



# 2023 BUDGET



PREPARED BY THE SPP  
ACCOUNTING DEPARTMENT

# TABLE OF CONTENTS

- I. 2023 BUDGET EXECUTIVE SUMMARY ..... 4**
- II. BUDGET OVERVIEW ..... 6**
  - Background ..... 6
  - Operating Plan ..... 7
  - Capital Expenditures ..... 7
  - Debt Service ..... 9
- III. 2023 NET REVENUE REQUIREMENT ..... 10**
  - Tariff Rate Cap..... 14
  - Future Forecasting ..... 15
- IV. RESOURCE UTILIZATION ..... 16**
  - Incremental Staffing..... 16
  - Staffing Components ..... 18
  - Outside Services and Consulting..... 22
  - Maintenance ..... 28
  - Other Operating Expenses ..... 30
- V. CAPITAL PROJECTS ..... 32**
  - 2023 Capital Projects ..... 32
  - Foundation Capital Expenditures..... 36
- VI. INVESTMENT OF INCREMENTAL NRR ..... 40**
  - Incremental Workload and Staffing..... 41
  - Market Adjustments and Inflation..... 47
  - Net Other NRR Impacts..... 48
- VII. DEBT SERVICE..... 49**
- VIII. CONTRACT SERVICES ..... 51**
  - Western Interconnection Unscheduled Flow Mitigation Plan (WIUFMP) ..... 51
  - Western Reliability Coordination (RC West) Service ..... 52

Western Energy Imbalance Service (WEIS).....	52
Western Resource Adequacy Program (WRAP) .....	52
Summary of Contract Services Impact on 2023 NRR.....	53
<b>IX. SUPPLEMENTAL ANALYSIS AND SCHEDULES .....</b>	<b>54</b>
Income Statement 2022-2023 Comparison.....	54
Income Statement 2023-2025 .....	55
2023 Consolidating Income Statement .....	56
Balance Sheet.....	57
Cash Flow Forecast .....	58
Schedule 1A Rates.....	59
Capital Projects List.....	60
Supplementary Capital Expenditures Data.....	61
<b>X. SPP OPERATING PLAN.....</b>	<b>68</b>

DRAFT

# I. 2023 BUDGET EXECUTIVE SUMMARY

SPP's Aspire 2026 strategic plan, adopted by the SPP Board of Directors in 2021, shapes and guides SPP's resource needs, requests and allocation. This is evident in the 2023 operating and capital budgets. The 2023 budgets are also shaped by the economic climate in the United States in 2022 highlighted by growing inflation concerns, rising interest rates, labor and supply shortages as well as general uncertainty regarding the immediate future. Despite this economic outlook, the Aspire 2026 plan provides a clear path for SPP towards improving on its already impressive 14:1 benefit to cost ratio for its customers.

SPP's 2023 operating budget results in a run-rate net revenue requirement (NRR) of \$191.9 million (before prior year true-up), a \$14.9 million increase over 2022's forecasted run-rate NRR. The vast majority of the increase is associated with labor costs where inflationary pressures along with significant growth in workload are at play. Corporate compensation adjustments are budgeted at 6 percent based on analysis conducted by SPP's board-level human resources committee and external consultant. The growth in labor costs across the United States is real and shows no signs of abating, particularly for the type of highly skilled/educated positions SPP employs.

SPP's workload is growing which also compounds the impact of inflation on labor costs. The Aspire 2026 strategic plan initiatives require additional workforce to develop and implement in accordance with the timelines identified in the planning horizons. SPP initially identified and justified 50 incremental positions for the 2023 operating budget representing \$6.6 million in annualized salary and benefit costs. SPP management worked collaboratively to reduce this amount to an annualized \$4.5 million in 2023 to ensure SPP remained affordable for its customers, which may affect the timelines for achieving strategic initiatives.

Capital expenditure and project initiatives are following a more routine cadence. Maintenance capital expenditures, primarily technology refresh efforts, are relatively consistent at \$8.2 million, with an additional \$2.8 million for minor system enhancements managed through the Change User Forum, Market Working Group or new regulatory requirements. An additional \$5.2 million in capital expenditures associated with projects is anticipated. Significant among these efforts is the work to enhance access management capabilities, which has been a goal of SPP for several years and is overseen by SPP's board-level Oversight Committee.

