SOUTHWEST POWER POOL
FINANCE COMMITTEE MEETING

July 15, 2021
Videoconference

MINUTES

ADMINISTRATIVE ITEMS

SPP Chair Susan Certoma called the meeting to order at 8:00 a.m. The following members were in attendance:

Susan Certoma	SPP Director
Julian Brix	SPP Director
Darcy Ortiz	SPP Director
Sandra Bennett	AEP
Sarah Stafford	OG&E
Mike Wise	Golden Spread Electric Coop
Al Tamimi	Sunflower Electric Coop
Matt Pawlowski	NextEra
Emily Koenig	Lincoln Electric
Tom Dunn	SPP

Others in attendance: See attached roster

A quorum was present. Minutes from the April 15, 2021 and June 17, 2021 meetings were reviewed. Mike Wise made a motion to accept the minutes. The motion was seconded by Matt Pawlowski and approved by unanimous voice vote with one abstention (Emily Koenig).

2022 SPP OPERATING PLAN

SPP staff presented the 2022 Operating Plan document, highlighting i) the primary corporate objectives, and ii) the 2022-24 project plan. Additionally, staff demonstrated how the corporate objectives and projects aligned with the draft 2022 strategic plan. Staff advised the committee members that the Strategic Planning Committee was briefed on the operating plan and alignment during a meeting the prior day and the Markets and Operations Policy Committee were advised of the 2022-24 project plan earlier in the week.

Some committee members expressed concern that the operating plan (and strategic plan) lacked clarity around what items in the plan are "must-do" items and lacked estimates of costs to complete and implement the plan.

Sandra Bennett made the following motion: The Finance Committee recommends the SPP Board of Directors accept the 2022 SPP Operating Plan as a working document for development of the 2022 budget. The motion was seconded by Mike Wise and approved by unanimous voice vote with one abstention (Mike Wise). Mike Wise indicated his abstention was due to the lack of constraints within the plan.

PROCESS IMPROVEMENT REPORT

The committee received a report from SPP staff on process improvement program efforts that have occurred over the trailing 12 month period. Eight improvement projects were highlighted which resulted in estimated financial savings of $1,200,000.

SCHEDULE 1A RATE CAP

SPP staff presented a recommendation to increase the rate cap in recognition of the growth of SPP's operations and inflation of costs to provide services. SPP's 2021 budget contained a forecast for 2022-2025 which indicated the net revenue requirement divided by transmission service billing units would exceed the existing 43¢/MWh cap beginning in 2022.

Sandra Bennett made a motion to increase the cap to 46.5¢/MWh. This motion was seconded by Mike Wise and approved by unanimous voice vote.

The committee further indicated to SPP staff its expectation that 2022 costs would be held at or below 45¢/MWh.

MID YEAR REVIEW

SPP staff provided a concise overview of full year projected financial performance. The net revenue requirement is projected to be at budget levels while tariff revenues are slightly below budget. Projections currently indicate a mild under-recovery during 2021. Staff further highlighted how the under-recovery presents itself within the 4 administrative fee rate schedules. Schedule 1A-1 is expected to produce a slight over-recovery while the other three rate schedules are expected to under-recover. The primary driver is lower billing determinants in the three under-recovering rate schedules.

FUTURE MEETINGS

The next meeting of the Finance Committee will be a video conference on September 22, 2021 when the committee will have a preliminary review of the 2022 operating and capital budgets.

The meeting was adjourned at noon.

Respectfully Submitted,

Tom Dunn

Secretary

First	Last	Company
Sandra	Bennett	AEP
Dianne	Branch	Southwest Power Pool
Julian	Brix	SPP
Denise	Buffington	Evergy Companies
Susan	Certoma	SPP
Jason	Chaplin	OCC
Michael	Desselle	Southwest Power Pool
Tom	Dunn	SPP
Tom	Hestermann	Sunflower Electric Power Corporation
Jim	Jacoby (AEP)	AEP/PSO
Laura	Kapustka	NPPD
Farzad	Khalili	State of Oklahoma
Emily	Koenig	Lincoln Electric System
Darcy	Ortiz	SPP Director
Jeff	Parkison	CUS
Matt	Pawlowski	NextEra Energy Resources, LLC
Joshua	Phillips	Southwest Power Pool
Robert	Pick	NPPD
Russell	Quattlebaum	Southwest Power Pool
SCOTT	SMITH	SPP
Sarah	Stafford	OGE Energy Corp.
Barbara	Sugg	SPP
Robert	Tallman	OG&E
Al	Tamimi	Sepc
Zeynep	Vural	Southwest Power Pool
Michael	Wise	Golden Spread Electric Coop, Inc.

SOUTHWEST POWER POOL, INC.
FINANCE MEETING

July 15, 2021 (8:00am – noon CDT)
WebEx

AGENDA

1. Administrative Items ..... Susan Certoma
2. 2022 SPP Operating Plan (*60 minutes*) ..... Tom Dunn
3. Process Improvement Report (*30 minutes*) ..... Michael Desselle
4. Schedule 1-A Rate Cap (*45 minutes*) ..... Tom Dunn
5. Mid-Year Review (*30 minutes)* ..... Dianne Branch
6. Future Meetings .....

SOUTHWEST POWER POOL
FINANCE COMMITTEE MEETING

April 15, 2021
Videoconference

MINUTES

ADMINISTRATIVE ITEMS

SPP Chair Susan Certoma called the meeting to order at 8:00 a.m. The following members were in attendance:

Susan Certoma	SPP Director
Julian Brix	SPP Director
Sandra Bennett	AEP
Sarah Stafford	OG&E
Mike Wise	Golden Spread Electric Coop
Al Tamimi	Sunflower Electric Coop
Matt Pawlowski	NextEra
Tom Dunn	SPP

Others in attendance: See attached roster

A quorum was present.

Minutes from the January 14 and January 21 meetings were reviewed. Matt Pawlowski made a motion to accept the minutes. The motion was seconded by Julian Brix and approved by unanimous voice vote.

2020 FINANCIAL AUDIT REPORT

Dianne Branch and Chad Moore presented the results of the 2020 financial audit. Dianne Branch covered highlights on the financial statements and related footnotes. Chad Moore presented the audit opinion letter and the management letter. The audit opinion was unmodified and no exceptions were noted in the management letter.

The committee convened a brief executive session with the auditor.

Sarah Stafford made the following motion: Recommend the SPP Board of Directors accept in its entirety the 2020 audit report and findings of BKD, LLC. The motion was seconded by Mike Wise and approved by unanimous voice vote.

2021 BENEFIT PLAN FUNDING

The committee received a recommendation from SPP staff to contribute $5.10 million to the SPP Retirement Plan in 2021 and to contribute $0 to the SPP Post-retirement Healthcare Plan in 2021.

Al Tamimi made the following motion: Approve 2021 funding of the SPP Retirement Plan of $5.10 million. Approve 2021 funding of the SPP Post-retirement Healthcare Plan of $0. The motion was seconded by Julian Brix and approved by unanimous voice vote.

Two questions were asked regarding detail in the actuary report. One was the addition of someone to the "Retired" status with the reason of "other". A second question was why the actuary used 4.5% for compensation growth for purposes of calculation of the contribution when 4.0% compensation growth was used elsewhere. The actuary responded that a retired employee became divorced and the ex-spouse was added to the retired roster in accordance with a qualified domestic relations order. The actuary stated 4.5% compensation growth was used to be more in-line with the inflation assumption used in the contribution calculations consistent with prior years.

2021 DEBT ISSUANCES

SPP staff discussed utilizing the private placement market to provide funding for 2021 and 2022 capital expenditures. This market would allow SPP to obtain term debt at attractive and competitive rates while also structuring principal retirements to occur in 2026-28. This structure of principal retirements will allow SPP to maintain the amount of principal and interest that needs to be recovered in future rates at a level consistent with those included in 2021 rates. Staff proposed utilizing U.S. Bank as its placement agent for this issuance as U.S. Bank has developed a strong record in placements and serves as SPP's bank for liquidity financing and treasury management services. U.S. Bank also provides a $30 million revolving line of credit to SPP to supplement short-term liquidity needs. This line of credit is scheduled to mature in October 2021. U.S. Bank has proposed to extend the maturity of the line of credit to October 2023 retaining all other terms.

Mike Wise made the following motions: Authorize the issuance of $28 million in senior unsecured term notes with scheduled principal retirements not occurring until 2026 and final maturities of 2028 or prior. The notes will be issued as a private placement, utilizing the services of USB as the sole placement agent. Authorize appropriate regulatory filings for the issuance of up to $28 million in senior unsecured term notes to be issued within 12 months of receiving regulatory

approval. Authorize the SPP Finance Committee to oversee negotiation, final approval of terms and conditions, and authorizations to execute up to $28 million in senior unsecured term notes with final maturities of 2028 or prior. Authorize the SPP President and Chief Financial Officer to jointly execute notes and agreements for the issuance of up to $28 million of senior unsecured term notes with final maturities of 2028 or prior.

Authorize the extension of maturity date of $30 million revolving credit facility to October 2023 with all other terms and conditions remaining unchanged. Authorize appropriate regulatory filings for the extension of the maturity of the existing $30 million revolving credit facility to October 2023. Authorize the SPP President to execute notes and agreements to effectuate the extension of the maturity date of the existing $30 million revolving credit facility to October 2023.

The motions were seconded by Matt Pawlowski and approved by unanimous voice vote.

CREDIT PRACTICES WORKING GROUP

Scott Smith presented a recommendation from the Credit Practices Working Group to clarify a requirement in the credit policy that requires undercapitalized market participants to provide financial security equal to at least 2 times their market exposure, including exposure related to transmission congestion rights products.

Sandra Bennett made the following motion: The CPWG recommends revising section 3.1.1.8.2(e) and section 4.4 to include references to TCR exposure to help clarify the intent of the language and Financial Security Requirements. The motion was seconded by Julian Brix and approved by unanimous voice vote.

CORPORATE LIABILITY INSURANCE REVIEW

SPP staff summarized the results of the renewal of the company's corporate liability insurance program. Premiums increased in line with the guidance provided by Stephens Insurance LLC in January 2021. Cyber risks and the fallout from the February 2021 winter storm weighed on the renewals.

REVIEW OF FEBRUARY 13-19 INTEGRATED MARKETPLACE

SPP staff provided a summary of the operational and financial events from the winter storm which hit the SPP region in mid-February 2021. The committee was informed of the comprehensive review effort being led by the SPP board of directors and the committee's role to provide oversight of the financial section of the report. The committee was provided with a draft outline of the financial report and was requested to reply back to staff regarding any items a committee member felt should be added, enhanced, deleted, or other.

CONTRACT SERVICES REVIEW

SPP staff responded to a question from the January meeting of the committee regarding the shared overhead collected under the contracts which serves to reduce the administrative fee collected under schedule 1A of the SPP regional tariff.

FUTURE MEETINGS

The next meeting of the SPP finance committee is scheduled for July 15, 2021 from 8:00am – noon CDT. The committee members will review the draft agenda prior to determining if the meeting will be virtual or offer an in-person option.

Respectfully Submitted,

Tom Dunn

Secretary

FirstName	LastName	Company
Jared	Barker	
Sandra	Bennett	AEP
Dianne	Branch	Southwest Power Pool
Julian	Brix	SPP
Denise	Buffington	Evergy Companies
Susan	Certoma	SPP
Jason	Chaplin	OCC
Keith	Collins (MMU)	Southwest Power Pool
Tom	Dunn	SPP
Tom	Hestermann	Sunflower Electric Power Corporation
Jim	Jacoby (AEP)	AEP/PSO
Ryan	Kirk	AEPSC
Heather	Knies	Altus Power, LLC
Emily	Koenig	Lincoln Electric System
Bernie	Liu	Xcel Energy
Jason	Mazigian	Basin Electric Power Cooperative
Chad	Moore	BKD LLP
Jeff	Parkison	CUS
Matt	Pawlowski	NextEra Energy Resources, LLC
Charles	Ross	why do I have to enter this every time?
SCOTT	SMITH	SPP
Sarah	Stafford	OG&E
Heather	Starnes	MJMEUC/KMEA
Al	Tamimi	Sunflower Electric
Will	Vestal	SPP_MMU
MICHAEL	WISE	Golden Spread Electric Cooperative

SOUTHWEST POWER POOL
FINANCE COMMITTEE MEETING

June 17, 2021
Videoconference

MINUTES

ADMINISTRATIVE ITEMS

SPP Chair Susan Certoma called the meeting to order at 11:00 a.m. The following members were in attendance:

Susan Certoma	SPP Director
Julian Brix	SPP Director
Sandra Bennett	AEP
Sarah Stafford	OG&E
Mike Wise	Golden Spread Electric Coop
Al Tamimi	Sunflower Electric Coop
Matt Pawlowski	NextEra
Tom Dunn	SPP

A quorum was present.

2021 COMPREHENSIVE REVIEW REPORT OF WINTER WEATHER EVENT – FINANCE SECTION

SPP staff provided a brief summary of the Finance section of the 2021 Comprehensive Review Report of the Winter Weather Event. The summary highlighted general observations from the event as well as actions SPP may consider to address issues exacerbated by the event.

Committee members expressed their individual support for the direction of the report while offering some suggestions on improvements to the report such as:

- Make it more readable by the non-industry reader
- Highlight benefits of the large footprint of the SPP region to mitigate the event's impacts
- Try to ascertain how behavior might be different had all parties known then what they know now
- And, consider utilizing market simulation studies to help prepare for these events in the future

No committee members expressed any concerns with the report proceeding forward.

The meeting was adjourned at noon.

Respectfully Submitted,

Tom Dunn

Secretary

Southwest Power Pool, Inc.

FINANCE COMMITTEE

Recommendation to the Board of Directors

July 27, 2021

2022 SPP Operating Plan

Organizational Roster

The following persons are members of the Finance Committee:

Susan Certoma	SPP Director
Julian Brix	SPP Director
Darcy Ortiz	SPP Director
Sarah Stafford	OG&E
Sandra Bennett	American Electric Power
Emily Koenig	Lincoln Electric
Matt Pawlowski	NextEra
Al Tamimi	Sunflower
Mike Wise	Golden Spread

Background

SPP annually documents an Operating Plan (Plan) detailing significant aspects of its planned work for the upcoming calendar year. This Plan document ultimately serves as the foundation for the SPP annual budget process..

