**COMMENTS OF THE PUBLIC ADVOCATES OFFICE ON the CALIFORNIA INDEPENDENT SYSTEM OPERATOR’S 20-YEAR TRANSMISSION OUTLOOK INITIATIVE and The MAY 14, 2021, Presentation on the INTIATIVE**

**INTRODUCTION**

The Public Advocates Office at the California Public Utilities Commission (Cal Advocates) is the California’s independent consumer advocate with a mandate to obtain the lowest possible rates for utility services, consistent with reliable and safe service levels, and the state’s environmental goals.**[[1]](#footnote-1)**

During the California Independent System Operator (CAISO) presentation on May 14, 2021, the CAISO requested comments on its proposed 20-Year Transmission Outlook Initiative (Initiative) by May 28, 2021. Cal Advocates provides the following comments and recommendations on the Initiative.

The CAISO proposes this Initiative to engage stakeholders in a meaningful discussion within a less structured framework than its “tariff-based 10-Year Transmission Planning Process (TPP) that focuses on transmission project needs and approvals over a 10-year planning horizon.”**[[2]](#footnote-2)** The primary objective of the Initiative is to explore longer term grid requirements and options for meeting the state’s greenhouse gas reduction and renewable energy objectives reliably and cost-effectively, including inter-regional transmission project opportunities.**[[3]](#footnote-3)** The CAISO intends to produce a draft 20-year transmission plan by January 31, 2022 that identifies transmission projects within a 20-year planning horizon that could inform the CPUC’s Integrated Resource Plan (IRP) and CEC’s Integrated Energy Policy Report.

For reference, in February 2021, as part of the CPUC’s IRP proceeding, the CPUC submitted a base case resource portfolio for the CAISO to evaluate in its 2021-2022 TPP. This base case includes 1,062 megawatts (MW) of wind from out-of-state,**[[4]](#footnote-4)** and new interregional transmission lines are needed to access these out-of-state resources. The CPUC also submitted alternative resource portfolios to the CAISO with larger quantities of in-state renewable resources including offshore wind and batteries, and new transmission lines and/or upgrades in California are likely needed to access these in-state resources.

 **COMMENTS AND RECOMMENDATIONS**

Cal Advocates is generally supportive of a long-term transmission outlook. Cal Advocates recommends the CAISO provide cost and economic benefit information to stakeholders on the identified transmission projects needed to meet the state’s clean energy goals. With this information, stakeholders will better understand the potential costs and benefits of additional transmission investment to meet the state’s goals.

**Recommendations**

1. **Provide a Comparative Cost Analysis for Out-of-State Transmission Projects to Determine Relative Cost-Effectiveness of Interregional Projects.**

Cal Advocates recommends that the CAISO provide a comparative cost analysis of the transmission infrastructure needed to meet the state’s clean energy targets, focusing on in-state resources and with a combination of in-state and out-of-state resources. The CAISO stated it will provide its 20-year assessment of identified interregional transmission projects at its November 2021 TPP Policy and Economic Projects stakeholder meeting. As such, Cal Advocates recommends that the CAISO should also present the transmission costs related to meeting the state’s goals with in-state resources only at this meeting. This information will allow stakeholders to evaluate the range of potential transmission projects to meet the state’s goals and will assist with determining the best option for California ratepayers.

1. **Determine all the Economic Benefits and Beneficiaries from New Interregional Transmission Projects Consistent with Federal Energy Regulatory Commission Order No. 1000.**

Per Federal Energy Regulatory Commission (FERC) Order No. 1000,

The costs of new interregional transmission facilities must be allocated to each transmission planning region in which that transmission facility is located in a manner that is at least roughly commensurate with the estimated benefits of the transmission facilities in each of the transmission planning regions. In determining the beneficiaries of interregional transmission facilities, transmission planning regions may consider benefits including, but not limited to those associated with maintaining reliability and shared reserves, production cost savings and congestion relief, and meeting Public Policy Requirements.**[[5]](#footnote-5)**

Consistent with FERC Order No. 1000 and the Interregional Cost Allocation Principal 1, Cal Advocates recommends that the CAISO identify the regional economic benefits generated from new interregional projects including energy, jobs, and tax benefits for cost allocation purposes. The regional economic activity associated with large infrastructure projects such as new interregional transmission projects directly benefit local businesses and contribute to the economy of the regions the interregional project passes through,[[6]](#footnote-6) and should be assessed for cost allocation purposes consistent with FERC Order No. 1000.