Net of a projected over-recovery of \$7.4 million in 2022, SPP anticipates the 2023 net revenue requirement to be \$184.5 million, a 6 percent increase over the 2022 forecasted net revenue

requirement. Transmission usage is running 5 percent higher than prior period resulting in estimated transmission billing determinants of 411,900,000 MWh, which yields a budget rate of 44.8¢/MWh vs the tariff cap of 46.5¢/MWh.

DRAFT

## II. BUDGET OVERVIEW

### BACKGROUND

*The SPP 2023 Operating Plan was used as a guide for development of the budget, with the strategic plan serving as the foundation for the Operating Plan.*

SPP's officers met in June 2022 to review corporate and departmental objectives included in the 2023 Operating Plan and 2023-2025 budget. SPP utilized an incremental-based budget approach at the department level for operating expenses.

Operating expenses represent the largest component of SPP's NRR and consist of budgeted costs for ongoing operation. Budgets for departmental operating expenses were reviewed and approved by their respective directors and executives. Explanations for significant changes from the 2022 forecast were required. The consolidated data was provided to the executive team for final review and approval. The Resource Utilization section of this document discusses material changes from the 2022 forecast in detail.

Capital expenditures are investments in long-term assets required by SPP to meet its strategic goals and operational requirements. These capital expenditures represent costs incurred to enhance or expand current systems and services and/or to maintain existing capabilities. SPP views and tracks the foundation and capital project expenditures. The foundation budget captures hardware and software to support SPP's business applications. This includes upgrades and replacements of SPP's aged hardware infrastructure and expenditures for new enterprise technologies driven by security requirements, application and architectural enhancements and legacy growth. Capital projects are generally specific initiatives to expand or meaningfully enhance SPP's product and service offerings.

Debt service costs are principal payments and interest expense related to various borrowings obtained to fund SPP's capital expenditures. The debt issuances have terms relatively consistent with the expected useful life of the assets developed or acquired, which is consistent with SPP's longstanding policy. This policy recovers the cost of the assets from the customers who benefit from them.

The combined efforts of identifying required operating expenses and planning for capital projects and associated funding resulted in the recommended NRR of \$184.5 million which is an increase of \$10.8 million for total NRR and \$14.9 million for run-rate NRR compared to the 2022 forecast. The main driver in the increase in NRR is associated with increased labor costs driven

by inflationary pressures and significant growth in workload. More information on the benefit of these budgeted investments is provided in detail in section VI.

## **OPERATING PLAN**

*SPP's 2023 Operating Plan considers the changing business environment along with the many opportunities and challenges affecting SPP such as cybersecurity risks, a changing generation mix, resource adequacy concerns, regulatory changes and SPP's expansion into the West.*

The SPP board of directors approved the finance committee's recommendation to adopt the 2023 Operating Plan as the foundation for the 2023 operating and capital budgets at their July 2022 meeting. The 2023 Operating Plan is the culmination of months of work by SPP staff to document the operating environment and activities SPP anticipates for 2023. The departmental objectives included in the 2023 Operating Plan were developed in correlation to the enabling capabilities and strategic opportunities as memorialized in SPP's five year strategic plan, Aspire 2026.

A recurring theme throughout the departmental objectives is a commitment to the advancement of the enabling capability Organizational Readiness. This readiness can only be achieved through the coordination of people, processes, systems and performance measurement. Other common themes included in the 2023 Operating Plan address risk management, technological readiness, Federal Energy Regulatory Commission (FERC) driven impacts and winter weather recommendations. Ongoing work on SCRIPT during 2023 also remains a significant focus for advancing the Innovative Transmission Planning strategic opportunity.

The 2023 Operating Plan also summarizes various projects on the horizon that will address both operational needs and efficiency efforts. Capital projects are discussed further in section V with additional details included in section IX.

The Operating Plan document in its entirety is included following the supplementary schedules in section X.

