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CAISO Management and Staff,

MidAmerican Transmission and Pinnacle West appreciate the opportunity to comment on the CAISO’s 2013/2014 Preliminary Transmission Planning Process study results.

We commend the CAISO’s significant steps to further the study process and approach for economic project evaluation, including deliverability and economic production cost analysis. These improvements create a robust foundation not only for projects in consideration in the current 2013/2014 cycle but future project study work as well. This work was evident in the supporting materials accompanying the project recommendations presented at the November 20-21, 2013 stakeholder meeting.

In particular, we support the economic analysis specific to the Delaney to Colorado River (“DCR”) 500 kV transmission line recognizing the significant benefits it provides to the CAISO customers.

In particular, we believe that the CAISO’s analysis of this transmission line has made substantial improvements in the following areas:

1. **Production Benefits:** The DCR evaluation now fully recognizes the established regulatory framework at the Palo Verde trading hub which allows CAISO market participants to access and utilize transmission through this hub without being assessed a transmission wheel.
2. **Capacity Benefits:** The DCR evaluation also includes a conservative model of the value of capacity suitable for providing Resource Adequacy. This includes analysis supporting a 400 MW benefit to the CAISO Maximum Import Capability from the Palo Verde trading hub.
3. **Cost:** Finally, the DCR evaluation includes a detailed year-by-year revenue requirement and net present value estimate of project costs and benefits. Both benefits and costs are then discounted to the same base year for comparison.

We also note that in order to achieve many of the near term benefits anticipated in the DCR project analysis, timely approval in March 2014 is paramount to allowing the project to begin its permitting and construction activities and achieve commercial operation by 2020. The DCR

transmission line, if approved in March 2014, would need to undergo a competitive Phase 3 process over much of 2014, leaving only five years to permit this project through the federal National Environmental Policy Act (NEPA) process and ultimately construct the transmission line. While the in-service date proposed is achievable barring unforeseen circumstances based on analysis completed to date, it is critical that a March 2014 approval be maintained.

Production Benefits

Modeling trading hubs, such as Palo Verde, helps capture the real value that already exists in the hub-market regulatory design by more accurately modeling the actual topology and transaction pricing of the transmission system. The DCR evaluation recognizes the unique benefits the Palo Verde trading hub facilitates by allowing direct CAISO control of scheduled generators through the trading hub to meet fluctuating load and generation needs. As the most liquid trading hub in the western interconnection, hosting thousands of megawatts of existing latent capacity and serving as the market interface across multiple balancing authorities, the CAISO's implementation of trading hub models incorporates a portion of this value in its economic evaluation.

Capacity Benefits

We appreciate the CAISO recognizing the 400 MW resource adequacy import benefit effectuated by the DCR transmission line. We understand the assigned 400 MW capacity benefit is derived using power flow analysis conducted with peak loads and peak transfers into the southern California system consistent with CAISO business practice. Based upon power flow analysis, we believe that the resource adequacy benefits at times exceed 400 MW under many different sets of plausible system loading conditions.

The Category 1 system upgrades identified in the planning process provide necessary reinforcement to the southern California system and especially the San Diego system under peak load conditions. Given the high West of River flows into the CAISO system during these conditions, we agree with the CAISO that the Category 1 transmission system upgrades identified in the draft Transmission Plan are necessary system additions to the Southern California system. DCR provides added benefits to the CAISO system by having efficient and uninterrupted access to the Palo Verde hub under N-1 system conditions and that will also benefit CAISO customers. As a result of these benefits, we agree with the CAISO that the costs of these Category 1 facilities should not burden the DCR transmission line economic analysis but viewed more as an enhancement to these elements that are already needed.

Costs

We also support the CAISO's refined approach at assessing the economic costs to customers by forecasting detailed year-by-year revenue requirement estimates based on a conservative cost estimate as the basis for comparison to a similar stream of forecasted benefits. This process is consistent with the TEAM methodology and more accurately represents the costs of new projects, allowing better comparison to the benefits these projects bring.

Conclusion

We agree with the CAISO's overall assessment that the DCR transmission line is an economically beneficial project to CAISO customers under what we believe to be plausible but reasonably conservative assumptions. The results shared at the recent stakeholder meeting are consistent with our own assessment we independently developed with our economic consultant with significant experience in the California and Western Interconnection markets.

While the CAISO's evaluation demonstrates the economic benefits to CAISO customers to a level where it makes sense to move forward with a recommendation to the CAISO Board of Governors to approve the DCR transmission line, we believe there are other factors that could drive even more benefits to CAISO customers that are worth mentioning. These benefits include the ability to access flexible thermal capacity to follow generation and load fluctuations, the ability to capture indirect capacity benefits created by lowering the proxy clearing price for generation capacity in the CAISO, the increase in options that could be considered as a part of the San Onofre Nuclear Generating Station (SONGS) retirement mitigation plan, and the increased deliverability between the CAISO and neighboring regions which could facilitate inter-regional market development.

In summary, we commend the CAISO for its thoughtful analysis of this transmission line. We concur with the CAISO that the DCR transmission line is an economically justified investment for CAISO customers, and we support the CAISO moving forward with its plan to seek Board approval to competitively bid the project.