The California Independent System Operator Corporation (“CAISO”) submits the following post-workshop comments to explain that existing processes in the CAISO’s planning region already provide an effective avenue to increase interregional transfer capability. Although the CAISO understands the Commission has an interest in increasing interregional transfer capability, the CAISO is concerned the Commission is essentially adopting a solution before it has clearly articulated the underlying issues that necessitate increasing interregional transfer capability. Resource sufficiency and extreme event considerations can vary by region, as can reliability, economic, and public policy driven transmission needs. The more efficient and cost-effective solutions to address these needs may vary by region and may not necessarily involve increasing interregional transfer capability. Requiring the CAISO region to establish a minimum level of interregional transfer capability is unnecessary and may not provide material benefits to the CAISO system, particularly in times of extreme weather events. The Commission should focus on specific problems in each individual region, in particular the reasons why such problems exist, and
then assess the best solutions to those problems. It should not prematurely prescribe a one-size-fits-all solution.

I. Comments

The CAISO recognizes the potential need to increase interregional transfer capability between planning regions in the West specifically due to increasing renewable development, and it supports efforts to identify projects that accomplish that goal. However, the Commission should not establish a minimum level of transfer capability. Instead it should allow the planning practices of each region to identify what issues might drive a need for increased interregional transfer capability (or some other solution) and then identify projects to address those needs most efficiently and cost-effectively. The CAISO, for example, already has a framework for evaluating transfer capability through a robust study and stakeholder engagement process.

The CAISO utilizes its tariff-based transmission planning process to consider grid reliability needs, policy-driven transmission needs, and economic study considerations. The CAISO has approved transmission projects through its planning processes that have increased transfer capability between balancing authority areas, even though they were driven by more specific study inputs related to economics or resource planning policy.

In California, state agencies provide demand and resource inputs for the CAISO to consider and use in its transmission planning process.¹ Specifically,

the California Energy Commission (CEC) provides demand outlooks, and the California Public Utilities Commission (CPUC) provides forward-looking resource portfolios that include significant amounts of out of state wind and solar resources. The CAISO incorporates these demand and resource scenarios in its annual transmission planning studies. The CAISO expects that consideration of out of state resources will result in it approving or enabling new transmission projects that also increase interregional transfer capability. Given this existing framework is functioning effectively and resulting in the approval of transmission that increases interregional transfer capability, establishing a mandatory minimum transfer capability requirement is unnecessary and may not produce the most appropriate, efficient, and cost-effective transmission solutions. Removing any barriers in existing processes is a better approach than simply mandating more transfer capability.

1. **The CAISO’s Planning Processes Effectively Evaluates Interregional Transfer Capability Under Both the Economic Study Process and in Relying on State Goals to Drive Policy-Related Transmission**

   The CAISO’s economic and public policy study processes consider projects that can potentially increase interregional transfer capability. In these processes, increasing interregional transfer capability is not evaluated for its own sake, but as a beneficial consequence of economic- or policy-driven transmission solutions. This approach allows the CAISO to approve the most efficient, beneficial, and cost-effective overall projects. These drivers have a meaningful

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effect on the reliability and resiliency of the system because they are aligned with resource development. Two 500 kV transmission projects approved by the CAISO that increase transfer capability were approved under an economic need evaluation, and they also provided general reliability benefits. However, as the state’s inputs increasingly demonstrated the need to access out-of-state renewables, these projects increasingly demonstrated policy-related benefits as well.

In the CAISO’s planning region, resource planning requirements and transmission solutions required to address these forward-looking resource scenarios is becoming a significant driver for the need to increase interregional transfer capability. The CAISO actively engages with state and local regulators to incorporate resource portfolios developed by state agencies into the consideration of policy-driven and economic-driven transmission solutions. In the 2022-2023 planning cycle, the CAISO has identified the need to develop incremental import capability. Similarly, the CAISO’s 2023-2024 planning cycle will likely see a further increased need for additional import transfer capability. These drivers for transmission are tied to the state’s resource development goals and although they are not tied directly to achieving a specific minimum transfer capability number, they also increase transfer capabilities across the region.