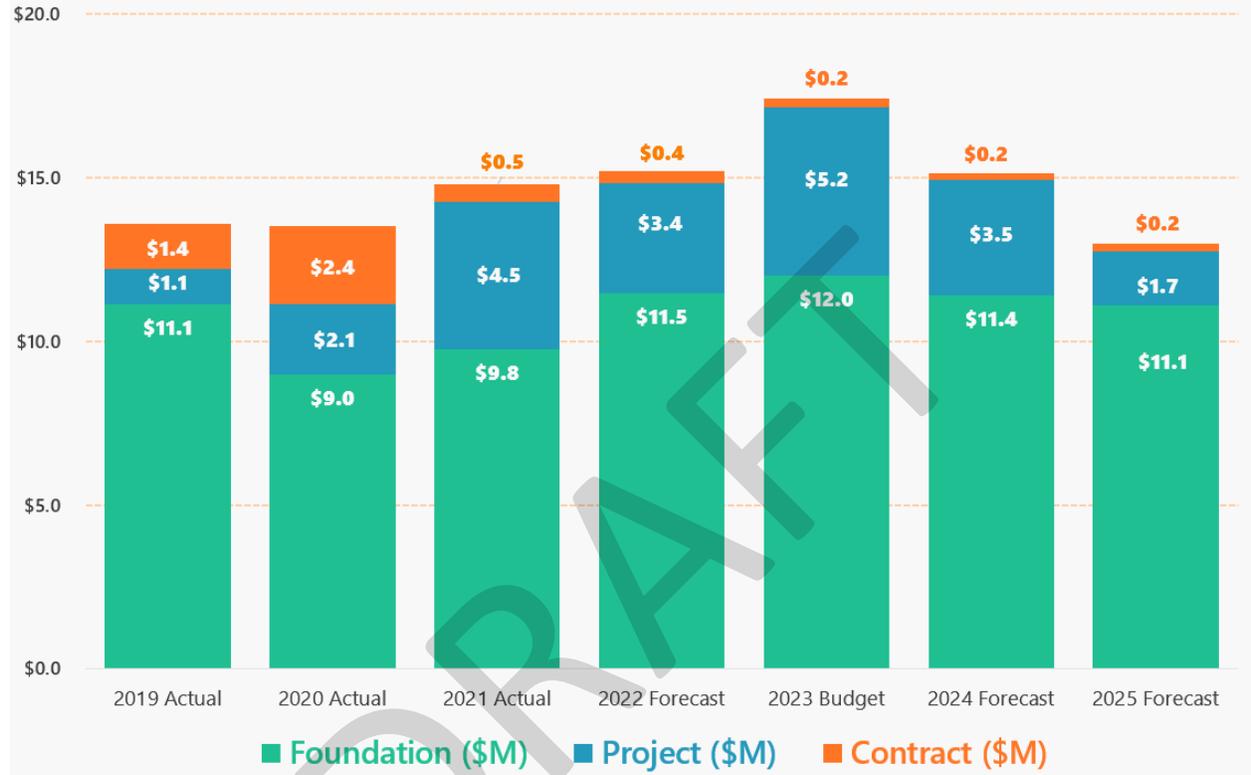
## **CAPITAL EXPENDITURES**

*The 2023 budget identifies capital expenditures totaling \$44.9 million for 2023-2025, plus \$0.7 million for contract services. The capital budget represents investments in various initiatives driven by stakeholder requests, regulatory*

requirements and capital spending intended to maintain and improve SPP’s capabilities and services.

# CAPITAL EXPENDITURES

Contract services capital expenditures are funded under the contract and not included in the RTO NRR.



Projects are consistently evaluated throughout the year under oversight of SPP’s internal Project Review and Prioritization Committee (PRPC). Reprioritization due to new developments and/or resource constraints throughout the rest of 2022 and into 2023 could potentially impact the project portfolio. Capital expenditures planned for 2023 could be impacted by: 1) addition of projects not currently reflected in the budget, 2) deferrals of projects into future years, 3) elimination of projects due to time constraints and/or completion of the project without incurring capital costs, or 4) costs carried forward into 2023 for projects not completed as planned during 2022.

