- and 20-year time horizon. These portfolios should represent an aggressive transition to clean energy resources, consistent with the state’s clean



energy goals. The TPP should report the necessary transmission projects and costs for each portfolio that is analyzed. And transmission projects that show up in most of the resource portfolios and time horizons should move toward approval and construction rapidly. Projects that show up in only some instances should be further studied in the IRP and subsequent TPPs and should begin to be permitted and engineered so that construction can start in a timelier manner in the future, should the projects end up being required. This will provide optionality to move forward with needed projects faster if they are determined to be necessary or beneficial.

We continue to believe a robust dialog on these types of reforms is necessary and look forward to working with the CAISO and the CPUC to help explore changes that can improve the process going forward.

Frequency Response Assessment

ACP-California appreciates CAISO's efforts to study primary frequency response on the CAISO system and, especially, to assess the ability of CAISO to meet primary frequency response obligations solely with inverter-based resources. CAISO's assessment finds that, without primary frequency response from inverter-based resources or with reduced headroom from these resources, the CAISO will be below its frequency response obligation in 2030. The assessment also finds that it is possible to be in compliance with the BAL-003-2 Frequency response standard while having 100% of energy provided by renewable resources, if the new inverter-based resources have frequency response and 10% headroom. This highlights the importance of procuring headroom services from inverter-based resources for California to meet its future reliability and clean energy needs. But the switch to providing headroom from renewables and other inverter-based resources cannot be flipped overnight and will require changes to contracting practices in order to come to fruition. Action on these changes must begin now, to ensure the services are provided in the coming years.

CAISO's Draft Transmission Plan discusses how, per FERC Order 842, new inverter-based resources must **be capable** of providing primary frequency response. But it is critical to understand that in order for these resources to be willing to **provide** those services, they must be compensated (and not penalized) for doing so. To encourage wind and solar to provide flexible services and not always seek to maximize their output, contracting provisions must change. Typical contracting structures today pay these resources based on the amount of energy delivered to the grid and often have provisions that will result in non-payment if energy is curtailed (i.e. headroom is provided). This must be changed in order for these resources to provide headroom type services in the future. If California wants to have these types of headroom services provided by inverter-based resources in place in the 2025-2027 timeframe then the changes must take shape today.



If the provision of headroom is valuable to CAISO and enhancing reliability, as this study indicates will be the case in the future, then there must be changes to the contracts for future resources. In its comments and advocacy in other venues (e.g. at the CPUC), CAISO should be clear about the need for provision of headroom services from inverter-based resources. This will help drive the regulatory and contracting changes that will be needed for the future fleet of resources.

While some contracting reforms will need more time to take effect, CAISO is also poised to consider some operational changes in 2021 initiatives, such as the Dispatch Enhancement Initiative and Frequency Response Initiative. These upcoming stakeholder initiatives should look broadly at the capabilities of variable energy resources and ensure market changes are made with an eye towards the provision of headroom by wind and solar.

Finally, in a future TPP, it would also be helpful for CAISO to study whether different levels (other than 10%) of “headroom” from inverter-based resources would be sufficient to meet the CAISO’s primary frequency response obligations.

We appreciate CAISO’s study efforts and look forward to working with CAISO to ensure that future inverter-based resources are compensated appropriately, such that they can support the CAISO’s primary frequency response needs.

Conclusion

ACP-California appreciates CAISO’s consideration of these comments and CAISO’s efforts to conduct the 2020-21 TPP. We look forward to continuing to work in collaboration with the CAISO on transmission planning processes and their interaction with the CPUC’s IRP. We also hope to work with the CAISO to support contracting practices and market structures that will allow inverter-based resources to provide the primary frequency response services envisioned in the CAISO’s frequency response studies.