Analysis

SPP's 2022 Operating Plan describes high-level objectives and initiatives planned by SPP for 2022. Noteworthy focuses are:

- SCRIPT – implementation of the initiatives outlined by the "strategic and creative re-engineering of integrated planning team" report to be presented to the SPP board of directors in October, 2021
- 2021 Winter Weather Event – implementation of the recommendations approved by the SPP board of directors to improve SPP's response and preparedness to events similar to the 2021 winter weather event
- Order 2222 – development of and enhancement to systems to comply with FERC's directives in order 2222 which removes barriers to market participation by distributed energy resources

Recommendation

The Finance Committee recommends the SPP Board of Directors accept the 2022 SPP Operating Plan as a working document for development of the 2022 budget.

Approved: SPP Finance Committee

Action Requested: Approve Recommendation

SPP Southwest Power Pool

2022 OPERATING PLAN

By the SPP Finance Department

Published on July, 8 2021

CONTENTS

APPROACH

SPP's 2022 Operating Plan includes descriptions of the major work SPP will undertake to achieve its strategic plan, operate the organization and implement its mission. To carry out SPP's mission and the obligations set forth in its governing documents, SPP must plan and allocate its resources properly and thoroughly. SPP utilizes its robust stakeholder process to ensure accountability, transparency, fiscal responsibility and continuous improvement.

The 2022 Operating Plan outlines both corporate and departmental objectives to inform budget decisions for the coming fiscal year while acknowledging current business, financial, legislative and regulatory environments, which could impact ultimate delivery.

SPP reviews enterprise project requests and approves those that align with and support SPP's value propositions and strategic objectives. For the 2022-2024 budget planning cycle, SPP recommends a portfolio of 21 enterprise efforts for 2022.

SPP OVERVIEW

The SPP mission: Working together to responsibly and economically keep the lights on today and in the future.

SPP oversees the bulk electric grid and wholesale power market in the central United States on behalf of a diverse group of utilities and transmission companies in 17 states.

As a regional transmission organization (RTO), SPP ensures the reliable supply of power, adequate transmission infrastructure and competitive wholesale electricity prices for a 552,000-square-mile region, including more than 70,000 miles of high-voltage transmission lines in the Eastern Interconnection. SPP's services are independently provided on a regional basis, focused on electric reliability, cost-effectiveness and bringing value to SPP members and their customers.

Through SPP's portfolio of Western Energy Services, it also provides contract-based services such as reliability coordination and administration of a real-time balancing market to entities in the Western Interconnection.

SPP's staff of more than 650 professionals works proudly and diligently to ensure almost 19 million people across its service territories have electricity when they need it.

GOVERNING DOCUMENTS

TARIFF

The Federal Energy Regulatory Commission (FERC) directly regulates SPP. FERC must approve all changes to the SPP Open Access Transmission Tariff before implementation. SPP's failure to comply with tariff provisions and/or FERC directives must be reported to FERC and may be subject to penalties and fines.

The tariff defines the majority of the required workload for SPP's operations and engineering departments. Changes to the tariff are primarily within the oversight of the Market Operations Policy Committee (MOPC).

MEMBERSHIP AGREEMENT

The membership agreement is an agreement between SPP and each of its members that obligates SPP to perform outlined services, including those in the tariff. Changes to the scope of responsibilities are primarily within the purview of the MOPC and SPP's board of directors and Members Committee.

BYLAWS

The bylaws describe SPP's organizational operation, specifically outlining duties of the board and its advisory committees. Changes to the bylaws are under the oversight of the Corporate Governance Committee and board of directors.

PROTOCOLS AND BUSINESS PRACTICES

SPP has well-documented business practices detailing the administrative practices SPP follows in administering the tariff, including coordinating the sale of transmission service. SPP also has well-documented market protocols detailing how market participants and SPP are to interact. These documents are developed, monitored and amended through SPP's stakeholder process.

ORGANIZATIONAL STRUCTURE

SPP operates via two distinct organizational structures. The governance structure (Appendix A) begins with the board and cascades into board-level committees and working groups. This organizational structure is populated largely with representatives from SPP's member companies. These groups provide directives on the work SPP is expected to accomplish.

The internal staff structure (Appendix B) illustrates reporting relationships between employees. The staff structure begins with the SPP president and cascades into vice presidents, departmental directors/managers, etc. The staff structure is generally aligned based on functional responsibilities.

FUNDING

SPP funds its ongoing operating costs through charges to its customers under the tariff and customers of specific nontariff services. SPP's operating costs include scheduled principal and interest payments on its outstanding debt but exclude depreciation and amortization expenses. SPP's tariff allows the company to collect up to 100% of its operating costs from a combination of four unique rate schedules charged to its customers.

Under SPP's FERC-filed and approved formula rate design, transmission customers are charged for system dispatch and control costs; auction revenue rights and transmission congestion rights holders are charged for costs to operate the congestion rights markets; generation, load and financial-only participants are charged the common costs to administer the energy markets; and generation and load participants are charged the costs to operate the physical energy markets.

SPP's capital expenditures are funded with borrowings from periodic debt issuances and with 20% equity allocation included in the annual net revenue requirement. SPP's debt issuances are generally unsecured. These issuances have a one-to-two year, interest-only payment period and then fully amortize by the maturity of the notes. SPP is required to obtain regulatory approvals before issuing new debt.

SPP's A rating from Fitch Ratings was last affirmed November 2020. SPP issued notes in August 2018 to fund capital expenditures incurred through 2023. The SPP board authorized the issuance of additional notes in April 2021. It expects these notes to fund in the fourth quarter of 2021.

Managing SPP's cash flow provides short-term liquidity. SPP has a committed $30 million revolving credit facility with a commercial bank to provide additional liquidity support.

2022 EXPECTED BUSINESS ENVIRONMENT

Some of the opportunities and challenges affecting SPP are related to continued electrification, changing generation mix, transmission planning and cost allocation, evolving energy markets, expansion of SPP services to the west, regulatory issues and cybersecurity risks. The full impact of the February 2021 Winter Weather Event on SPP is the subject of a comprehensive review commissioned by the SPP board of directors. This review is anticipated to identify several opportunities to improve SPP systems and processes.

ELECTRIFICATION

Many projections show U.S. energy consumption will continue to decline, while overall electricity use is expected to increase with technologies such as electric cars and heat pumps. SPP anticipates continued growth in its members' demand response and energy efficiency programs. Over time, these changes will likely cause lower summer peaks, higher winter peaks and a flattening of load shapes due to an annual normalization of electricity use. Consumers will have more choices about how they use energy and interact with the electric grid. While major changes may not materialize over the next year, SPP is incorporating more of these evolving assumptions in its engineering models.

While load in the SPP region has been flat overall for the last several years, there are pockets of load growth. Commercial and industrial customers seeking low-cost, renewable service options are increasingly attracted to the SPP region. Companies such as Google, T-Mobile USA and Facebook have contracted with renewable generators in the SPP footprint to power their data centers or meet carbon emission reduction goals.

CHANGING GENERATION MIX

The generation fleet at SPP's disposal — more than 800 generators participating in its markets — has changed dramatically in the last 10 years. SPP's current generation fuel mix is primarily wind, coal and gas. Coal has been on a continual decline in production and capacity since 2014. No new coal generation is planned, and older plants are being or projected to be retired.

The SPP region has seen a significant increase in renewable energy. In 2008, wind energy made up just 3% and solar a fraction of a percent of SPP's annual energy production. In 2020, wind comprised 31.3% and solar 0.2%. At a given moment, SPP has reliably met as much as 84% of its load with wind. SPP's primary operational challenge is maintaining grid reliability as it becomes increasingly dependent on energy delivered from intermittent resources. The generator interconnection (GI) queue represents new generators "waiting in line" to be analyzed and

connected to the transmission system. Of the more than 84 gigawatts (GW) of pending generator interconnection requests, over 80% is renewable resources.

TRANSMISSION PLANNING AND COST ALLOCATION

Every year SPP works with its members to determine the region's new transmission needs. These projects benefit the region by connecting new generators and demand sources to the transmission system, ensuring low-cost electricity is delivered to consumers and solving power grid issues that, if not addressed, could impact the reliable delivery of electricity.

Determining who should pay for transmission upgrades is a highly debated public policy issue. SPP is challenged to better align its transmission planning processes, Integrated Marketplace and transmission cost allocation methodologies. It is important to address the cost responsibility of loads and generators as well as cost allocation among loads.

Additional future challenges are based on the changing generation mix, including how storage can be used for both transmission reliability and to provide economic benefits through the markets. As load also starts to respond to either reliability needs or economic benefits through the markets, planning will increase in complexity, because load will no longer just be a forecasted demand.

EVOLVING ENERGY MARKETS

Wind — which has zero fuel cost and enjoys significant federal tax incentives — coupled with low natural gas prices continues to enable an economic dispatch of SPP's changing generating fleet that reduces wholesale energy prices and shifts the region away from traditional generation. This economic dispatch is feasible due to SPP's robust transmission system investment and Integrated Marketplace. The Integrated Marketplace has provided more than $3.5 billion in savings since it launched in 2014.

In 2020, SPP's spot wholesale energy prices remained the lowest in any organized market. SPP's primary financial challenge is ensuring that, given declining wholesale energy prices, resources capable of providing reliability are appropriately compensated and incentivized to offer and deliver these services to the grid. SPP continuously works with stakeholders to enhance the Integrated Marketplace's ability to cost effectively utilize its diverse generation mix, manage grid congestion and reliably respond to changes in load and generation.

WESTERN ENERGY SERVICES

SPP began operating in the Western Interconnection as a North American Electric Reliability Corporation (NERC)-certified reliability coordinator in December 2019, working with customers to keep the lights on and mitigate operational contingencies that threaten reliability. In February 2021, SPP launched its Western Energy Imbalance Service market and administers it on a

contract basis. The market centrally dispatches energy from participating resources every five minutes, enhancing reliability and affordability for western consumers.

In November 2020, SPP announced several utilities would evaluate the benefits of placing western facilities under the terms and conditions of SPP's Open Access Transmission Tariff. An SPP-commissioned study found the move would be mutually beneficial and produce annual savings for both eastern and western members. Additionally, SPP anticipates its wholesale electricity market, resource adequacy program and other regionalized services can help western members achieve renewable-energy goals, reinforce system reliability and leverage new opportunities to buy, sell and trade power.

The interested utilities are working with SPP to evaluate the terms, costs and benefits of putting western facilities under the RTO's tariff. Membership agreements are projected to be executed in 2022.

FEDERAL AND STATE ENERGY POLICIES

SPP regularly monitors and analyzes proposed federal and state legislative actions and determines the potential impact on SPP and its members and stakeholders. At the federal level, SPP has observed broad energy policy trends toward increased renewables, storage development, grid and cybersecurity and electric infrastructure development. Historically, comprehensive federal energy legislation has been slow to become law. The pace at which regulatory rulemakings have been issued also appears to have slowed, with finalized actions often facing lengthy subsequent court challenges.

At the state level, legislative changes happen more quickly. Hundreds of energy-related bills become law each year across the country. These state-level changes both reflect and drive energy development and investment trends. SPP has seen state energy policy trends similar to that at the federal level, as well as continued interest in renewable portfolio standards, retail choice, RTO participation and right of first refusal laws.

Federal and state energy policy trends toward increased renewables, storage development, cybersecurity and grid security and modernization are likely to continue in the coming years. Additionally, as states continue to increase their renewable energy goals and reduce their greenhouse gas emissions, interest in advanced transmission systems, RTOs and possibly even retail choice could continue to grow. The public utilities and large private corporations are also likely to advance policy through independent actions.

REGULATORY

The regulatory department has four main priorities: tariff administration, outreach (federal and state), education and monitoring of regulatory agencies (federal and state). Due to SPP's anticipated growth, the increasing number of new FERC initiatives, required changes to SPP's Open Access Transmission Tariff and tariff administration responsibilities have been steadily

increasing. SPP combines outreach, education and monitoring efforts with FERC, state commissions and other interested stakeholders.

In addition to facilitating the important work of the Regional State Committee and the Cost Allocation Working Group, SPP provides presentations to state commissions within the footprint to ensure they are aware of current SPP activities. The turnover on state commissions is high, requiring SPP to be constantly engaged in education efforts of new members. In addition, SPP's proposed expansion to the Western Interconnection has increased the number of states to monitor. SPP is engaged in outreach to the four states where expansion is currently proposed (Montana, Utah, Colorado and Wyoming) while educating interested entities and other western state commissions on SPP's Western Energy Services.

SPP's responsibilities for outreach, education and monitoring on the federal level are focused on FERC. The election of the Biden administration has brought leadership and priority changes to FERC. In the past six months, the commission has two new members (Commissioner Christie and Commissioner Clements), a new chair (Chairman Glick) and another open seat possible in 2021. FERC Chair Glick has acknowledged that, while FERC operates outside the direction of the president and the other offices of the executive branch, the administration has made a high priority of addressing greenhouse gas emissions and climate change. Glick stated his goal is "to carry out [FERC] responsibilities, which … leads to reducing greenhouse gas emissions." He stated he would accomplish this goal by focusing on the efficiency of electricity markets and eliminating barriers for newer technologies, such as wind, solar, energy storage and other clean energy technologies. Glick also noted that through FERC's "significant control" over the interstate electric transmission system, another of his goals is "simply to facilitate greater investment in electric transmission." He is looking at how FERC could help improve the interregional transmission planning process and allow for more regional cost allocation of long-distance transmission lines.

CYBERSECURITY RISKS

The threat of ransomware attacks will continue to pose the greatest cyber-related risk to both SPP and all critical infrastructure. SPP will remain focused on advancing its cybersecurity maturity by becoming more secure, vigilant and resilient. The expanding number of threats and threat actors dictates SPP take a proactive view of the advanced threat landscape.

SPP will seek to incorporate threat intelligence that highlights not only technical vulnerabilities but also economic, legal and geopolitical factors as well. SPP will continue to manage cyber risk across the enterprise and up through the supply chain by enhancing its procurement practices with specific vendor cyber risk assessments. SPP will remain committed to identifying and deploying new technologies that will assist in monitoring and detecting anomalies on networks, thereby reducing SPP's overall corporate cyber risk.