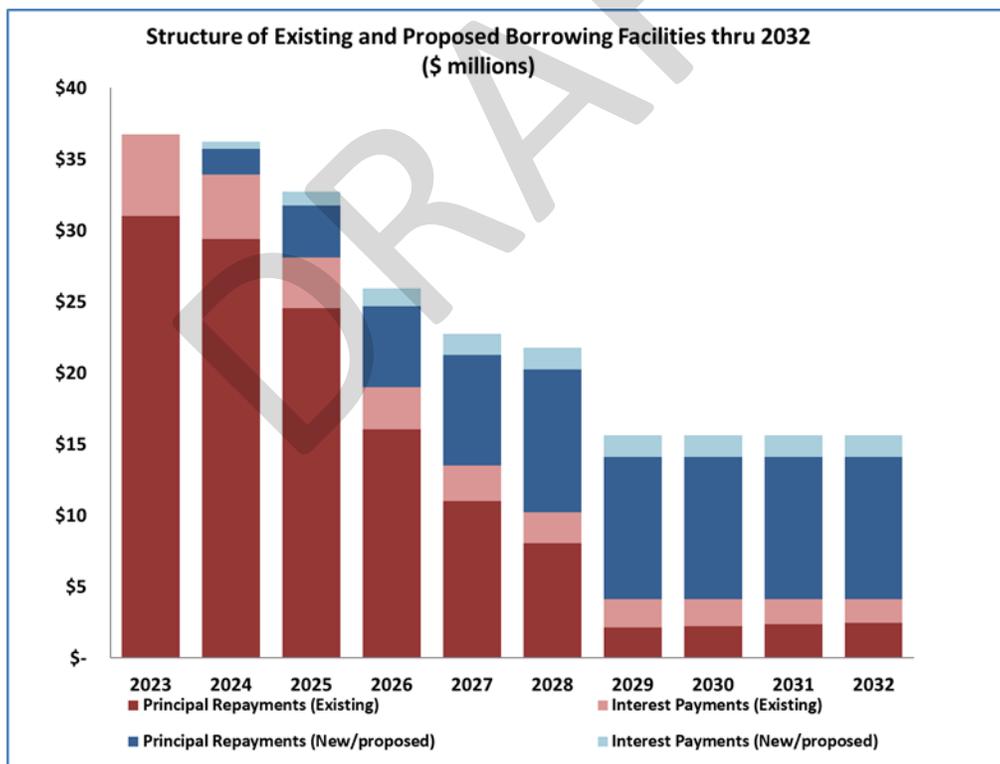
The capital projects section V. describes 2023 projects in detail, and a complete list of other projects and foundation work is described in the supplementary schedules IX.

## DEBT SERVICE

*Debt service is the second largest component of the NRR following operating expenses.*

The balance of SPP’s outstanding long-term borrowings, including borrowings to fund western offerings, will equal \$161.7 million at the beginning of 2023. Debt repayments will total \$31.0 million during 2023 with \$28.7 million recovered from SPP’s NRR and the remainder covered under contracts.

Annual debt obligations are projected to gradually decrease beginning in 2026, becoming approximately equal to SPP’s annual capital expenditures on a rolling average basis starting in 2029. With the exception of the Chenal campus mortgage, by 2026 SPP will have paid off all borrowings that were obtained to fund capital expenditures for projects prior to 2019, including the Integrated Marketplace and Project Pinnacle. As a result, based on current projections, annual debt obligations are projected to decrease to approximately \$25.9 million beginning in 2026 and to \$15.6 million in 2029 and thereafter.



More details are included in the debt service section VII.

### III. 2023 NET REVENUE REQUIREMENT

*The NRR represents the funding necessary to provide services throughout the footprint. The NRR is comprised of operating expenses (excluding depreciation and FERC assessment), principal and interest payments on loans for capital expenditures and a capital reserve fund intended to partially offset future borrowings.*

Miscellaneous revenues provide a reduction in the NRR calculation and include reimbursements for engineering studies and other revenue sources such as joint operating agreements, miscellaneous rebates, reserve sharing and circuit reimbursements. Revenues, in excess of associated expenses, generated from specific services provided by SPP under standalone contractual agreements also provide a reduction in the NRR.

In addition to operating expenses related to day-to-day operations, the income statement includes tariff administration service income (equal to the NRR), contract service revenues, miscellaneous income (primarily related to engineering studies) and various other income/expense items that are excluded from the NRR calculation (including depreciation and income/expense related to FERC fees and assessments).

## Income Statement (\$ millions)

	<u>2022 Budget</u>	<u>2022 Forecast</u>	<u>2023 Budget</u>	<u>2023 Prior</u>
<b>Revenues</b>				
Tariff Administration Service	\$176.3	\$181.0	\$184.5	\$180.7
Fees & Assessments	26.0	26.6	30.0	26.5
Contract Services Revenue	9.8	15.4	14.2	10.0
Other Revenues	19.1	16.8	20.9	19.1
<b>Total Revenues</b>	<b>\$231.2</b>	<b>\$239.8</b>	<b>\$249.7</b>	<b>\$236.4</b>
<b>Expense</b>				
Salary & Benefits	\$114.4	\$119.5	\$131.2	\$118.8
Communications & Maintenance	23.4	22.4	25.2	24.9
Assessments & Fees	27.2	27.2	28.8	28.6
Outside Services & Consulting	15.8	15.6	17.2	15.5
Services Reimbursed	10.2	8.5	12.0	10.2
Depreciation	17.8	17.4	16.7	17.6
Interest Expense	7.1	7.0	6.0	6.0
Administrative	5.5	5.7	5.8	5.7
Travel & Meetings	1.7	1.4	2.1	2.0
Other (Income) / Expense	(0.7)	(1.5)	0.7	(0.8)
<b>Total Expense</b>	<b>\$222.4</b>	<b>\$223.2</b>	<b>\$245.6</b>	<b>\$228.6</b>
<b>Net Income (Loss)</b>	<b>\$8.8</b>	<b>\$16.7</b>	<b>\$4.0</b>	<b>\$7.8</b>
Debt Repayment	\$30.4	\$31.1	\$31.0	\$32.0
Net Revenue Requirement	\$176.3	\$173.7	\$184.5	\$180.7

