

MEMORANDUM

DATE: September 4, 2018

REPLY TO: A7000
ATTN OF: Regional Vice Presidents of Operations

SUBJECT: Reliability Coordinator Service Providers

TO: Kevin Howard, A7000

THRU: J. Sundsted, B0000
R. Moulton, G0000
M. McElhany, J0000
S. Johnson, L0000
D. Roth Lindell, N0000

Background

Formed in February 2014, Peak Reliability (Peak) is the current Reliability Coordinator (RC) for the majority of the Western Interconnection. In December 2017, Peak announced it was partnering with PJM Connex to explore developing a west-wide market. In January 2018 the California Independent System Operator (CAISO), which funds approximately 30 percent of Peak's annual revenue requirement, announced it would be establishing its own RC and withdrawing from Peak by September 2019. As part of its announcement, CAISO indicated its intent to provide RC services to other Balancing Authorities (BAs) and Transmission Operators (TOPs). This spurred discussions in the Western Interconnection regarding the viability of Peak beyond 2019.

On July 18, 2018, Peak announced it would wind-down and cease operations by December 31, 2019. These events required Western Area Power Administration (WAPA) to evaluate alternatives for RC services. The two options expected to be viable, subject to certification by the Western Electricity Coordinating Council (WECC) and the North American Electric Reliability Corporation (NERC), as entities to provide RC services in the Western Interconnection are the Southwest Power Pool (SPP) RC and CAISO RC. WAPA performed a preliminary evaluation of providing RC services for itself and others but abandoned the concept due to a number of factors including the time to implement, WAPA full-time equivalent caps, hiring timelines, and control center space.

After evaluating the available options, WAPA's regional offices and Colorado River Storage Project Management Center (CRSP) recommend the following for RC service providers.

Rocky Mountain and Desert Southwest Regions

Recommendation:

WAPA's Rocky Mountain Region (RMR), in its capacity as the BA for the Western Area Colorado Missouri (WACM) Balancing Authority Area (BAA) and as a TOP within WACM, recommends the SPP RC as its preferred option.

WAPA's Desert Southwest Region (DSW), in its capacity as the BA for the Western Area Lower Colorado (WALC) BAA and as a TOP within WALC, recommends the SPP RC as its preferred option.

Discussion:

From a tactical perspective, WAPA has spent the last eight years consolidating the operational functions in WACM and WALC. Since 2010, WACM and WALC have integrated the functional elements, tools, processes, and procedures of WACM and WALC operations, which today operate as a single operations organization. For the Loveland Area Projects (LAP), CRSP, Parker-Davis Project, Boulder Canyon Project, Pacific Northwest-Southwest Intertie Project, and the Central Arizona Project, WACM and WALC can fully back up each other in times of operational emergencies. As such, WAPA believes splitting these two BAAs across two different RCs would be contrary to its long-term consolidation efforts. Splitting the BAAs between RCs would introduce operational and compliance complexities for WAPA operators that could compromise the safety, security, and reliability of segments of the bulk electric system in WACM and WALC.

From a strategic perspective, over the past 20 years, the electric industry has moved towards organized electricity markets. WAPA's Western Area Upper Great Plains - East (WAUE) experience with the SPP Regional Transmission Organization (RTO) within the Eastern Interconnection since 2016 has been extremely positive for WAPA and its customers. Since 2013, WAPA and other participants of the Mountain West Transmission Group (MWTG) along with additional stakeholders have been working to evaluate establishing a fully integrated market within the MWTG entities' footprint. Since January 2017 the group has been working with SPP to expand the SPP RTO into the Western Interconnection. On October 12, 2017, WAPA formalized its participation in the process by publishing a notice in the *Federal Register*, seeking comments on the recommendation by WAPA's LAP and CRSP to pursue final negotiations regarding membership in SPP. Although those discussions were altered when Public Service Company of Colorado withdrew from MWTG in April 2018, WAPA continues to work with neighboring utilities to pursue opportunities to optimize the use of generation and transmission resources across multiple utility systems.

As part of these continued optimization efforts, SPP has offered to provide RC services as a standalone product in the Western Interconnection. Participating in the SPP RC will preserve and facilitate options for the potential development of an organized electricity market in the West. The cost of service for the SPP RC (initially capped at \$0.055/megawatt-hour (MWh) is within reasonable range of the cost of service for the CAISO RC (initially estimated at \$0.034 to \$0.041/MWh depending on total load). However, the additional attributes of the SPP RC as described above are not captured in a per MWh charge yet offer significantly greater value for WACM and WALC.