CORPORATE AND DEPARTMENTAL 2022 OBJECTIVES

CORPORATE OBJECTIVES

DIVERSITY, EQUITY & INCLUSION (DEI) ADVANCEMENT

A more diverse, equitable and inclusive SPP is about doing the right thing, for the right reason, in the right way. It is also about enhancing SPP's competitive edge in the marketplace for human capital. With these values in mind, SPP made significant steps in advancing its diversity, equity and inclusion (DEI) strategy in 2021. SPP executives approved the charter of the DEI council who will provide oversight, guidance and leadership in the implementation and maintenance of SPP's DEI initiatives.

Another milestone in this initiative is the establishment of business resource groups (BRG). These voluntary, employee-led organizations are composed of employees who share common characteristics and interests with the purpose of fostering a diverse, inclusive workplace aligned with SPP's mission, values, goals, business practices and objectives.

PROMOD REPLACEMENT/UPGRADE

The PROMOD replacement project upgrades the transmission planning adjust production cost software to PROMOD IV. This software upgrade will improve performance, member value and affordability. Staff will have a better toolset to help maintain an economical and optimized transmission system. This upgrade to the PROMOD application is tied to two recommendations from the holistic integrated tariff team (HITT). They are S1 to add technological advances and S2 to include seams, both in support of SPP's strategic plan.

Implementation of the PROMOD upgrade will include procurement, benchmarking with the new and old software, installation, integrations, substantial automation updates required for compatibility and process improvements, testing and process documentation. Automation updates tied to this upgrade are critical to successful implementation.

WINTER WEATHER EVENT IMPROVEMENTS

SPP experienced the most operationally challenging week in its 80-year history the week of Feb. 14-20, 2021. SPP's board of directors approved a plan to assess SPP's performance and that of its member utilities during the February 2021 winter weather event. SPP will evaluate operational, financial, communications and other factors related to the events of the February

winter storm. SPP will present its assessment and recommendations at the July 27, 2021, meeting of the SPP board of directors and members committee. Upon the board's approval, recommendations for improvement will be completed, beginning with the 2022 SPP comprehensive roadmap.

SCRIPT IMPLEMENTATION/DEVELOPMENT

SPP established the strategic and creative re-engineering of integrated planning team (SCRIPT) Aug. 31, 2020, to holistically evaluate all transmission planning and applicable cost allocation processes used in SPP, consider and evaluate options to strategically reengineer those processes and finalize a report with high-level recommendations to the board and members committee for improvements. At its May 2021 meeting, the SCRIPT approved a set of policy recommendations designed to help address SPP's multiyear backlog of generator interconnection requests. Once approved by SPP's Board and FERC, it is expected these policies will be implemented beginning in 2022 with the backlog expected to be cleared by the end of 2024. SPP expects the SCRIPT to complete its work by October 2021, with a number of policy recommendations that will be implemented over the next three-year budget cycle.

REGIONAL COST ALLOCATION REVIEW (RCAR) III

In 2021, SPP will re-engage the regional allocation review task force (RARTF), as required by the tariff, to plan and finalize methodology for the RCAR III study that must be completed in 2022 per Attachment J of the SPP tariff. This RCAR III study will be the first to utilize operational market data for the majority of the highway/byway project analysis while supplementing the remaining projects' analysis utilizing planning models and assumptions.

ORDER 2222 DEVELOPMENT

FERC Order No. 2222 helps usher in the electric grid of the future and promotes competition in electric markets by removing the barriers preventing distributed energy resources (DERs) from competing on a level playing field in the organized capacity, energy and ancillary services markets. SPP will have governing language, process/procedures and significant application/tool changes necessary to facilitate not only compliance with the order, but the design to help ensure future enhancements better optimize the value of DERs. SPP anticipates this project will require substantial technology resources and effort to develop and implement.

SPP will develop and file tariff changes with FERC by the first quarter 2022 to support resources on the distribution grid. It anticipates implementation of the system and procedure changes to both operations and planning by 2024. The changes include communication with the distribution utility and other entities within the SPP market footprint previously not engages with SPP, potential changes to demand response processes and tariff language and the aggregation of individual DERs into a single resource.

20-YEAR ASSESSMENT

The objective of the 20-year assessment is to develop a long-range, extra high-voltage, 300 kV and above transmission roadmap for the SPP region. The assessment will result in the identification of projects that economically deliver energy within the SPP region while addressing a reasonable range of future industry uncertainty. The resulting library of projects will provide a source of candidate projects that will inform shorter-term planning assessments for injecting longer-term vision into those assessments. The SPP tariff requires completion of a 20-year assessment every five years. 2022 is the last year in the current five-year cycle.

WESTERN EXPANSION

SPP expects two initiatives to gain momentum in 2022. First, several utilities are evaluating the benefits of placing western transmission facilities and load under the terms and conditions of SPP's Open Access Transmission Tariff. The interested utilities are working with SPP to evaluate the terms, costs and benefits of this action. SPP projects these membership agreements will be executed in 2022.

Secondly, SPP is expecting to work with the Northwest Power Pool ("NWPP") in the implementation and subsequent operation of a resource adequacy program for entities affiliated with the Northwest Power Pool ("NWPP").NWPP is comprised of vertically integrated utilities and generation-only entities, including independent power producers. Smaller load-serving entities that do not own generation generally participate indirectly through the NWPP member system with which they are interconnected. The NWPP membership includes several large utilities in the Pacific Northwest and Canada, including Bonneville Power Administration, Western Area Power Administration, Northwestern Energy, PacifiCorp, Xcel Energy, British Columbia Hydro and Alberta Independent System Operator. The entities are located in the Western Interconnection and are under the jurisdiction of the Western Electricity Coordinating Council (WECC) Regional Entity. NWPP is registered with the North American Reliability Corporation (NERC) as a Reserve Sharing Group (RSG).

IT STORAGE CAPACITY

Demand for storage continues to grow at a high rate. Well-functioning applications and services demand increasing amounts of detailed data. Responsive data retrieval, storage processes and data management are essential to meet user needs and maintain affordability. The storage capacity planning strategy includes assessments of current capacity and areas where capacity can be optimized, future capacity requirements, performance metrics and capacity planning tools. SPP will use this information to formulate actionable recommendations to support capacity needs now and in the future.

HITT RECOMMENDATIONS IMPLEMENTATION

HITT was created to comprehensively review SPP's cost allocation model, transmission planning processes, integrated marketplace services and disconnects or synergies between planning and real-time reliability and economic operations. SPP released the resulting recommendations in July 2019, which consist of items for continual study and evaluation and specific implementations to address the issues considered by the HITT. SPP organized the group's 21 recommendations (actually 26 action items) into the HITT program, and a schedule for staff actions and working group consideration. As of June 2021, SPP has completed 16 initiatives, and expect to complete the remaining efforts by October 2022.

Z2

SPP has two significant legal and regulatory activities underway related to Z2, and one does not have a definitive resolution date due to its legal and/or regulatory track with timelines set by the courts. Legacy Z2 resettlement is on appeal to the D.C. Circuit Court of Appeals. SPP's objective is to participate in the legal process and drive toward a resolution that complies with court and FERC orders. FERC approved revisions to Attachment Z2 effective July 1, 2020, to specify that upgrade sponsors are no longer eligible for transmission revenue credits for new network upgrades.

SEAMS DEVELOPMENT

Throughout the remainder of 2021 and the first half of 2022, SPP expects to coordinate with neighboring transmission planning authorities, transmission service providers, reliability coordinators, and market operators to form seams development plans. These plans will identify mutually agreeable opportunities to reduce seams boundaries, primarily in the operations and planning realms, in order to create additional value for SPP and its respective neighbors.

SPP and MISO began performance of Joint Targeted Interconnection Queue Study in 2021. While that study is expected to be completed by the end of 2021, it is expected that any necessary regulatory development and FERC filings will take place in early 2022.

GRID OF THE FUTURE

SPP expects to begin work on its Grid of the Future strategic opportunity in late 2021 with efforts increasing in early 2022 and continuing throughout the majority of the year. The bulk of this work in 2022 is expected to consist of establishment of a complementary stakeholder group, evaluation of future opportunities and threats, and reporting on conclusions and needed capabilities, tools, and processes.

DEPARTMENTAL OBJECTIVES

Additional details associated with the departmental impact to meet the aforementioned corporate objectives are included in the following departmental objectives.

OPERATIONS

SPP STRATEGIC ROADMAP

In 2020, efforts commenced to develop the SPP's strategic roadmap process. This process allows SPP staff and stakeholders to identify, develop and prioritize initiatives that enhance SPP's reliability capabilities by improving existing tools and processes and developing new ones. Certain initiatives aim to increase reliability and reduce compliance risk through improved congestion management practices, while others address opportunities to utilize the existing grid more efficiently through practices like dynamic line ratings and topology optimization. Another initiative focuses on continued improvement and seeks to evaluate the reliability metrics and assumptions used in SPP's generation assessment process with the goal of ensuring appropriate risks and reliability margins for outage coordination. This roadmap process increases transparency and collaboration, while prioritizing focus on areas with the greatest need.

INTEGRATING NEW TOOLS

The transient security assessment tool (TSAT) is part of the dynamic security assessment suite of tools and has been in production since August 2019. Additional validation of results is ongoing to ensure results are accurate and concise and can be trusted for real-time decision making. TSAT provides operators a time domain analysis to determine the impacts of a fault on the transmission grid. The tool assists SPP personnel in protecting grid reliability for transient instability. SPP will continue to evaluate the accuracy and effectiveness of TSAT. Based on future transmission system conditions, SPP will add new TSAT scenarios as necessary.

Operations is prototyping the Strategic Energy and Risk Valuation Model (SERVM) tool that is utilized in the resource assessment process by planning to deploy more sophisticated statistical analysis in the generation outage process. As referenced in the strategic roadmap section above, SPP continues to improve its outage coordination process. Work has focused on refining the generation assessment process by ensuring the statistical analysis employed is accurate and suitable. Staff is focusing on benchmarking toward historical analysis and implementing new statistical tools and methods.

2021 WINTER WEATHER EVENT

SPP is working on a coordinated response to the 2021 winter weather event geared toward continuous improvement. The comprehensive review steering committee has engaged multiple stakeholder groups to perform a comprehensive review of the event with the goal of making recommendations for improvement as part of the lessons learned effort. While this work is

ongoing, these SPP anticipates recommendations to identify opportunities for improvement in the following areas:

- **Operational aspects**: Operating conditions leading up to and during the event
- **Communication**: Effectiveness of communications between SPP and member operating staff before and during the event
- **Load-shed approach**: Effectiveness of load-shed strategy
- **Import strategy**: Use of imports, their impact on congestion, and SPP resources and opportunities to improve the strategy in future events
- **Seasonal planning**: Effectiveness of winter preparedness
- **Training**: Evaluation of TOP and SPP operator training and preparedness
- **BA and RC operator tools**: Effectiveness of tools
- **BA and RC processes and procedures**: Effectiveness of processes/procedures

As such, each of these improvement areas will be a large part of the SPP operations roadmap for 2022 and beyond.

MARKETS AND RELIABILITY TRAINING SIMULATOR (MRTS)

In 2016, SPP launched a multiyear project to upgrade its dispatcher training simulator (DTS) to a markets and reliability training simulator (MRTS). SPP is working with an external vendor to create a full training and testing simulated environment that performs more closely to real-time production systems. Development is ongoing throughout 2021 and the first two phases are complete. The next phase of the project is the implementation and testing of all software. The completed MRTS will provide realistic simulation training using market systems imperative for SPP operator readiness and increased reliability. This will improve operator training and greatly enhance support of reliability coordination, balancing authority and market operations.

EXPAND AND IMPROVE MARKET FUNCTIONALITY

SPP's footprint continues to see increasing amounts of variable generation penetration. As the grid shifts to a generation fleet with more renewable resources, there are many times when the majority of the day's planned operating capacity is available from a forecastable resource. Due to changes in temperature, humidity, cloud cover and human behavior, these resource forecasts are not always accurate. This phenomenon can lead to SPP relying on capacity that will not actually be supplying energy when needed to meet demand. SPP is working to develop an uncertainty product that accounts for uncertainty in energy production from available capacity to ensure there is enough capacity to be committed to produce energy during these events. The time horizons for this product development have not been determined. Other markets have addressed this issue with products in the 30-minute time horizon. In SPP's analyses to date, results look promising for one or more products in time ranges of up to four hours. The working groups are analyzing the results of SPP's study on uncertainty and are working to develop this product to ensure it meets the needs of SPP and the market.

SPP is developing a ramping capability product to ensure it has enough ramping capability to address potential wind forecast errors and address SPP members and the SPP market monitor concerns SPP's real-time prices are overly volatile due to scarcity pricing. Ramping capability of resources is an essential component of efficiently and economically meeting the energy needs of SPP's market participants. A resource's asset age and technology has impact on its ability to ramp. The SPP market does not directly value the ability to perform ramping functions. This could potentially result in new technology ignoring ramp as a valued product and older assets not necessarily optimizing their offers or maintenance to produce enough ramping capability to meet the region's needs. With the continuing development of forecastable resources, the ability to procure and value excess ramping capability to handle potential errors in renewable forecasts will help ensure a stable, reliable and economic grid for SPP and its members. SPP filed revision request (361 Ramping Capability*)* with FERC April 21, 2020, and is awaiting the response to begin implementation planning.

Another area of SPP focus to improve and expand market functionality is on fast-start resources. Fast-start resources are essential to the reliable provision of energy. These resources typically have short startup times, low minimum run-time requirements and faster than average ramp rates. These characteristics provide the needed flexibility for managing the operational challenges SPP faces. Although the need for fast-start resources could potentially decrease with the implementation of ramp market products, SPP anticipates continuing to encounter unforeseen circumstances that will require a fast-start market product/service. While SPP has a participation model for fast-start resources, many market participants believe the model's compensation principles are lacking and do not adequately incent participation of fast-start resources. FERC and some stakeholders are concerned about the inclusion of startup and no-load costs into the locational marginal price (LMP) calculation. SPP and its stakeholders have initiated fast-start market product enhancements in the form of RR 375 (FERC Order on Fast-Start Pricing) (filed at FERC and awaiting response) and RR 402 (HITT R3 (Fast-Start Resources) - Enhanced Intra-Day Reliability Unit Commitment) (approved at MWG) and expect to implement these changes after gaining approval from FERC.