Total expenses (excluding depreciation, FERC assessments and other income/expense) are expected to be \$199.4 million in 2023, an increase of \$19.3 million compared to the 2022 forecast.

The following table illustrates the calculation of the NRR. The 2023 calculation includes funding of the 2023 capital reserve (20 percent of RTO capital expenditures) and an adjustment to NRR to account for expected over-recovery in 2022.

### Net Revenue Requirement (\$ millions)

	<u>2022 Budget</u>	<u>2022 Forecast</u>	<u>2023 Budget</u>	<u>2023 Prior</u>
<b>Gross Revenue Requirement</b>				
Operating expenses *	\$216.1	\$217.7	\$238.9	\$223.3
Less FERC assessments (Schedule 12)	(27.2)	(27.2)	(28.8)	(28.6)
Less depreciation (non-cash)	(17.8)	(17.4)	(16.7)	(17.6)
Less retirement valuation adjustments (non-cash)	(5.9)	(3.9)	(5.0)	(6.1)
Less contract services operating expenses	(5.6)	(7.1)	(8.7)	(5.8)
Adjusted operating expenses	\$159.5	\$162.1	\$179.6	\$165.2
Plus RTO debt service & interest	34.5	34.4	34.5	34.5
Less contract services shared overhead & cost recovery	(2.0)	(5.5)	(4.1)	(2.1)
<b>Gross Revenue Requirement</b>	<b>\$192.0</b>	<b>\$191.0</b>	<b>\$210.1</b>	<b>\$197.7</b>
Less other revenues	(\$19.8)	(\$17.6)	(\$21.6)	(\$19.9)
Plus capex reserve	3.6	3.6	3.4	2.9
<b>Run-Rate Net Revenue Requirement</b>	<b>\$175.8</b>	<b>\$177.0</b>	<b>\$191.9</b>	<b>\$180.7</b>
Less prior year (over)/under recovery	0.6	(3.3)	(7.4)	0.0
<b>Net Revenue Requirement</b>	<b>\$176.3</b>	<b>\$173.7</b>	<b>\$184.5</b>	<b>\$180.7</b>

\* Operating expenses exclude interest expense and other (income) / expense accounts.

*The main driver of the increase in the 2023 NRR is associated with higher labor costs driven by inflationary pressures and significant growth in workload.*

The following table outlines the drivers in the increase in the 2023 NRR over the 2022 forecast. For comparative purposes, the 2022 forecast NRR is adjusted to exclude the 2021 prior year over recovery and 2022 non-recurring compensation expenses.

**Net Change in NRR  
2022 Forecast vs 2023 Budget (\$ millions)**

2022 Forecast NRR	\$173.7
Exclude 2021 prior-year over recovery	3.3
Exclude 2022 non-recurring compensation expense	(3.2)
2022 Adjusted run-rate NRR	\$173.8
Salary & benefit increases (market adjustments, etc)	12.6
Maintenance for new projects, year-over-year increases	2.1
Outside services (excluding pass-thru)	1.6
Net change in contract services	1.5
Travel & meetings costs	0.8
Fees/taxes on existing communications circuits	0.4
Miscellaneous revenues (GI studies staff time)	(0.6)
Miscellaneous other fav/unfav changes	(0.2)
2023 Budget run-rate NRR	\$191.9
 Increase in 2023 NRR excluding 2021 over recovery & 2022 bonus	\$18.1

- 1) Increases in outside services primarily consulting for IT cybersecurity & infrastructure and legal counsel for zonal placement, Z2 and 2021 winter weather event.
- 2) Decrease in net contract services primarily due to lower expenses in 2022 during initial ramp up of implementation for WRAP.

