

OFFICE OF THE CITY AUDITOR COLORADO SPRINGS, COLORADO

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24-11 Colorado Springs Utilities Southwest Power Pool Participation

April 2024

Purpose

The purpose of this audit was to review specific internal controls and confirm the reported benefits achieved since Colorado Springs Utilities (Utilities) joined the Western Expansion Imbalance Service (WEIS) Market operated by the Southwest Power Pool (SPP).

Highlights

We conclude that a financial benefit was achieved because the WEIS Market provided Utilities access to lower cost regional energy resources. We were unable to validate the estimated benefit reported by Utilities due to a modeling program error. We identified two observations and one opportunity to strengthen internal controls.

On August 1, 2022 Utilities joined the WEIS Market operated by SPP to help mitigate customers from the exposure to volatile energy market prices, enhance the current and future reliability of the electric grid, and expand the ability to meet clean energy goals. The WEIS Market centrally dispatches energy from participating resources throughout the region every five minutes. After one year of involvement in the WEIS Market, Utilities reported customers saved approximately \$4.7 million in energy costs.

SPP is approved by the Federal Energy Regulatory Commission to operate a reliable, economic, and non-discriminatory electric grid. Our review focused on understanding Utilities operating relationship to the SPP operated WEIS Market and reviewing internal controls for the energy trading software. In addition, we reviewed the cost and benefits achieved from WEIS Market participation.

The Office of the City Auditor will continue to monitor development as Utilities prepares for full participation in the SPP Regional Transmission Organization in 2026.

We would like to thank Utilities Fuels and Purchase Power and Accounting Department employees for their assistance and support during this review.

Recommendations

- Improve policy and processes related to safeguarding of access to the energy trading software.
- Review the vendor testing for the updated post analysis software for accuracy.

Formally document the testing process for system implementations, to include customizations, and ensure testing is completed for any new implementations.

Opportunity for Improvement:

1. Develop a process to validate data used in generation cost calculations on a periodic basis.

Management Response

Management was in agreement with our recommendations.

24-11 COLORADO SPRINGS UTILITIES SOUTHWEST POWER POOL PARTICIPATION

Observation 1

Based on our review, energy trading software policy and processes could be improved to ensure compliance with Utilities policies and safeguarding of access to the software.

We are not including details concerning any potential vulnerabilities (or strengths) related to the security of those Colorado Springs Utilities facilities and functions.

Disclosure of this information to the public would be contrary to the public interest. The details of this audit are not required to be released to the public per C.R.S. § 24-72-204(2)(a)(VIII)(A).

Recommendation

Fuels and Purchase Power Department Management should:

Improve policy and processes related to safeguarding access to the energy trading software.

Management Response

Management agrees with the recommendation and has provided responses for our follow up to ensure corrective actions are implemented to safeguard access to the energy trading software. Anticipated implementation is Q4 2024 or Q1 2025.

Observation 2

There were calculation errors in the post analysis modeling used to estimate the benefits from avoided costs achieved from WEIS Market participation. As a result, we were unable to validate the estimated savings of \$4.7 million reported by Utilities. However, we believe a financial benefit resulted from WEIS Market participation due to the increased access to lower cost regional energy sources.

The reported savings estimation was used for informational purposes only and did not have an impact on financial statements. The software vendor and Utilities management believe these errors originated when customizations were made to the energy trading software.

Recommendation

Fuels and Purchase Power Department Management should:

- Review the vendor testing for the updated post analysis software for accuracy.
- Formally document the testing process for system implementations, to include customizations, and ensure testing is completed for any new implementations.

Management Response

Management agrees with the recommendation and will implement new processes and documentation requirements by the end of 2024, to ensure new system functionality is consistent with the expectation of the changes.

24-11 COLORADO SPRINGS UTILITIES SOUTHWEST POWER POOL PARTICIPATION

Opportunity 1

Factors used to calculate non-fuel generation costs were last updated in 2018 and 2019, respectively.

Utilities confirmed the variable operations and maintenance and heat rate factors were still reasonable for 2024. In addition, there was no formal process to document the review and support of data used in the cost generation calculations.

The use of dated calculations could affect purchase power or sale decisions for generation assets as well as margin calculations.

Recommendation

Fuels and Purchase Power Department Management should:

 Develop a process to validate data used in generation cost calculations on a periodic basis.

Management Response

Management agrees with the recommendation and will implement recurring reviews, likely annually at a minimum. This process is expected to be implemented in Q2/Q3 2024.

This audit was conducted in conformance with the International Standards for the Professional Practice of Internal Auditing, a part of the Professional Practices Framework promulgated by the Institute of Internal Auditors.