The SPP board approved HITT M1 (Improve Congestion Hedging) in July 2019 and directed the market working group to write a policy paper to use counterflow optimization in the auction revenue rights (ARR) allocation. Based on the market rules already in place, there is no use of un-nominated ARRs in SPP's annual ARR allocation. These un-nominated ARRs are often counterflow ARRs, which means these ARRs are a cost-to-the-market participant. SPP has contracted with a consultant to perform the analysis and provide a recommendation to the Strategic Planning Committee (SPC) in 2021.

INFORMATION TECHNOLOGY

The mission of IT is to provide value, in partnership with our stakeholders, through continuous innovation, technology transformation, reliable platforms and excellent customer support. IT leads and supports work for every department within SPP. The IT ecosystem is constantly in flux

to respond quickly to business needs as well as reliability, security, compliance and financial risks.

The major areas of IT focus for 2022 are:

- Risk management
- Quality and efficiency
- Technology and process support
- Affordability

RISK MANAGEMENT

SPP is enhancing security efforts in accordance with its IT cybersecurity architecture roadmap. This work includes:

- Improving vulnerability assessment practices through enhanced scans and assessing all results for any necessary mitigation. This will provide a more detailed analysis of vulnerabilities present in SPP's network and allow for a more focused approach in assessing the risks posed by those vulnerabilities.
- Continuing the implementation of an identity and access management system by finalizing the rollout of SPP's existing identity and access management software product as SPP's identity analytics solution. This system will ensure that users have only the access privileges needed, thereby increasing security and lowering risk.
- Strengthening SPP's information management program by establishing a data governance program. Several projects are being sponsored and prioritized, including hardening sensitive data definitions, updating and enforcing data retention policies, implementing a data-loss prevention platform to prevent sensitive data from being stored in inappropriate locations and tracing the flow of sensitive information through the SPP infrastructure.
- Streamlining intra- and interdepartmental efforts associated with NERC standard CIP-013-1 (supply chain risk management), which helps SPP mitigate identified and potential cybersecurity risks to bulk electric system cyber assets.
- Addressing the 2021 FERC audit findings.
- Implementing, as appropriate, recommendations derived from the cybersecurity strategy assessment conducted by a third-party information security company.

QUALITY AND EFFICIENCY

As the needs of the business change, IT continues to partner with stakeholders across the business to create and implement collaborative solutions that are focused on continuous improvement and efficiency.

Automating the following solutions will reduce the opportunity for human error and related compliance and security risks.

- Patch assessments of security and nonsecurity patches issued by third-party software providers, most of which are driven by critical infrastructure protection (CIP) requirements.
- CIP physical and virtual server builds and decommissions.
- CIP audit evidence collection.

Initiating the following work will increase efficiency.

- Implementing cloud-like infrastructure on premises.
- Standardizing processes and platforms to reduce the SPP software stack, increase efficiency and automation and reduce the time and expense associated with licensing, support and maintenance.
- Re-engineering the hardware, software and services procurement process to clarify and consolidate the various paths by which hardware and software are acquired today, ensure adequate architectural and security oversight and maintain auditable compliance with CIP-010-1 and CIP-013-requirements.

TECHNOLOGY AND PROCESS SUPPORT

SPP continues to evaluate and appropriately implement new technologies that optimize current functionality and add new required functionality. It is prudent for IT to maintain awareness of these evolving technologies with an eye toward integrating them into the SPP infrastructure in support of SPP's strategic initiative of driving value beyond reliability.

- IT is evaluating cloud-based solutions that could allow for more flexibility and efficiency while reducing equipment purchases by delegating responsibility for certain parts of the infrastructure outside of SPP. IT is working with stakeholders and industry analysts to develop a strategy for managing cloud-based security risk as part of its comprehensive risk management program.
- IT is pursuing a strategy of de-coupling SPP's infrastructure stack. Rather than supporting custom software running on custom hardware, SPP is moving toward a common underlying layer of physical components that can be dynamically reconfigured to support business needs. This common physical layer across multiple applications decreases the effort and risks of supporting multiple custom configurations and allows the same physical resources to be leveraged by many applications as needed.

AFFORDABILITY

Physical technology assets (servers, hosts, storage devices and networking equipment) comprise approximately $42 million of capital hardware inventory. SPP must replace these physical assets on a periodic basis due to technical obsolescence that creates exposure to increased hardware failure rates, discontinued or unaffordable vendor support, operating system incompatibility and the need for improved application performance and connectivity requirements.

In addition to SPP's hardware portfolio, the IT department supports roughly $160 million of software applications, tools and security products requiring continuous upkeep related to security patches, product upgrades and integration efforts to ensure compatibility across products and systems.

An asset inventory management program is being evaluated by the enterprise architecture group that will reduce exposure to contractual noncompliance fines, reduce risk of purchasing multiple overlapping technologies, reduce risk of infrastructure getting to end of support and expense reduction of automating a manual and error-prone task.

IT will begin research into a cost allocation "show-back" process that will allow SPP staff and stakeholders a more granular view of costs associated with a particular business function or project. This process will provide SPP's analytical oversight of member financial resources additional transparency and education of total costs to support a particular system. SPP expects this effort to take a maximum of three years to implement.

FINANCE

EMERGENCY MANAGEMENT

As SPP emerges from the COVID-19 pandemic, it will look to enhance its emergency management plans based on lessons learned from the pandemic and industry best practices. Additionally, the SPP will update its business continuity plans to accommodate each department's impacts due to adoption of a hybrid work environment. These activities will better prepare SPP to provide its suite of services under extreme conditions, with limited access to facilities or assets and with a workforce that may provide critical services from a remote workplace.

CREDIT POLICY

The 2021 winter storm event and its subsequent documentation provided valuable information to SPP's credit team and its external stakeholders. The Credit Practices Working Group will review and analyze this data and may recommend prudent amendments to the credit policy and tariff.

ENGINEERING

GENERATION INTERCONNECTION (GI) PROCESS

In 2019, the new three-phase GI study process was approved by FERC and was implemented beginning with the DISIS 2017-001 Cluster Study. SPP staff, SPP members and interconnection customers spent much of 2021 working together with the SCRIPT to adjust the three-phase DISIS study with the objective to accelerate the clearing of the GI backlog of almost 558 requests (more than 100 GW). Special studies (affected systems, modification, interim, limited

operations, surplus, ILTCR) now consists of a backlog of approximately 100 studies that must be performed over the next year. This high volume of special studies is expected to continue until the GI backlog has been cleared.

The generation interconnection user forum ("GIUF") was established to educate stakeholders and to identify process improvements to facilitate clearing of the GI queue backlog. An average of 100 people attend the GIUF meeting each month, and Hybrid facility requests (combinations of different types of resources) are becoming more prevalent which will require the adoption of new study procedures and policies to address the unique aspects of hybrid facilities. The generator replacement process was added to Attachment V of the tariff in 2020. This is a procedure to expedite processing of a request to replace an existing generating facility with a replacement generating facility without going through the full DISIS study process.

RESOURCE ADEQUACY PROCESS

In 2018, FERC approved new tariff provisions regarding resource adequacy, which SPP began implementing in 2019. Foremost are a new enforcement process and enhanced data collection and monitoring provisions that ensure load-responsible entities are planning sufficient resource capacity.

The Supply Adequacy Working Group is addressing many initiatives and policies regarding accreditation for wind, solar, storage and hybrid resources. SPP has targeted the new wind and solar accreditation policy and governing documents for MOPC approval in late 2021. SPP has targeted the stand-alone battery accreditation policy and governing documents for MOPC approval in 2022 because the hybrid accreditation is still being developed. Additionally, resource adequacy staff is facilitating changes to conventional generation accreditation based on historical performance.

In response to the 2021 winter weather event, resource adequacy has a number of recommendations and initiatives to investigate and implement within the 2022-2024 period. The initiatives include exploring fuel assurance measures for generating capacity, putting more focus on winter preparedness for generating capacity, studying the need for a separate winter season planning reserve margin and exploring the need to account for extreme weather events that may occur in the future.

TRANSMISSION PLANNING

The transmission planning and interregional coordination teams will be working with MISO to perform a coordinated system plan in 2022.This study is performed as part of the 2022 Integrated Transmission Plan and a hopeful outcome will include seams-related transmission projects. A coordinated system plan with AECI is targeted for 2022 as well.

Transmission planning will lead or support six of 22 projects slated for 2022 including: DERs FERC Order 2222, Electric Storage Resources/Hybrids, SCRIPT, HITT (T1), ProMod upgrade, and West RTO.

PROCESS INTEGRITY

NERC AND NAESB STANDARDS

In 2022, SPP process integrity will work with stakeholders to pass a maximum of three new standards at NERC and one at the North American Energy Standards Board (NAESB) to address new technologies. Process integrity will take advantage of opportunities at NERC, NAESB, the ISO RTO Council and FERC to advocate or sponsor projects to improve standards and practices that will make improvements tied to the corporate efforts under winter weather events.

CUSTOMER SERVICES

To assist our stakeholders in managing the impact of travel-related costs, SPP will offer 2022 training deliverables virtually when deemed appropriate. Virtual training will account for more than half of 2022 deliveries. SPP will evaluate in-person training to ensure the impact of travel-related costs (e.g., travel expenses and overtime) are kept to a minimum.

SPP's customer training provides approximately 500 NERC credential maintenance hours to ensure stakeholder operators have access to a minimum of 70 continuing education hours. This strategically aligns with their three-year reliability coordinator NERC certification renewal requirements. All SPP market enhancement training, system modifications and processes/protocol updates requiring education will be facilitated virtually before implementation. Specifically, 2022 customer training deliverables will include:

- 2021 winter event recommendations and identified improvements
- PROMOD replacement/upgrade education
- SCRIPT implementation/development education
- HIIT adoption/implementation education
- FERC Order No. 2222 education
- RTO West education

2022 PROJECTS

SPP's project review and prioritization committee (PRPC) reviews enterprise project requests and approves those that align with and support SPP value propositions and strategic objectives. Generally, business owners develop business cases, with the support of the PMO and the sponsoring director. In some cases, the PRPC recognizes that while it is too early to submit a detailed business case, there is awareness of looming enterprise efforts that will require coordinated planning and accordingly will have an impact on resources available for project work. In that case, the PRPC has included such efforts even when a business owner has not submitted a business case for consideration. For the 2022-2024 budget planning cycle, the PRPC recommends a portfolio of 21 enterprise efforts for 2022.

2022-2024 LIST OF PRIORITIZED PROJECTS/ PROGRAMS

SPP classifies projects (or in some cases programs) in the following descriptive categories:

- **Previous**: projects previously prioritized, including two with updated business cases
- **New**: new submissions with estimated scope, budget and/or timelines
- **Unknown**: submissions with unknown scope, budget and timelines

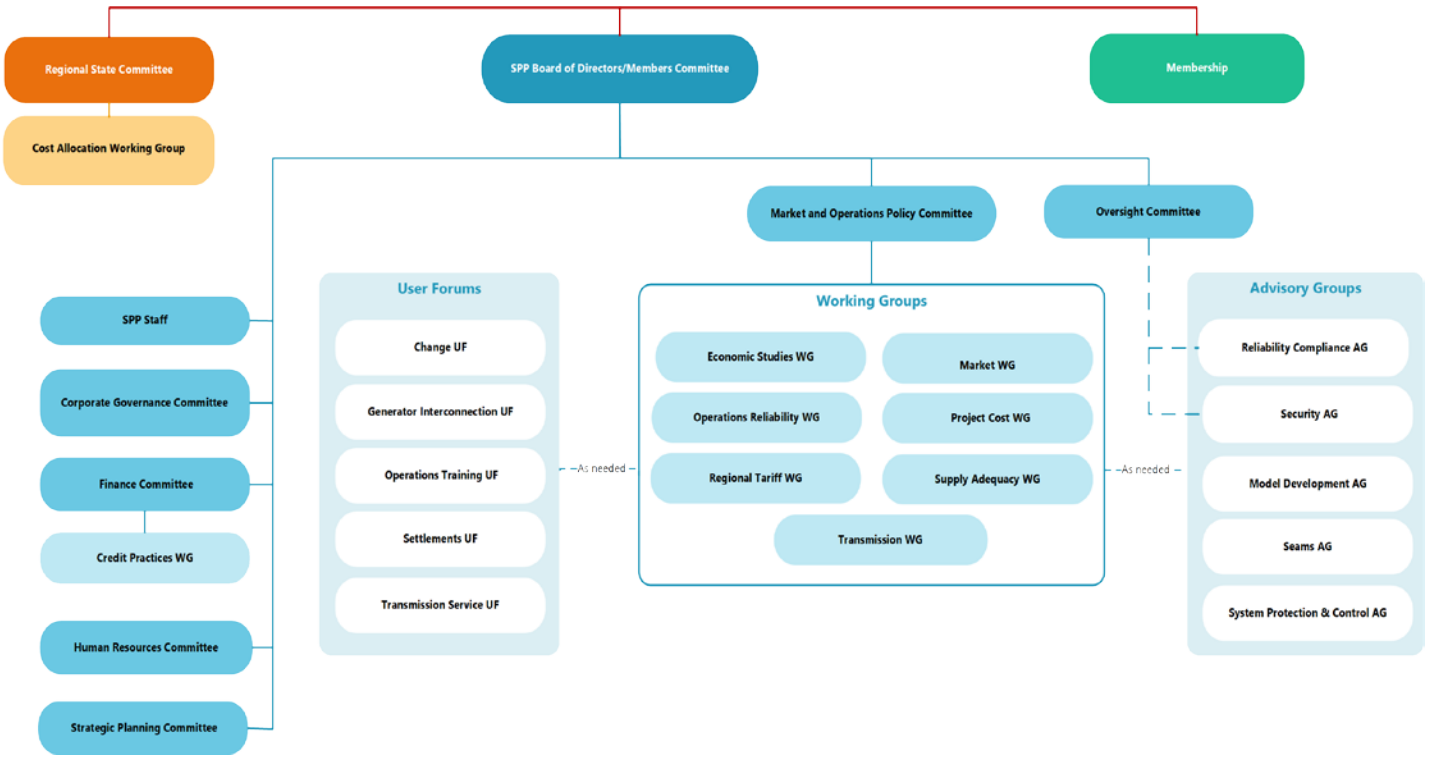
Together, this portfolio of projects and programs addresses stakeholder requests and regulatory directives.