For the above reasons, WACM and WALC recommend moving forward with pursuing SPP as their RC.

Upper Great Plains Region

Recommendation:

WAPA's Upper Great Plains (UGP), in its capacity as the BA for Western Area Upper Great Plains - West (WAUW) BAA and a TOP within the Western Interconnection, recommends SPP RC as its preferred option.

Discussion:

UGP is currently a transmission owning member of SPP and is fully engaged in the SPP stakeholder/governance process. SPP is already the Transmission Service Provider and Planning Coordinator for the UGP transmission facilities in the both the Eastern and Western Interconnection. In addition SPP is the RC, BA, and Market Operator for UGP transmission facilities in the Eastern Interconnection. Selecting a different RC in the Western Interconnection would result in UGP being involved in the stakeholder/governance processes of two different entities, at increased cost.

By selecting SPP, UGP will have one RC for its entire footprint. This will relieve potential conflicts of interest between a non-SPP RC and SPP when, for example, during certain maintenance activities UGP transfers a portion of its Western Interconnection transmission facilities to the Eastern Interconnection and into the SPP market. It also will simplify operational and compliance complexities for its operators, which will in turn, enhance the safety, security and reliability of the segments of the bulk electric system that WAUW and WAUE operate within.

SPP, as UGP's RC in the Eastern Interconnection, is successfully managing the complex seams between SPP and Midcontinent Independent System Operator (MISO). This seam is a result of the intertwined nature of the transmission systems of UGP, other SPP Upper Missouri Zone transmission owners, and MISO transmission owners. UGP is confident that SPP will be able to effectively manage the Western Interconnection seams with the same level of success.

Finally, the selection of SPP as the RC for UGP's WAUW BA and its Western Interconnection TOP footprint supports the desire to maintain a unified pricing zone for all of UGP's transmission facilities. By transitioning to the SPP RC, UGP will no longer have to pay a second entity for RC services. Transmission customers using UGP transmission facilities in the Western Interconnection already pay the full SPP Schedule 1a rate, which includes SPP's RC services for transmission facilities under the functional control of SPP. SPP has agreed that no additional charges will be assessed for RC services. UGP's preference customers in the Western Interconnection have expressed support for SPP becoming a RC in the Western Interconnection and providing services to the region.

For the above reasons, UGP recommends moving forward with pursuing SPP as RC for its WAUW BA and Western Interconnection TOP footprint.

Sierra Nevada Region

Recommendation:

WAPA's Sierra Nevada Region (SNR), in its capacity as a TOP within the Balancing Authority of Northern California (BANC), has selected the CAISO RC as its preferred option.

Discussion:

As a result of Peak's decision to wind-down its RC services, on July 25, 2018, BANC authorized its staff to proceed with transitioning from Peak to the CAISO RC effective December 31, 2019. NERC's Rules of Procedures (§ 501, 1.4) require that there is "one and only one" RC for each BA. Under this rule, SNR must follow BANC into the CAISO RC.

SNR has worked with CAISO and stakeholders in the CAISO RC process, including developing operating terms and conditions, decision making, and governance to ensure non-discriminatory, cost effective, reliable RC services.

For the above reasons, SNR recommends moving forward with pursuing CAISO as its RC.

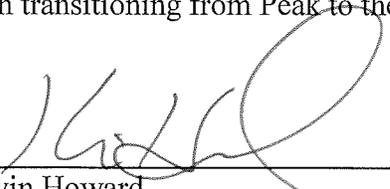
Conclusion and Recommendation

Initial analyses have determined SPP and CAISO should be able to provide reliable RC services comparable to or superior to the services provided by Peak, and the costs for such services are expected to be lower than Peak's. Given the dynamic nature of the situation and the need for ongoing analysis, each region will keep you informed of their progress. If any significant issues arise, we will bring those matters to your attention.

To concur with the above recommendations, please sign the concurrence below.

Concurrence

I concur with the recommendations in this memo, which includes your decision to move forward with transitioning from Peak to the respective RCs indicated above.



Kevin Howard
Executive Vice President and Chief Operating Officer