



Southwest Power Pool, Inc.

SPP STAFF

Recommendation to the SPP Board of Directors

September 20, 2019

Western Energy Imbalance Service Budget Recommendation

Organizational Roster

SPP staff

Background

The SPP Board of Directors, in early 2019, authorized SPP staff to pursue the offering of an energy imbalance service market to utilities in the Western Interconnection. SPP staff identified and worked with interested parties to develop a Western Energy Imbalance Service (WEIS) proposal. SPP released its proposal detailing the scope of the WEIS on June 17, 2019, which was distributed to the nineteen interested parties SPP worked with in the Western Interconnection. The proposal is posted on the SPP website (www.spp.org/WEIS).

On September 9, 2019, Basin Electric Power Cooperative, Tri-State Generation and Transmission Association, Western Area Power Administration (WAPA) Colorado River Storage Project (CRSP), WAPA Rocky Mountain Region (RMR), and WAPA Upper Great Plains (UGP), executed contracts to fund the development of SPP's WEIS market. SPP will accept additional commitments through October 25, 2019, from market participants who wish to be included in the initial WEIS go-live which is scheduled for February 2021. Additional market participants who seek to participate in the WEIS after October 25, 2019 will be onboarded according to SPP's normal market onboarding process.

Analysis

The WEIS will centrally dispatch energy from market participants throughout the market region every five minutes, enhancing reliability and affordability. SPP will develop and implement the WEIS under a Western Joint Dispatch Agreement and market participants do not have to be a member of the SPP Regional Transmission Organization to participate. SPP will operate the WEIS market pursuant to a separate tariff containing the market rules and procedures applicable only to WEIS market participants.

SPP will provide an Energy Imbalance market to meet the real-time demand with the most cost-effective generation available. Like SPP's previous and current markets, the WEIS will provide price transparency of wholesale energy, allow market participants to trade bilaterally and hedge against transmission congestion.



SPP staff has developed a high-level cost estimate for both the implementation and annual operation of the WEIS. Similar to the Reliability Coordinator Services Agreement, SPP is proposing to finance the implementation costs during a 16 month implementation period and recover those costs through the application of an annualized production rate over an eight year term. The following table outlines the projected implementation costs and estimated year one on-going production costs.

<i>Millions of Dollars</i>	Implementation Costs	Production Costs
Salaries & Benefits	\$2.2	\$1.5
Project Consulting	\$1.4	\$0.0
Technology Costs	\$4.2	\$0.8
Travel & Administrative Costs	\$0.1	\$0.1
Principal & Interest Payments	\$0.3	\$1.5
Corporate Overhead Costs	\$1.3	\$1.2
Total Costs	\$9.5	\$5.0

SPP staff has projected the need for thirteen incremental full time equivalent staff (“FTE”) to perform the WEIS functions. The primary business drivers for incremental FTEs are: 1) the physical separation of the western operational area requires an incremental 24x7 real-time market shift desk, 2) settlement of market transactions will require additional settlement analysts and settlement system support, and 3) increasing requirements for ongoing market design and independent market monitoring. All staff will be based in SPP’s existing facilities.

SPP will utilize consultants when appropriate to accomplish the market implementation, primarily in the Training, Customer Relations, and IT departments to aid in the development of a robust training program, collection and analysis of onboarding data, and development and testing of market and settlement systems, respectively. SPP may engage outside counsel if needed, to support the development and legal filings of rates, terms and conditions of the WEIS market. It is expected that the WEIS will require a FERC filed tariff and corresponding set of market protocols. These documents are separate from the SPP Tariff.

SPP’s technology roadmap includes enhancements to current Marketplace systems to allow for imbalance trading and settlement in the Western Interconnection. This would include identified changes to various operational components such as the commercial model tool, energy management system, and other sub-systems. SPP is currently in development of a new, more robust settlement system expected to be placed into service in first quarter 2020, enhancements will be made to that system to accommodate the settlement of WEIS transactions. Additional data storage and communications equipment will be required including accompanying software components. Ongoing costs include licenses and maintenance of hardware, software, and communications equipment. Refreshment of these items upon their expected end of useful life

is not included within this estimate. These hardware and communications components have typical useful lives of 3-5 years. Future enhancements and further western customizations have not been included within this estimate.

SPP will finance the WEIS implementation costs with proceeds from the issuance of debt and will recover those costs from the WEIS market participants through the assessment of an annual production rate over an eight year period. WEIS market participants who terminate market services prior to the eight year repayment are obligated to pay their portion of the remaining implementation costs. Additional market participants who enter the market within the first eight years will be allocated a portion of the original implementation costs upon entry.

The project costs described above are exclusively incremental to SPP's current financial structure. Costs for existing corporate functions required to support these market services for the Western Interconnection are included in corporate overhead costs. These functions include human resources, legal, accounting, credit, network/circuits, facilities, and other infrastructure requirements not included in the incremental costs.

The WEIS administration rate charged to market participants will be calculated on an annual basis using a formula type rate. This rate will use the projected annual production costs, startup principal and interest charges and current NEL for the current market participants to determine the rate charged. SPP will invoice market participants annually beginning in December 2020. Staff will actively track costs associated with the project via time tracking, processes and controls to ensure full recovery of appropriate costs. Within the Western Joint Dispatch Agreement, SPP's liability is limited in the same manner as exists within the SPP Tariff. This is energy imbalance service has limited applicable NERC standards associated with the service.

Recommendation

1. SPP staff recommends the SPP Board approve the \$9.5 million budget to fund development and implementation of the WEIS scheduled for February 1, 2021.

Action Requested: Approve Recommendation