PRIORITY	PROJECT	CATEGORY
1	Fast-Start Resource Logic	Previous
2	EMS, CMT & Markets Upgrade	Previous
3	FERC Order 2222	Unknown
4	HITT Program	Previous
5	West RTO	Unknown
6	HITT Uncertainty Product Development	Previous
7	ICCP Hardware & Software Upgrade	Previous
8	Freeze Date Replacement	Previous
9	Electric Storage & Hybrid Resources	New
10	Z2 FERC Remand Order	Unknown
11	PROM)D Upgrade	Previous

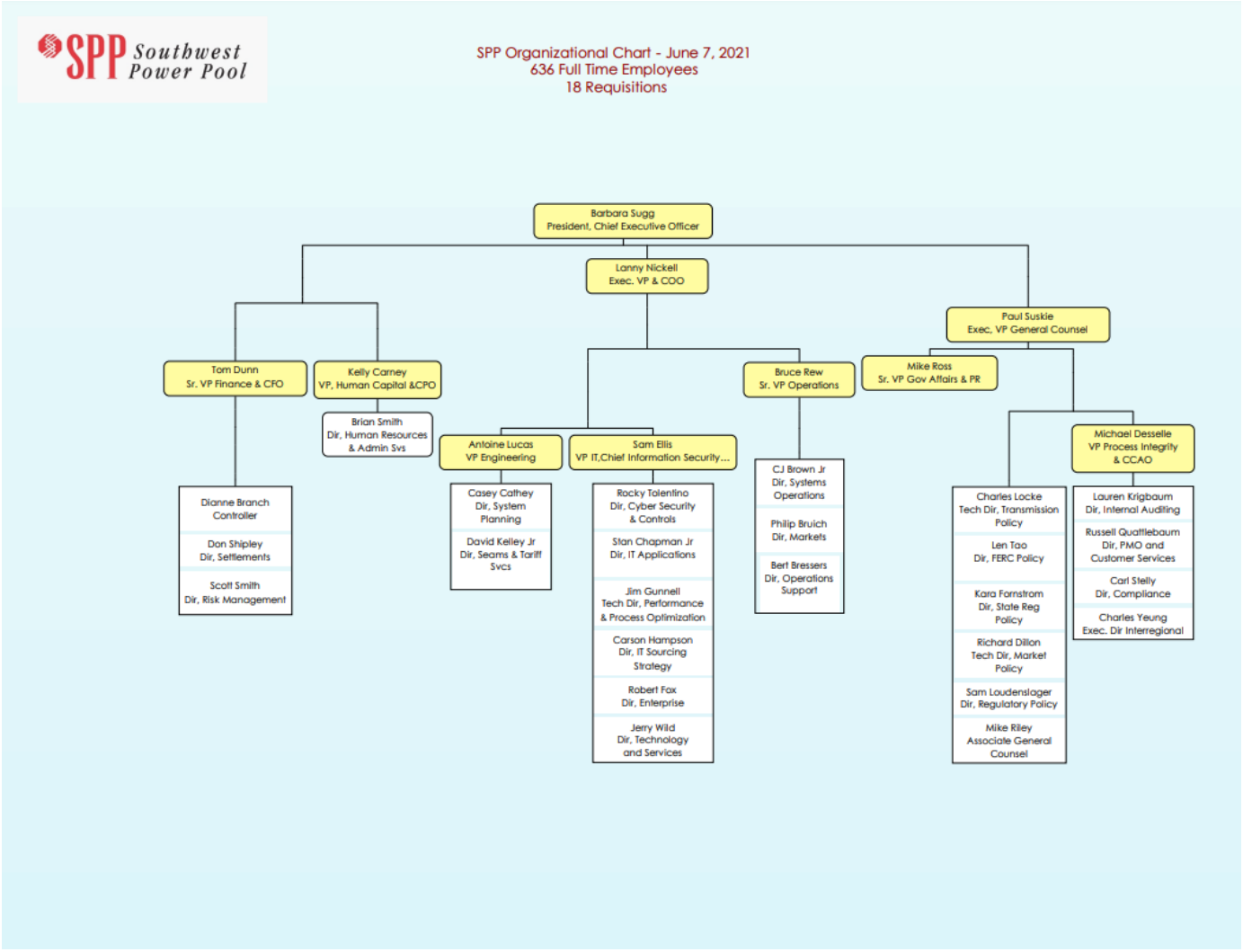
12	HITT M1 Improve Congestion Hedging	New
13	SCRIPT	New
14	Identity and Access Management (IAM) – User Lifecycle Management (ULM) Integration	New
15	Interface Pricing and Pseudo Tie Modeling	Previous
16	HITT Multi-Day Unit Commitment	New
17	Netezza Replacement	New
18	Data Loss Prevention	New
19	Data Aging and Archiving	New
20	ITSM Solution Phase 2 – Implementation	New
TBD	Winter Weather Event Improvements[1]	Unknown

[1] Winter weather event improvements was an effort added very late in the project review and budget process. It currently does not have a business case nor a budget pending regulatory direction but is included for transparency and consistency.

APPENDIX 1: SPP WORKING GROUPS



APPENDIX 2: SPP STAFF ORGANIZATION



SPP Southwest Power Pool

2021 PERFORMANCE EXCELLENCE REPORT

By Joshua Phillips, Interregional Affairs

Published on July 8th, 2021

CONTENTS

SUMMARY

Over the past year, SPP implemented improvements that saved over $1.2 million while remaining flexible in our work to adjust to the additional challenges associated with the pandemic.

In 2020 SPP began a new approach to managing its process improvement program. As part of this evolution, SPP shifted to a decentralized approach where directors are responsible for managing and capturing the improvements made within their departments.

The process improvement program also expanded in 2020 to include a new Customer Savings and Innovation program to incentivize our employees to propose ideas with a keen focus upon the reduction of the Net Revenue Rates charged to our members. There were over 30 proposals submitted by staff of which two were approved by the steering committee to proceed.

In this report, eight of our improvements are shared. While these are the more visible projects, there are many improvements that our innovative staff made to adjust to remote work and still achieve our mission.

2021 IMPROVEMENTS

HR MANAGEMENT SYSTEM REPLACEMENT – BRIAN SMITH

SPP's Human Resource management software SAGE was an onsite application nearing the end of its useful life. By hosting the application at SPP it required server infrastructure and staff in addition to the ongoing licensing costs. In 2020 SPP began implementing a new system that would allow a reduction in costs and staff time through its new cloud-based vendor UKG Pro. As of June 2021, the replacement of SPP's HR legacy HR software and the implementation of UKG Pro has resulted in a savings of more than $286,000.

- Savings of $158,400 including licensing and hardware costs
- Increased HR staff efficiency by 10% (projected to be more as more functionality is adopted), an estimated "soft" savings of $8,000 annually
- Eliminated the need for full-time IT support for legacy system. This IT resource is now reassigned to other IT work, eliminating the need for 1 FTE in annual incremental headcount requests. This is an estimated savings of $120,000 (including benefits)

SETTLEMENTS MANAGEMENT SYSTEM – DON SHIPLEY

SPP utilizes settlement systems for both the Market and Transmission systems. Historical costs for the software licenses to support these two systems from GE cost SPP roughly $900k per year. SPP has since developed applications to support these functions internally avoiding these ongoing costs as well as improving efficiencies to the settlement process. Notably these efficiencies include increased functionality updates, reduced resettlements, fewer staff needed to support inquiries, and accounting efficiencies saving 10 hours per month.

PMO SOFTWARE REPLACEMENT – TERRY RHOADES

SPP's PMO software Daptiv was replaced with a new application Workfront. This implementation was to address several shortfalls with the existing software and resulted in an annual savings of over $43k for staff time and approximately $1.5k lower licensing costs. Details regarding these savings are covered in Attachment 1.

TAGGIT AND SCERT REPLACEMENT – TONY GREEN

TRAC is an engineering tool for interaction between SPP and entities submitting transmission project data to SPP. SPP's former systems Taggit and SCERT were designed with basic

functionality. As SPP transmission planning responsibilities expanded the tools were beginning to become overly complex to support the evolving demands associated with planning.

Through the replacement of these systems with TRAC SPP was able to avoid contracting or hiring additional staff saving between $46,800 and $75,000 per year to help run and maintain the old system. Since implementation John O'Dell has been able to maintain the TRAC system without manual input to produce custom reports and we have been able to produce a Quarterly Project Tracking Report with the new system avoiding impacts to current processes.

In addition to SPP stakeholders reporting better ease of use with the TRAC system, there are two qualitative benefits to the new TRAC system:

First is a more secure environment the new architecture supported by TRAC. The system is also compatible with current IT development, maintenance, and support guidelines which makes it easier to report issues and track updates and release control. This aligns with SPP IT's new strategic initiatives for data management.

Second, this is a joint development effort with both Engineering and IT. The success of the project will open pathways for more efficient in-house development projects that will save time and money by eliminating dependency on vendor management and development. It also will align software design, development and delivery processes for Engineering and IT, producing more efficient projects and building a stronger knowledge base between departments.

SMARTQ RELEASE 1.2 – TONY GREEN

"SmartQ Release 1.2" involved the implementation of SPP Tariff, Attachment AQ, Addendum 1 Form into the tariff studies web portal tool called SmartQ. SmartQ allows end-users (Developers, Customers, Transmission Owners) to submit application data for SPP Engineering Tariff Studies processes.

SmartQ was originally rolled out in March 2020 to accommodate the Generation Interconnection Cluster Study Process. SmartQ Release 1.2 was explicitly for Attachment AQ, Addendum 1 Form for Request for Change in Local Delivery Facilities (Delivery Point Addition) requests, via online portal. SmartQ 1.2 is also intended to support HITT R3 by moving the Attachment AQ, Addendum 1 Form online in preparation for probable AQ / DPA public and internal queue, as well as metric data for analysis.

While no direct quantifiable costs savings were targeted in the implementation of SmartQ 1.2, developing the project using SPP IT resources and our existing web portal application likely resulted in cost avoidance approaching $90,000.00, had the project been outsourced. Further, SmartQ will continue to aid SPP in reducing cyber risks by moving the tariff studies application process to an online platform rather than trafficking thousands of emails, with attachments, each year, that could potentially harbor ransomware or other malicious attachments. The economic implications of ransomware or other malicious attachments would be staggering.

While SmartQ 1.2 Release for Attachment AQ, Request for Change in Local Delivery Facilities (Delivery Point Addition) Addendum, 1 Form was intended to preemptively address a HITT T3 recommendation for greater transparency, the SmartQ tool provides value-added process improvement to SPP staff allowing them to receive, review, reject and/or approve the DPA request online rather than mediating through multiple emails.

GI QUEUE CHANGES – TONY GREEN

GI Queue Changes for Tariff Compliance was an SPP GI Queue data field addition request to accommodate new Generation Interconnection study product, Generator Facility Replacement process, per SPP Tariff Attachment V, Section 3.5 OASIS Posting requirements, with an effective date of 1 July 2020.

While no direct quantifiable costs savings were targeted in the implementation of the GI Queue data field additions, cost avoidance (FERC fines) may be considered should there have been no action take to comply with the newly added tariff requirements. Additionally, process improvement from the addition of the new data fields related to the Generating Facility Replacement process aid in tracking and compliance of essential generation interconnection study data.

OASIS TRANSFER TOOL (OTT) UPGRADE – MICHA BAILEY

SPP's congestion hedging utilizes OTT to support our congestion hedging auctions. Each year our staff execute the analysis multiple times between the annual and incremental processes. The update to the OTTT resulted in an execution duration for these process from 50 minutes to 2 minutes. The upgraded to the processing systems enabled our staff to save approximately 35 hours a year. This reduction in effort is now being redirected towards improving accuracy and providing more value creating effort.

CUSTOMER SAVINGS AND INNOVATION

In 2020 SPP launched an internal process improvement program that directly compensated employees for cost saving ideas. Our staff submitted 17 ideas that included proposals for reducing dependency on contractor services, reduced costs associated with employees leaving the organization, process documentation, cloud services for collaboration, and others. The Process Excellence (PEX) steering committee reviewed the proposals and selected two to move forward.

First was enhancing staff knowledge with specialized modeling software to enable in house training on those tools. SPP has typically sent small groups of employees to train with our major modeling vendors, incurring costs for travel and the courses. This proposal would elect two or three senior engineers to develop training for internal employees. The annual savings was

estimated at approximately $30k when submitted. To date, SPP has developed the training and will begin rolling this out in Q3 2021.

Second were savings and enhancements to collaboration through cloud-based services for both our phone system and Microsoft Office products. These submissions proposed adopting virtual phone systems that would allow employees to integrate their work phone to either a computer or mobile device. The other idea was closely tied the phone submission and proposed utilizing Microsoft Office Teams. The estimated savings from the Teams program would reduce the number of current software applications and save SPP over $150k per year. Due to the security and architecture concerns with cloud-based solutions, SPP's IT organization is evaluating these ideas and how they may be incorporated into its strategy regarding these and other cloud-based options.

As both ideas are currently being implemented, the actual reduction in costs has yet to be determined.

CONCLUSIONS

SPP staff and leadership continue to focus on ways to improve our processes. While these savings are excellent examples of the cost and efficiencies, there are numerous qualitative benefits that enhance both our stakeholders and employee experiences. Often these are challenging to classify such as reducing risks of a compliance violation or increasing the response time to a stakeholder question.

SPP continues to grow and provide additional services each year. Our focus upon continuous improvement is a key to maintaining the value and affordability provided to our membership, and I look forward to highlighting the successes we achieve as we emerge from the challenges presented by the pandemic.

This report was prepared by:

Joshua Phillips
BPI Coordinator
jphillips@spp.org

ATTACHMENT 1: PROJECT MANAGEMENT ORGANIZATION DETAILS

Application Logging

Daptiv does not provide system logging available that tracks system changes and who made the change. This creates barriers for trouble shooting issues because there is no way to back track the system changes to identify the root cause if an issue was caused by a configuration change to the system. Workfront provides universal logging that allows administrators to see when system changes were made, who made them, data level updates, and unsuccessful login attempts. This dramatically decreases the amount of time required to trouble shoot issues because the person researching the issue can use a chronological log to back through the changes made to the system. An estimate of 1 hour per week in lost production saved by using the activity logs in the system which would equate to $2,340 per year.