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3 The DesertLink Harry Allen - Eldorado 500 kV facility reached commercial operation in 2020. The Ten West Link Colorado River - Delaney 500 kV facility has received regulatory approvals and is targeting operation by the end of 2023.

This not only supports the state’s renewable resource goals, it also significantly improves grid reliability, resiliency, and resource adequacy.

Beyond the annual transmission planning cycle, in 2022 the CAISO also issued a 20-year outlook of transmission needs based on public policy drivers and resource and demand forecasts, including increased electrification. This long-term planning outlook indicated the need for up to 10 GW of additional transfer capability over the next twenty years. This outlook provided a conceptual plan for the future of the transmission grid as developed in conjunction with the CPUC and CEC. The CAISO will continue to use the annual resource portfolios from state agencies in the annual transmission planning cycles, which may be informed by the 20-year outlook, and it anticipates future projects will further increase interregional transfer capability.

The tools and processes exist for all transmission planners to consider solutions like these. If sufficient transmission is not being built and it is causing problems, the Commission should first determine why and then address the specific problem; it should not impose a generic minimum transfer capability requirement on every transmission provider.

2. Existing Processes in the CAISO Footprint Consider Extreme Events for Planning

The workshop also discussed extreme weather and related events (e.g., heatwaves, drought, and wildfires), which have increased the interest in adding interregional transfer capability. However, a minimum volume of inter-regional transfer capability.

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transfer capability alone does not necessarily support reliability in these instances, especially if the extreme event causes an outage or derate on the facilities providing the increased transfer capability. Also, there must be available generation to import during stressed periods. In instances where the extreme weather is geographically widespread or cross balancing authority areas, that may not be the case.

Planning for such events requires a holistic resource and transmission study approach that evaluates all these variables. This cannot be achieved by generically adopting a required minimum level of transfer capability. The CAISO already incorporates these events into its own planning standards. The CAISO’s standards are derived from the North American Electric Reliability Corporation’s (NERC) reliability standards, which include extreme event analysis. California has separately launched new programs to help maintain reliable electric service during extreme events beyond resource planning. In any event, addressing extreme climate events requires targeted and comprehensive planning like that occurring in California, and not a standard, generic, minimum interregional transfer capability requirement that does not recognize the appropriateness of regional variations.

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7 NERC Reliability Standard TPL-001-4, Requirement 3.
8 Starting summer 2021, several emergency resource programs emerged in California which provide grid support during system emergencies and extreme events. These programs include both conventional generation and demand-side programs. Programs include the State Power Augmentation Project, Electricity Supply Strategic Reliability Reserve Program (ESSRRP), the Emergency Load Reduction Program developed by the California Public Utilities Commission, and the Demand Side Grid Support Program administered by the California Energy Commission. The ESSRRP program will grow to over 3,000 MW in 2024.
3. Requiring a New Transmission Planning Study Duplicates CAISO Efforts

At the workshop, some participants recommended requiring a transmission planning study to determine the appropriate minimum amount of interregional transfer capability. As discussed above, the CAISO does not support a standardized minimum requirement for interregional transfer capability because it alone would not address the more nuanced resource planning different regions need to undertake or region-specific needs and circumstances.

The Commission inquires about the appropriate geographic scope of a new transmission planning study and the type of analysis the study should include. These questions highlight the many challenges of creating a one-size-fits-all approach. As described above, the CAISO’s transmission planning process utilizes a complete set of California-specific inputs from state agencies regarding resource planning and extreme weather contingencies as required by NERC. These efforts consider increased interregional transfer capability as a potential solution for identified economic and/or public policy, but in the context of identifying the most efficient or cost-effective solution.
II. Conclusion

The CAISO appreciates the opportunity to provide comments and encourages the Commission to consider regional flexibility in any action it considers related to minimum interregional transfer capability.

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Dated: May 15, 2023
CERTIFICATE OF SERVICE

I certify that I have served the foregoing document upon the parties listed on the official service list in the captioned proceedings, in accordance with the requirements of Rule 2010 of the Commission’s Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 15th day of May, 2023.

/s/ Jacqueline Meredith
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