1. **Identify the Economic Benefits from In-State Transmission Projects to Maximize Benefits to the State of California.**

Any new transmission projects located in-state to the meet the state’s clean energy goals would create energy benefits in California, as well as economic benefits such as increased employment opportunities and tax base. The CAISO should identify these benefits when assessing in-state transmission projects to determine the optimal transmission projects for California to pursue to meet its clean energy goals.

**4. Evaluate the Capacity of Proposed Transmission Projects Using Both Energy Only as well as Full Capacity Deliverability Status Resources to Maximize its Cost-Effectiveness.**

Cal Advocates requests that the CAISO assess the cost and need for potential new transmission lines and upgrades based on the deliverability assessment for renewable resources portfolios with both full capacity deliverability status resources**[[7]](#footnote-7)** and energy only (EO) status resources. EO resources can be used to meet the state’s clean energy goals and are not as costly as full deliverability status resources,**[[8]](#footnote-8)** for this reason Cal Advocates recommends the CAISO evaluate the proposed transmission project capacity needed to access EO resources both in-state and out-of-state to meet the state’s goals. This evaluation will assist with determining the most cost-effective transmission projects for California ratepayers.[[9]](#footnote-9)

Please contact Kanya Dorland, if you have any questions on these comments at kanya.dorland@cpuc.ca.gov.

1. Cal. Pub. Util. Code § 309.5. [↑](#footnote-ref-1)
2. *CAISO 20 Year Transmission Outlook Kick-Off Meeting* (Presentation), May 24, 2021, slide 6. [↑](#footnote-ref-2)
3. *CAISO 20 Year Transmission Outlook Kick-Off Meeting* (Presentation), May 24, 2021, slide 5. [↑](#footnote-ref-3)
4. CPUC Decision (D.) 21-02-008, p. 3. [↑](#footnote-ref-4)
5. FERC, Order No. 1000, *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, July 21, 2011, 2. Cost Allocation Principle 1-cost allocated in a way that is roughly commensurate with benefits, b. 622, Interregional Cost Allocation Principal 1. p. 448. [↑](#footnote-ref-5)
6. It is common practice to include job and tax base increases as part of the overall project benefit analysis for large public projects such as bridges, airports, and port terminals. For example, to estimate the economic activity generated by port capital projects, port authorities in the United States rely on an economic impact model commissioned by the Department of Maritime Administration referred to as MARAD Port Economic Impact kit. This kit estimates expected job and tax base increases with Port capital projects. [↑](#footnote-ref-6)
7. There are three possible deliverability designations for resources when they interconnect to the grid: (1) Full Capacity Deliverability Status (FCDS); (2) Partial Capacity Deliverability Status; or (3) Energy Only (EO). A FCDS designation means a generator can deliver its maximum capacity to the grid under peak load and stressed conditions. FCDS also qualifies a generating facility to offer its capacity to Load Serving Entities (LSE) to meet their Resource Adequacy (RA) requirement. The cost responsibility for Area and Local Delivery network upgrades are initially born on generators selecting full deliverability status. *CAISO Tariff Appendix DD, September 9, 2020, 8.4 Cost Responsibility for Local Delivery Network Upgrades and 8.4.1 Cost Responsibility for Area Delivery Network Upgrades*. These upgrade costs are then passed on to ratepayers after the upgrades are completed. [↑](#footnote-ref-7)
8. Energy only resources are resources that are interconnected to the CAISO grid and can deliver energy only to the grid. Generators can select to provide energy only during peak conditions or just off-peak conditions. For energy only deliverability status projects, local and area delivery network upgrades are not required, *CAISO Tariff Appendix DD, 8.4. Cost Responsibility for Delivery Network Upgrades.* [↑](#footnote-ref-8)
9. *Expedited Generator Interconnection and Deliverability Allocation Procedures (GIDAP) and Enhancements Draft Issue Paper and Straw Proposal,* July 24, 2017, CASIO pp. 9-10 “it remains to be determined whether additional transmission capacity should be built to make the additional renewable capacity needed to make 50% deliverable, which impacts whether incremental renewable capacity should be procured as FCDS or Energy Only.” [↑](#footnote-ref-9)