Workflow Routing Rules

Daptiv did not have the ability to set routing rules based on conditions configured by a system admin. Workfront allows for custom routing rules for approval processes which are currently being used to denote PRPC stage gate approvals. PMs also have the ability to create approvals for various items in their workspaces (e.g., decisions, action items, risks, issues, expenses) instead of obtaining the approvals via email. The routing capability cuts down on PMs sending emails out for approvals, waiting on the response, converting them to .pdf documents, and uploading them to SharePoint. This saves approximately two hours per week for all of the PMs combined. The two hours of lost production saved per week equates to 104 hours or $4,680 per year.

Scenario Planner

Daptiv does provide scenario planning functionality, but it is available via a separate add-on application that is not integrated with the project resources in the portfolio. The Workfront scenario planner is an integrated add-on that is directly tied to the project resources in the portfolio. This integration saves approximately 2 hours per week for all Resource Managers combined that would otherwise have to pull resource information together manually for resource scenario planning. The estimated savings for the scenario planner functionality in Workfront results in approximately 104 hours of lost production per year and equates to $4,680 per year.

Resource Planner

Daptiv's resource planner does not allow filtering for job roles not in use, which makes it difficult to use. Users had to manually search/scroll through more than 250 job roles to find information. Workfront has the ability to use native and custom filters, groups, and views to find resource information. The Planner shows available capacity with over- and under-allocations for resources based on an FTE % established by resource managers. Daptiv has the ability to provide over- and under-allocations, but the process requires more manual steps, is cumbersome, and not as user friendly as the Workfront solution. The estimated savings is an average of four hours per week aggregated across all resource manager rolls for pulling information together for resource demand and capacity planning in Daptiv. This equates to 208 hours of lost production per year or $9,360.

Single sign-on

The Daptiv access levels are complicated to understand. A non-sensitive data (NSD) file provided by the HR department is sent daily via secure FTP (SFTP) to Changepoint (Daptiv vendor). It contains all active employees and if an SPP employee is no longer in the tool from the previous day's file, their account is deactivated. The NSD file is loaded into Daptiv, with success and error logs emailed to the SPP Daptiv system admins.

In Workfront, Single sign-on is enabled using mapped user attributes from the NSD file. New users are auto-provisioned in the tool upon their successful login using their network credentials. Login success and error logs are visible to system admins in the tool as well as extracted by SPP Technology & Services through an automated process.

When issues arise with the Non-Sensitive Data (NSD) file feed to Daptiv, approximately 0.5 hours per week was required to trouble shoot the issue. The automated feed for Workfront removes this issue. The 0.5 hours per week equates to 26 hours of lost production saved per year or $1,170.

New Project Requests

With the Daptiv system, the PMO was required to maintain a separate server allowing SPP staff to submit new project requests to the Daptiv cloud app. In Workfront, the new project requests are routed directly to the Workfront solution via restricted IP addresses. No intervention is required from the PMO. Requestors also have a dashboard available to view the status of their submissions on a user friendly interface, whereas, Daptiv did not provide this type of dashboard or status of submitted requests for the submitter. When issues arise with the project request form (located on a local server), approximately 0.5 hours per week was required to trouble shoot the issue. The integrated project request form in Workfront removes this issue.

Additionally, approximately 0.5 hours per week were required to look up and provide status of project submissions to project request submitters. The Workfront dashboards remove these actions by providing a self-service dashboard for status of requests. The migration to the

Workfront system equates to approximately 52 hours per year in lost production or $2,340 per year.

Expense Management

Project-related expense management was cumbersome in Daptiv. The user interface was difficult to understand by the PMO and Accounting and went largely unused due to the complexity and behind the scenes functionality. Project-related expense management is more straight forward in Workfront. A custom layout was easily developed for Accounting which enables them to control specific data elements while others have view only capability. Additionally, the PMs can control the project forecast information for project budgets and Accounting has the ability to enter actual expenses into the system as bills and invoices are paid. The ease of use, coordination of expenses and budget management items across all projects equates to approximately 104 hours per year in lost production or $4,680 per year.

Reporting

While Daptiv provided a more robust report writing engine allowing consolidated reports to be created with custom queries, the Changepoint developers were constantly relabeling field and table names without notice which would sometimes "break" reports currently in use. The software/release management at Changepoint was not mature. The constant changes were due to their efforts to clean up their database architecture with the goal of redirecting users towards a data warehouse instead of running reports in production. Communications to customers was poor at best and often required troubleshooting report errors that ran smoothly for weeks prior. Many hours were wasted on fixing reports that were corrupted by Changepoint's modifications to the database architecture.

Workfront has an easy to understand report writing engine. However, it does not have the ability to create queries and join data from multiple tables into a single combined report. Multiple reports must be created and added to a dashboard in order to view the information. Other Workfront clients have integrated more robust reporting tools (e.g., Cognos, Power BI, Tableau, etc.) to their production environments. Workfront does have plans to roll out more robust reporting in their release roadmap, but the date has not yet been announced.

The frequent changes to functionality were frequent in the Daptiv system which resulted in approximately four hours per month in troubleshooting reporting issues due to changes made by the vendor. Workfront is a more mature system with well-coordinated, quarterly releases reducing the re-work required to maintain reporting and metrics in Daptiv. While the reporting functionality is Daptiv was more robust, the stability of the Workfront system reduces "re-work" on reports which results in approximately 208 hours of lost productivity per year or $9,360 per year.

Timesheets

The Daptiv timesheet interface is user friendly; however, the timesheet approval process was not customizable by resource manager and was is a global setting for all resource managers.

The Workfront timesheet interface is also user friendly; however, the timesheet approval process is highly customizable. Custom timesheet layout templates can be created for each resource manager. In addition, the approval process can be turned on or off based on resource manager preference.

In the Daptiv system, approximately four hours per week was required to support timesheet submissions. The support effort includes fielding and answer questions related to timesheets, troubleshooting issues with Daptiv and providing timesheet data to resource managers. The Workfront system functionality reduces the support requirements through out of the box reports and download capability for resource managers which results in 104 hours of lost productivity savings or $4,680 per year.

Function	**Savings based on hourly rate only. ($45/hr.)**
Application logging	$ 2,340
Workflow routing rules	$ 4,680
Scenario Planner	$ 4,680
Resource Planner	$ 9,360
Single sign-on	$ 1,170
New Project Requests	$ 2,340
Expense Management	$ 4,680
Reporting	$ 9,360
Timesheets	$ 4,680
Total Savings in Lost Production:	**$ 43,290**

Southwest Power Pool, Inc.

FINANCE COMMITTEE

Recommendation to the Board of Directors

July 27, 2021

2022 Administrative Fee Rate Cap Change

Organizational Roster

The following persons are members of the Finance Committee:

Susan Certoma	SPP Director
Julian Brix	SPP Director
Darcy Ortiz	SPP Director
Sarah Stafford	OG&E
Matt Pawlowski	NextEra
Sandra Bennett	AEP
Al Tamimi	Sunflower
Emily Koenig	Lincoln Electric
Mike Wise	Golden Spread

Background

Schedule 1-A of the SPP regional tariff provides the mechanism for SPP to recover its costs from its customers by applying a rate per unit of services purchased/provided under the tariff. Individual rates charged under the Schedule 1-A structure are determined by formula which has been filed with and approved by the FERC. The annual rate setting process relies on the annual budget recommended by the SPP Finance Committee and approved by the SPP Board of Directors, and estimates of quantities to be transacted under the tariff. Schedule 1-A provides for recovery of up to 100% of SPP's cash operating and debt service costs, adjusting for any over or under collections in the prior fiscal year. Schedule 1-A, in addition to the formula rates, also prescribes a cap on SPP's budget. The cap, currently 43¢/MWh, is calculated by dividing SPP's budgeted net revenue requirement (including true-up from prior periods) by the estimated amount of transmission service to be provided under the tariff in the coming calendar year. The table below details changes in the Schedule 1-A cap going back over 20 years.

Effective Date	Cap Rate/MWh
January 1, 2000	$ 0.20
January 1, 2007	$ 0.23
January 1, 2011	$ 0.35
January 1, 2014	$ 0.39
January 1, 2017	$ 0.43

Analysis

SPP includes a three and five year forecast as part of the annual budget process. The 2021 SPP budget illustrated the following forecasts for net revenue requirement, transmission service billing units, and rate calculation for cap purposes:

	2021	2022	2023	2024	2025
Net Revenue Requirement (millions)	$ 151.3	$ 179.0	$ 184.4	$ 186.8	$ 186.2
Transmission Service Billing Units	392.2	392.2	392.2	392.2	392.2
Rate (per MWh)	$ 0.386	$ 0.456	$ 0.470	$ 0.476	$ 0.475

Several things are evident in this forecast; 1) there is a significant increase in net revenue requirement between 2021 and 2022; 2) the transmission service billing units are forecast to be flat during the entire period; and 3) the forecast rate exceeds the 43¢/MWh tariff cap established in 2017 as early as 2022. The significant increase in net revenue requirement in 2022 vs 2021 is due to the significant over-recovery SPP realized in 2020 (approx. $17 million); SPP's 2021 net revenue requirement prior to the over-recovery was $171.8 million. Transmission service billing units are held flat in the forecast based on a historical decision by the Finance Committee to only forecast growth in billing units when there is an identified change in service in the SPP region (new load joining SPP or load transitioning out of SPP). Absent the over-recovery from 2020, SPP's 2021 budget would have been right at the tariff cap.

The SPP board of directors, in April 2021, approved the issuance of $28 million in term notes to fund capital expenditures incurred in 2021 and 2022. The term notes will have no scheduled principal retirements until 2026. This will serve to reduce the net revenue requirements forecasted in the 2021 budget for the fiscal years 2022 – 2025. The table below illustrates the impact to forecasted net revenue requirements and the rate cap.

	2021	2022	2023	2024	2025
Net Revenue Requirement (millions)	$ 151.3	$ 176.0	$ 176.0	$ 177.0	$ 181.0
Transmission Service Billing Units	392.2	392.2	392.2	392.2	392.2
Rate (per MWh)	$ 0.386	$ 0.449	$ 0.449	$ 0.451	$ 0.461

Relative to the 2021 budget forecast, the proposed issuance of $28 million in term notes in 2021 results in lower net revenue requirements for each year 2022-2025. This, in turn, results in a lower calculated rate for rate cap purposes. The calculated rate, for the forecast period, continues to exceed the existing rate cap of 43¢/MWh established in 2017.

Additional considerations to be aware of when considering the recommended change to the rate cap are as follows:

- The SPP board of directors commissioned a comprehensive review of the winter weather that impacted the SPP region the week of February 12-19, 2021. This report is expected to contain numerous recommendations to strengthen the SPP region in advance of future winter weather events. The recommendations are expected to require incremental operating and capital investment and have not been included in prior forecasts.

- The SPP strategic planning committee is expected to recommend adoption of a new 5 year strategic plan later in 2021. This plan, which has been developed over the past 24 months through an open and inclusive stakeholder process, will include areas of focus not previously considered when developing previous financial forecasts. The pursuit of these strategic initiatives is expected to require incremental operating and capital investment.

- 9 utilities beyond SPP's western boundary have expressed interest in joining SPP as full members and placing their transmission assets under the SPP regional tariff. These entities are currently participating in the western energy imbalance services market which SPP administers under a contract. A 24 month implementation period is expected, with the utilities becoming members of SPP in 2Q'24. Addition of these new members is not expected to result in a reduction in the calculated rate for cap purposes until 2028 after implementation costs have been retired. The implementation of these utilities is expected to require incremental operating and capital investment and has not been included in prior forecasts.

- The SPP board of directors established the "strategic and creative re-engineering of integrated planning team" ("SCRIPT") in 4Q'20. The SCRIPT, an 11 member group comprised of board members, utility

members, and state regulatory commissioners, is charged with strategically developing broad changes to SPP's transmission planning processes to better meet customer needs while resolving growing stakeholder concerns about the amount, nature and funding of continued transmission investment amid rapid industry changes. The SCRIPT is due to submit recommendations to the SPP board of directors in October 2021. The recommendations are expected to require incremental operating and capital investment and have not been included in prior forecasts.

The anticipated investment associated with the above referenced activities creates additional uncertainty in the accuracy of the forecasts. While each endeavor is expected to provide benefits to the SPP region, SPP staff believes those benefits will accrue to the customers in a form other than reducing SPP's administrative costs. In fact, only the addition of new members from the west is expected to result in an increase in transmission service provided under the tariff and thereby potentially reduce existing customer's share of SPP's administrative costs.

SPP staff recommends setting the tariff rate cap at a higher level than the forecasted rate calculated above to account for the known unknowns detailed above and to defer any future requirements to change the cap until much later, thereby avoiding the effort and costs to continually adjust the cap and file with the FERC. As always, SPP remains committed to conservative and prudent investments in the business to meet the needs of the region. An increase in the tariff rate cap does not supersede that commitment.

Recommendation

The Finance Committee recommends the SPP Board of Directors approve an increase the Schedule 1-A tariff rate cap to 50¢/MWh and authorize SPP staff to make the appropriate filings with FERC for approval.

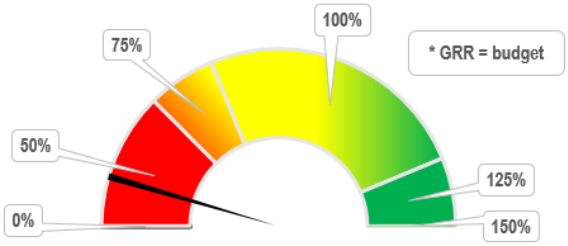
Approved: SPP Finance Committee

Action Requested: Approve Recommendation

Monthly Financial Reporting Package
May 2021

SPP Executive Summary
May 2020

Gross Revenue Requirement Metric *



Between >$3M to $5M over budgeted GRR

** The GRR includes net unfavorable expenses of $3.9 million that are directly offset by pass-thru revenues with no impact to the NRR.*

2021 Cost Recovery
($ millions)

Gross Revenue Requirement

	Forecast	Budget	Fav/(Unfav)
Operating expenses:	$200.5	$197.0	(3.5)
PLUS Debt service & interest	34.6	36.4	1.8
LESS FERC assessment (Schedule 12)	(22.5)	(22.5)	(0.0)
LESS Depreciation (non-cash)	(17.7)	(18.1)	(0.4)
LESS Contract services expenses & shared OH	(7.6)	(7.8)	(0.2)
LESS Pension & other adjustments	(5.0)	(3.7)	1.4
GRR Before cost reductions	$182.2	$181.3	(.9)
Projected unidentified cost reductions	(0.7)	(4.0)	(3.3)
Gross revenue requirement	$181.5	$177.3	($4.2)
Offsetting revenues & other adjustments:			
Engineering studies staff time revenues	($6.9)	($6.2)	$0.7
Pass-thru revenues for engineering studies consulting	(8.0)	(3.3)	4.7
Pass-thru revenues for Order 1K IEP expenses	(0.5)	(1.2)	(0.7)
Misc other revenues	(2.0)	(1.9)	0.2
Capital expenditure reserve	3.2	3.2	-
Prior year over-recovery	(17.2)	(16.6)	0.6
Net Revenue Requirement	$150.1	$151.3	$1.3
Tariff Admin Fee Revenue	(149.7)	(151.3)	(1.6)
Over / (Under) Recovery	($0.3)	$0.0	($0.3)

Southwest Power Pool
2021 Financial Commentary
May 31, 2021
(in thousands)

Summary

	2021 FY Forecast	2021 FY Budget	Fav/(Unfav) Variance	
Revenues	$197,057	$196,510	$547	0.3%
Expenses	206,158	200,853	(5,305)	(2.6%)
Net Income/(Loss)	($9,101)	($4,343)	($4,758)	109.6%

Revenue

	2021 FY Forecast	2021 FY Budget	Fav/(Unfav) Variance	
Tariff Administration Service	$149,744	$151,337	($1,593)	(1.1%)
FERC Fees	19,701	22,467	(2,767)	(12.3%)
Engineering Studies	14,919	9,504	5,415	57.0%
Contract Services	10,579	10,585	(6)	(0.1%)
Miscellaneous	1,454	1,951	(497)	(25.5%)
Annual Non-Load Dues	660	666	(6)	(0.9%)
Total Revenue	$197,057	$196,510	$547	0.3%

The annual billing determinants assumed in the 2021 budget for Tariff Administration Service revenues for the market rate schedules were based on actual data from August 2019 - July 2020. The current projections are based on the most recent 2020 actual data that is slightly lower and results in a projected unfavorable variance to budget.

FERC Fees & Assessments revenue reflects the actual rate to be charged under Schedule 12 for 2021, which is $0.072 as compared to $0.083 assumed in the budget.

The forecast has been updated to include a $4.7 million out-of-budget request (pending approval) for additional pass-thru consulting to decrease the backlog in GI studies. The incremental expense is directly offset by an increase in pass-thru Engineering Studies revenues and therefore has no impact to the NRR. SPP billable staff time revenues for engineering studies is expected to exceed original estimates and also contributes to the projected favorable variance to budget.

Miscellaneous Income primarily includes revenues associated with various sources such as pass-thru consulting costs for the Order 1000 transmission owner selection process, joint operating agreement fees, miscellaneous rebates, reserve sharing, and circuit reimbursements. The variance is driven primarily by the Order 1000 revenues that are offset by lower consulting expenses.

Southwest Power Pool
2021 Financial Commentary
May 31, 2021
(in thousands)

Expense

	2021 FY Forecast			2021 FY Budget			Fav/(Unfav)	
	SPP RTO	Contract Services	Total SPP	SPP RTO	Contract Services	Total SPP	Variance	
Salary & Benefits	$106,561	$4,327	$110,888	$103,457	$4,346	$107,803	($3,085)	(2.9%)
Assessments & Fees	22,474	-	22,474	22,474	-	22,474	0	0.0%
Communications	4,556	476	5,032	4,440	485	4,925	(107)	(2.2%)
Maintenance	16,097	303	16,400	17,471	385	17,856	1,456	8.2%
Outside Services & RSC	21,545	349	21,894	18,667	307	18,974	(2,920)	(15.4%)
Administrative	5,604	1	5,605	5,424	1	5,425	(180)	(3.3%)
Travel & Meetings	390	59	449	1,329	59	1,388	939	67.6%
Depreciation	16,381	1,350	17,732	16,776	1,336	18,112	381	2.1%
Interest Expense	7,321	315	7,635	7,588	308	7,896	260	3.3%
Other (Income)/Expenses	(1,951)	-	(1,951)	(4,000)	-	(4,000)	(2,049)	
Total Expense	$198,978	$7,180	$206,158	$193,627	$7,226	$200,853	($5,305)	(2.6%)

Salary & Benefits are expected to be unfavorable to budget partially related to increases in pension and retiree health care plan costs of approximately $1.1 million. This variance is partially offset in Other (Income)/Expenses where the non-service portion of the annual pension costs is recorded ($0.5 million). These costs are excluded from the net revenue requirement (NRR) recovery. Various out-of-budget expenses also contribute to the unfavorable variance.

The budget contains a $4 million reduction in overall costs as recommended by SPP management and approved by the Finance Committee and Board of Directors. The recommendation was proposed to reduce total controllable expenditures in an attempt to maintain a 2021 GRR more equally aligned with the 2020 GRR. As no specific reductions were proposed to attain the $4 million reduction, an offset to expenses was budgeted under (Other Income)/ Expenses. Currently $0.7 million of the $4 million reductions remain unidentified.

SPP staff has proposed cost reductions in Maintenance, Outside Services and Travel & Meetings that are reflected in the 2021 forecast at the account level. The unidentified amount remains in the forecast under (Other Income)/ Expenses. Other items also recorded in Other (Income)/Expenses include swap valuation, investment income, unrealized gain/loss on investments, and other miscellaneous income and expense amounts. These expense and income items are highly unpredictable and therefore are not included in the budget.

The variance in Outside Services is associated with various offsetting favorable and unfavorable factors. The most significant unfavorable impacts are related to the $4.7 million increase in pass-thru consulting for engineering studies (which is also offset by a favorable increase in pass-thru consulting revenues), unbudgeted staff augmentation costs for incremental engineering initiatives and congestion hedging studies within operations and miscellaneous services originally covered in the 2020 budget that were carried forward into 2021. Lower pass-thru consulting costs for the Order 1000 industry expert panel (IEP) and lower than expected legal counsel also offset the unfavorable variance. The decrease in Order 1000 costs is driven by a slower start up in the process and due to the budget assuming additional projects driven by the 2021 ITP which have subsequently been delayed. This projected decrease in expense is directly offset by pass-thru revenues with no impact to the NRR.

Interest expense and debt payments are forecasted to be favorable to budget due to the early conversion of term notes, which did not include capital expenditures for December 2020 and ultimately contributes to a $1.8 million offset to the GRR (total variance including principal payments and interest expense).

Southwest Power Pool
Monthly Financial Overview
May 31, 2021
(in thousands)

	Actual Jan-21	Actual Feb-21	Actual Mar-21	Actual Apr-21	Actual May-21	Forecast Jun-21	Forecast Jul-21	Forecast Aug-21	Forecast Sep-21	Forecast Oct-21	Forecast Nov-21	Forecast Dec-21	FY 2021 Forecast	FY 2021 Budget	Variance Fav/(Unfav)	FY 2020 Actual	Variance Fav/(Unfav)
Income																	
Tariff Administrative Service	$10,282	$11,599	$11,898	$13,133	$11,222	$12,948	$14,146	$13,956	$11,998	$12,051	$11,676	$14,835	$149,744	$151,337	($1,593)	$172,377	($22,633)
FERC Fees	2,498	1,526	2,068	1,504	1,421	1,288	1,585	1,965	1,799	1,525	1,530	1,651	20,361	23,133	(2,773)	24,858	(4,497)
Contract Services	476	869	1,024	884	884	1,010	1,007	885	885	885	885	885	10,579	10,585	(6)	6,247	4,331
Engineering Studies Income	769	947	1,076	1,397	1,180	1,374	1,374	1,374	1,374	1,374	1,359	1,324	14,919	9,504	5,415	7,843	7,076
Miscellaneous	137	65	80	82	191	158	138	169	88	88	93	163	1,454	1,951	(497)	2,277	(823)
Total Income	14,161	15,007	16,146	16,999	14,897	16,779	18,249	18,350	16,143	15,923	15,544	18,858	197,057	196,510	547	213,602	(16,546)
Expense																	
Salary & Benefits	8,826	10,083	9,608	9,242	9,162	9,135	9,157	9,155	9,125	9,130	9,070	9,196	110,888	107,803	(3,085)	110,578	(310)
Employee Travel	(1)	0	0	0	1	-	()	49	48	59	60	58	274	953	679	375	101
Administrative	234	328	906	513	283	418	473	901	348	495	336	369	5,605	5,425	(180)	5,081	(523)
Assessments & Fees	1,873	1,873	1,873	1,873	1,873	1,873	1,873	1,873	1,873	1,873	1,873	1,873	22,474	22,474	0	22,324	(150)
Meetings	7	3	0	3	1	0	19	13	44	44	21	21	175	435	259	275	100
Communications	417	414	425	391	410	425	425	425	425	425	425	425	5,032	4,925	(107)	4,754	(278)
Maintenance	1,200	1,152	1,182	1,185	1,221	1,300	1,335	1,435	1,435	1,435	1,495	2,025	16,400	17,856	1,456	15,686	(714)
Services	947	1,237	1,328	2,042	1,514	1,977	2,321	1,853	2,001	2,243	1,975	2,310	21,749	18,475	(3,273)	15,795	(5,953)
Regional State Committee	-	-	-	-	-	-	-	72	1	72	-	1	145	498	353	65	(80)
Depreciation and Other	1,363	1,346	1,448	1,355	1,529	1,511	1,514	1,534	1,557	1,510	1,530	1,533	17,732	18,112	381	18,480	748
Total Expense	14,866	16,436	16,772	16,605	15,994	16,639	17,116	17,309	16,856	17,286	16,784	17,809	200,473	196,957	(3,516)	193,413	(7,060)
Other Income/(Expense)																	
Investment Income	25	27	37	28	28	-	-	-	-	-	-	-	145	-	145	576	(431)
Interest Expense	(652)	(651)	(665)	(649)	(643)	(648)	(628)	(630)	(632)	(612)	(613)	(611)	(7,635)	(7,896)	260	(8,210)	575
Capitalized Interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Change in Valuation of Swap	-	-	251	-	-	-	-	-	-	-	-	-	251	-	251	(196)	447
Other Income/(Expense)	(3)	111	148	210	44	24	24	24	24	257	257	257	1,374	4,000	(2,626)	2,583	(1,209)
Unrealized Gain on Investment	(49)	50	69	116	(4)	-	-	-	-	-	-	-	181	-	181	144	36
Chg in Emp Benefit Plan Funded Sta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(4,446)	4,446
Net Other Income (Expense)	(679)	(464)	(160)	(295)	(575)	(624)	(605)	(607)	(608)	(356)	(357)	(355)	(5,684)	(3,896)	(1,788)	(9,548)	3,864
Net Income (Loss)	($1,384)	($1,894)	($787)	$99	($1,671)	($484)	$528	$434	($1,321)	($1,718)	($1,597)	$695	($9,101)	($4,343)	($4,758)	$10,641	($19,742)
2021 Headcount																	
Approved Budgeted Positions	652	654	654	654	654	654	653	653	653	653	653	653	653	653		656	
Actual Headcount (Incl. Vacancy)	639	636	638	637	635	631	633	637	637	636	636	636	636			636	
Actual Positions (Excl. Vacancy)	652	654	654	654	654	655	654	654	654	654	654	654	654			656	
Headcount Vacancy Run rate	2.0%	2.8%	2.4%	2.6%	2.9%	3.7%	3.2%	2.6%	2.6%	2.8%	2.8%	2.8%	2.8%	3.5%			
NRR Over / (Under) Recovery	$1,843	$891	($4,991)	$2,941	$1,533	($3,920)	$3,641	$3,118	($5,240)	$1,437	$1,517	($3,098)	($327)				

Southwest Power Pool
Contract Services Breakout
May 31, 2021
(in thousands)

	SPP RTO			Contract Services			Total SPP		
	2021 FY Forecast	2021 FY Budget	Variance Fav/(Unfav)	2021 FY Forecast	2021 FY Budget	Variance Fav/(Unfav)	2021 FY Forecast	2021 FY Budget	Variance Fav/(Unfav)
Income									
Tariff Administrative Service	$149,744	$151,337	($1,593)	-	-	-	$149,744	$151,337	($1,593)
Fees & Assessments	20,361	23,133	(2,773)	-	-	-	20,361	23,133	(2,773)
Contract Services Revenue	306	312	(7)	10,273	10,272	1	10,579	10,585	(6)
Miscellaneous Income	16,373	11,455	4,918	-	-	-	16,373	11,455	4,918
Total Income	$186,783	$186,238	$546	$10,273	$10,272	$1	$197,057	$196,510	$547
Expense									
Salary & Benefits	106,561	103,457	(3,104)	4,327	4,346	19	110,888	107,803	(3,085)
Employee Travel	227	906	679	47	47	-	274	953	679
Administrative	5,604	5,424	(180)	1	1	0	5,605	5,425	(180)
Assessments & Fees	22,474	22,474	0	-	-	-	22,474	22,474	0
Meetings	163	423	259	12	12	-	175	435	259
Communications	4,556	4,440	(116)	476	485	9	5,032	4,925	(107)
Maintenance	16,097	17,471	1,374	303	385	82	16,400	17,856	1,456
Services	21,400	18,169	(3,231)	349	307	(43)	21,749	18,475	(3,273)
Regional State Committee	145	498	353	-	-	-	145	498	353
Depreciation	16,381	16,776	395	1,350	1,336	(15)	17,732	18,112	381
Total Expense	193,608	190,039	(3,569)	6,866	6,918	53	200,473	196,957	(3,516)
Net Other Income (Expense)	(5,370)	(3,588)	(1,781)	(315)	(308)	(7)	(5,684)	(3,896)	(1,788)
Net Income (Loss)	($12,194)	($7,389)	($4,805)	$3,093	$3,047	$47	($9,101)	($4,343)	($4,758)
2021 Headcount	621	620	(1)	33	33	-	654	653	(1)

Southwest Power Pool
Current Month Financial Overview
May 31, 2021
(in thousands)

	Current Month Compared to Forecast			YTD Actual Compared to YTD Budget			FY Forecast Compared to FY Budget			
	May-2021 Actual	May-2021 Forecast	Variance Fav/(Unfav)	May-2021 Actual	May-2021 Budget	Variance Fav/(Unfav)	FY 2021 Forecast	FY 2021 Budget	Variance Fav/(Unfav)	
Income										
Tariff Administrative Service	$11,222	$11,564	($342)	$58,134	$60,726	($2,592)	$149,744	$151,337	($1,593)	(1%)
FERC Fees	1,421	1,485	(65)	9,017	9,968	(951)	20,361	23,133	(2,773)	(12%)
Contract Services	884	885	(1)	4,137	4,267	(131)	10,579	10,585	(6)	(0%)
Engineering Studies	1,180	843	337	5,368	3,960	1,408	14,919	9,504	5,415	57%
Miscellaneous	191	172	19	555	761	(206)	1,454	1,951	(497)	(25%)
Total Income	14,897	14,949	(52)	77,210	79,682	(2,472)	197,057	196,510	547	0%
Expense										
Salary & Benefits	9,162	9,191	29	46,920	45,368	(1,553)	110,888	107,803	(3,085)	(3%)
Employee Travel	1	-	(1)	1	-	(1)	274	953	679	71%
Administrative	283	434	151	2,265	1,932	(332)	5,605	5,425	(180)	(3%)
Assessments & Fees	1,873	1,873	-	9,366	9,345	(22)	22,474	22,474		0%
Meetings	1		()	14	20	6	175	435	259	60%
Communications	410	409	(1)	2,057	2,052	(5)	5,032	4,925	(107)	(2%)
Maintenance	1,221	1,304	83	5,942	7,440	1,498	16,400	17,856	1,456	8%
Services	1,514	1,467	(47)	7,068	7,706	638	21,749	18,475	(3,273)	(18%)
Regional State Committee	-	-	-	-	208	208	145	498	353	71%
Depreciation	1,529	1,478	(52)	7,041	7,480	438	17,732	18,112	381	2%
Total Expense	15,994	16,157	163	80,673	81,550	876	200,473	196,957	(3,516)	(2%)
Other Income/(Expense)										
Investment Income	28	-	28	145	-	145	145	-	145	
Interest Expense	(643)	(644)		(3,261)	(3,292)	32	(7,635)	(7,896)	260	(3%)
Capitalized Interest	-	-	-	-	-	-	-	-	-	
Change in Valuation of Swap	-	-	-	251	-	251	251	-	251	
Other Income/Expense	44	24	21	510	1,000	(490)	1,374	4,000	(2,626)	(66%)
Unrealized Gain on Investment	(4)	-	(4)	181	-	181	181	-	181	
Net Other Income (Expense)	(575)	(620)	45	(2,173)	(2,292)	119	(5,684)	(3,896)	(1,788)	
Net Income (Loss)	($1,671)	($1,828)	$156	($5,637)	($4,160)	($1,477)	($9,101)	($4,343)	($4,758)	
Headcount	635	635	-	635	654	19	654	653	(1)	

Southwest Power Pool
Balance Sheet
May 31, 2021
(in thousands)

	5/31/2021	12/31/2020	Net Change
ASSETS			
Current Assets			
Cash & Equivalents	$159,511	$76,128	$83,383
Restricted Cash Deposits	775,431	445,550	329,881
Accounts Receivable (net)	35,620	85,251	(49,631)
Other Current Assets	20,021	11,883	8,137
Total Current Assets	$990,582	$618,812	$371,770
Total Fixed Assets	65,357	69,127	(3,770)
Total Other Assets	4,926	8,337	(3,411)
Investments	3,883	29,160	(25,277)
Total Assets	$1,064,749	$725,436	$339,313
LIABILITIES & EQUITY			
Liabilities			
Current Liabilities			
Accounts Payable	$29,973	$78,204	(48,231)
Customer Deposits	779,605	445,550	334,055
Current Maturities of LT Debt	31,313	27,260	4,053
Other Current Liabilities	147,620	86,877	60,743
Deferred Revenue	5,296	8,243	(2,948)
Total Current Liabilities	993,806	646,134	347,672
Line of Credit	4,450	12,090	(7,640)
Long Term Liabilities			
Long-Term Debt	156,954	154,353	2,601
Other Long Term Liabilities	48,297	45,980	2,317
Total Long Term Liabilities	205,251	200,333	4,918
Net Income	(5,637)	10,641	(16,278)
Members' Equity	(133,122)	(143,763)	10,641
Total Members' Equity	(138,759)	(133,122)	(5,637)
TOTAL LIABILITIES & EQUITY	$1,064,749	$725,436	$339,313

Southwest Power Pool
Headcount Analysis
May 31, 2021

	Current Month Actual vs. Budget			Year End Forecast vs. Budget		
	Actual May-21	Budget May-21	Over/(Under) Budget	2021 Forecast	2021 Budget	Over/(Under) Budget
Information Technology	162	168	(6)	168	168	0
Operations	163	171	(8)	167	171	(4)
Engineering	94	100	(6)	98	100	(2)
Process Integrity	55	56	(1)	56	56	0
Administration	62	56	6	57	56	1
HR & Administrative Services	16	24	(8)	23	24	(1)
Regulatory Policy & General Counsel	27	28	(1)	27	27	0
Market Monitoring	15	16	(1)	17	16	1
Communications & Gov't Affairs	8	8	0	8	8	0
Contract Services	33	33	0	33	33	0
Budgeted Attrition		(6)	6		(6)	6
Total Positions	635	654	(19)	654	653	1

Headcount summary	2021 Forecast	2021 Budget
2020 Total positions at year-end	656	659
2021 out-of-budget addition	1	0
2020 attrition / eliminations	0	(3)
2021 attrition / eliminations	(3)	(3)
2021 Headcount	654	653

Note: The 2021 budget included the elimination of three unidentified positions from 2020 (that had not occurred at the time the budget was proposed) and an additional three unidentified eliminations for 2021. Three positions were eliminated in late 2020 and three in January 2021.

Unbudgeted Report
Year to Date
As of 7/07/21

PO Number	Project Name	Scope of Work/Item Description	Total Amount	Budgeted	Unbudgeted	Notes
PO2021-1142	Identity Access Management Deployment	Identity IQ Tool Deployment	$ 607,940	$ 500,000	$ 107,940	(A)
PO2021-1068	FERC Order 841	Amendment 1 to RR323 Market Storage SOW	$ 691,750	$ -	$ 691,750	(B)
PO2021-1333	FERC Order 841	Amendment 1 to RR323 Market Storage SOW	$ 291,250	$ -	$ 291,250	(B)
PO2021-1010	2021 Foundation General	HITT M1 - Study of Congestion Hedging Process	$ 385,000	$ -	$ 385,000	(C)
PO2021-1217	2021 IT Foundation	Network Switches- Refresh (HW and Maintenance)	$ 282,718	$ -	$ 282,718	(D)
PO2021-1335	2021 Engineering Foundation	Services associated with GI restudy -DISIS 2017	$ 137,000	$ -	$ 137,000	(E)
			$ 2,395,658	**$ 500,000**	**$ 1,895,658**	

Notes

A	Original project budget of $500,000.
B	Initial SOW was for $210,210 (budgeted).
C	Engagement with independent, third party consulting firm to study SPP's Congestion Hedging process
D	Budgeted as capital expense, but given the per item cost was <$5k, purchase was expensed according to capitalization policy.
E	Costs will be billed to customers. No impact to cost recovery.

SPP Southwest Power Pool

CONSOLIDATED FINANCE COMMITTEE REPORT

JULY 15, 2021

PROJECT OVERVIEW

ACTIVE PROJECTS

DEFERRED, CONTINGENT, OR CANCELED PROJECTS

COMPLETED PROJECTS

LINK TO STRATEGIC PLAN

- 2 Reliability Assurance
- 1 Enhance Member Value & Affordability
- 0 Maintain an Economical, Optimized Transmission System
- 3 Enhance & Optimize Interdependent Systems

MRTS (TTSE DTS) UPGRADE - PHASE 2B

Strategic Plan Link: Reliability Assurance

OWNER	DESCRIPTION	BUDGET	STATUS
Rew	Enhancement to the Dispatcher Training Simulator (DTS) to construct an integrated simulator that allows SPP to construct and reuse training scenarios that simulate the interactions between the EMS and MOS in production and allow for the simultaneous training of reliability and market operators.	• Approved: $2.2M • Estimated cost at completion: $2.2M	Active

Upcoming milestones:

- Testing and validation complete 07/31/2021
- Code promoted to production environment 08/31/2021

Comments: The vendor has missed the last delivery date by over two months. SPP IT staff also will need to adjust the promotion of code into the production environment to allow for other planned releases that required full regression testing. These schedule adjustments have moved the project completion date into fall 2021.

RAMP CAPABILITY PRODUCT

Strategic Plan Link: Enhance Member Value and Affordability

OWNER	DESCRIPTION	BUDGET	STATUS
Rew	To provide a market-based approach for ramp management that leverages existing operational experiences to (1) systematically pre-position resources with ramp capability to manage net load variations and uncertainties and (2) provide transparent price signals to incent resource flexibility and economic investment.	• Approved: $0.79M • Estimated cost at completion: $0.79M	Active

Upcoming milestone:

- Internal Testing complete 1/10/22

Comments: Project was originally approved in the 2020-2022 budget for $0.2M. During the 2021-2023 budget cycle, the project cost was revised and approved for a total of $790,000.

FERC ORDER 841

Strategic Plan Link: Enhance and Optimize Interdependent Systems

OWNER	DESCRIPTION	BUDGET	STATUS
Rew	FERC Order 841 was issued to remove barriers to participation of electric storage resources (ESRs) in the capacity, energy and ancillary service markets operated by RTOs and ISOs. SPP has completed the first phase of this project, which was to file tariff changes needed to establish a participation model consisting of market rules that facilitate ESR participation. The remaining Phase 2 work, required to be completed by August 2021, will be to update modeling and dispatch software as needed to implement the tariff provisions.	• Approved: $0.4M • Estimated cost at completion: $1.4M • In Q1'21, the program received approval for additional funding of $0.7M (out of budget). • During Q2'21, an additional $0.3M out of budget spend was approved, in order to complete the Order 841 effort.	In Process

Upcoming milestones:

- Member testing finish 07/20/21
- Go-live 08/05/21

Comments: On 02/27/20, FERC directed SPP to meet an effective date of 08/05/21 for complying with new tariff provisions required by Order 841.

IDENTITY & ACCESS MANAGEMENT

Strategic Plan Link: Enhance and Optimize Interdependent Systems

OWNER	DESCRIPTION	BUDGET	STATUS
Ellis	SPP Oversight approved additional scope for a multi-phased approach to establish and support an identity and access management (IAM) program at SPP. Requested funding (not approved): $1.9M. Phase 1: AD assessment and remediation – separate 2021 project Phase 2: Identity IQ installation and certification – 2021 start Phases 3-5: Self-service password management, user lifecycle management, ticketing integration – 2022 Phase 6: Iterative integration of applications into IIQ – start 2021 (Finance Committee approved $390k out of budget)	• Approved for Phase 2: $500k • Estimated cost at completion for Phase 2: $607k (vendor costs came in higher than anticipated) • Estimated cost of all phases: $1.9M	Active

Upcoming milestones: discovery documents from vendor complete 7/21/21

Comments: The 2021 project (Phase 2) will need to be completed before work can begin on the 2022 project (Phases 3-5). Phase 6 will begin concurrent with the latter stages of Phase 2. The Finance Committee has approved $0.4M out-of-budget spend for 2021.

EMS, CMT & MARKETS SOFTWARE UPGRADE

Strategic Plan Link: Reliability Assurance

OWNER	DESCRIPTION	BUDGET	STATUS
Ellis	This project addresses the hardware refresh and software upgrade required to continue operations of the EMS, CMT and Markets applications. Both the system software and the hardware used for the systems are due for refresh by December 2022.	• Approved: $3.5M • Estimated cost at completion: $3.5M	Active

Upcoming milestones:

- Design complete Q3 2021
- Phase 1 software delivery Q4 2021

Comments: The upgrade of the EMS, CMT and Markets MKTNET components to GE's version 3.3 of EMS and CMT software (and the associated hardware refresh) better positions SPP for reliability. Upgrading to a modern version of EMS brings SPP up to date on the latest GE functionality offerings and reduces our level of customization, which allows greater standardization of tools and processes. Business users will benefit from new features, and IT can better address CIP requirements (both existing and new requirements as a result of CIP 10 and CIP 13) with fewer manual processes.

TRAC (TAGIT/SCERT REWRITE)

Strategic Plan Link: Enhance and Optimize Interdependent Systems

OWNER	DESCRIPTION	BUDGET	STATUS
Lucas	Creation of a new TRAC (TAGIT/SCERT) platform that will allow operators to focus on data analysis, remove potential barriers for additional operators to cross-train, and improve data integrity. These changes will help streamline the tools and provide more consistent and higher quality NTC letters and project tracking reports.	• Approved: $0.3M • Cost at completion: $0.1M	Complete; project closed

Comments: The TRAC tool was implemented to production on 2/5/21, as planned, for external use. The project remained open through 5/16/21 to implement additional internal functionality and reporting features. Performing much of the work using internal resources brought down our expected costs. The final project spend was $88k, which was $162k under the $250k approved project budget.

Memorandum

To: **Finance Committee Members**

From: **Tom Dunn**

CC: **Kaye McCarty**

Date: **July 23, 2021**

Re: **2021-22 Meeting Schedule**

Detailed below is a schedule for meetings of the Finance Committee for 2020 along with suggested agenda items to be covered at the meetings.

Meeting Date	Time	Location	Agenda
Oct 14, 2021	8:00 – noon	Little Rock	2022 Operating and Capital Budgets
Jan 13, 2022	8:00 – noon	Oklahoma City	Liability Insurance, Actuary Assumptions
Apr 14, 2022	8:00 – noon	Virtual	2021 Financial Audit, Benefit Plan Funding
Jul 14, 2022	8:00 – noon	Rapid City	Mid-year Review, 2023 Operating Plan,
Oct 13, 2022	8:00 - noon	Video Conference	2023 Operating and Capital Budgets

Consider conducting the July 2022 meeting virtually and the October 2022 meeting face-to-face in Little Rock