*NOTE: Amounts exclude RC West & WEIS expenses*

The salary and benefits budget assumes incremental staff of 36 positions. The SPP Human Resources Committee meets annually to determine funding required to maintain company compensation levels at the 50<sup>th</sup> percentile of a predetermined peer group. As a result, the budget assumes an increase of 6.0 percent for market adjustments, promotions and merit increases. A vacancy factor of 4.0 percent is also included, which is comparable to the 2022 vacancy run-rate.

The increase in salary and benefits is partially offset by projected retirement plan valuation adjustments of \$1.1 million which does not impact the NRR.

The increase in maintenance is primarily driven by new architecture and cybersecurity-related initiatives as well as year-over-year increases on existing technology contracts.

The increases in 2023 for outside services is primarily related to ramping up consulting associated with the GI studies backlog and additional consulting for various new cyber security and architectural infrastructure initiatives.

The components of the contract services' NRR impact are outlined in the following table:

<b>Contract Services NRR Impact</b>				
<b>(\$ millions)</b>	<b><u>2022 Budget</u></b>	<b><u>2022 Forecast</u></b>	<b><u>2023 Budget</u></b>	<b><u>Prior 2023</u></b>
RCW & WEIS shared OH	(\$1.9)	(\$1.9)	(\$1.9)	(\$1.9)
WRAP net revenues/expenses	0.0	(3.0)	(1.8)	0.0
WEIS onboarding revenues	0.0	(0.4)	(0.1)	0.0
Other contract services revenues	(0.2)	(0.3)	(0.2)	(0.2)
<b>Total NRR reduction for contract services</b>	<b>(\$2.0)</b>	<b>(\$5.5)</b>	<b>(\$4.1)</b>	<b>(\$2.1)</b>

The 2023 budget decrease from the 2022 forecast associated with contract services is primarily due to lower expenses in 2022 during initial ramp up of implementation for WRAP. In addition, WEIS onboarding fees were recognized over 12 months with 10 months of revenues recognized in 2022 and only 2 months in 2023.

The increase in travel and meetings expense is attributed to the resumption of normal travel post COVID-19 pandemic as well as inflationary impacts. The 2023 budget assumes expenses for approximately half of regularly scheduled meetings to be in-person in 2023.

## **TARIFF RATE CAP**

The SPP tariff currently limits the annual budgeted NRR to a ratio not exceeding 0.465:1 of estimated annual transmission usage (expressed in MWh). This limitation is a legacy limit based on SPP's single bundled-rate recovery structure where costs were recovered from all transmission customers. This requires the budgeted NRR, when divided by estimated transmission billing determinants for the budget year, to be at or below a specific rate stipulated in the tariff. The specific rate cap in effect for the 2023 budget year is 46.5¢ per MWh.

Actual billing determinants from August 2021 thru July 2022 are used to estimate transmission billing determinants as prescribed in the formula rate template for rate schedule 1-A1. SPP recorded 387,251,399 MWhs of network transmission billing units and 24,618,603 MWhs of point-to-point transmission billing units for August 2021 thru July 2022 which totaled transmission usage of 411,870,002 MWhs.

SPP’s budgeted NRR for 2023 is \$184.5 million, as described throughout the budget document. Comparing the 2023 NRR to the estimated transmission usage yields a ratio of 0.448:1, which remains within the limitations prescribed in the tariff and also falls below the previously projected 2023 forecast ratio of 0.461:1 from the 2022 – 2024 budget cycle.

## FUTURE FORECASTING

SPP constructs a three-year budget plan each year in accordance with the tariff. The basis for the five-year forecast is the 2023–2025 budget with only inflation adjustments applied to the operating expenses for 2026-2027. The transmission usage for 2026 and 2027 remain equal to the 2023 budget of 411.9 TWh.

Although the calculated rates for 2023 falls within the tariff rate cap of \$0.465, the rate exceeds the cap beginning in 2024 as a result of incremental expenses and no projected over-recovery in future years.

	<u>2023 Budget</u>	<u>2024 Forecast</u>	<u>2025 Forecast</u>	<u>2026 Forecast</u>	<u>2027 Forecast</u>
NRR (\$ millions)	\$184.5	\$201.7	\$203.6	\$200.7	\$201.0
MWh Forecast (millions)	411.9	411.9	411.9	411.9	411.9
Calculated rate for FERC cap	\$0.448	\$0.490	\$0.494	\$0.487	\$0.488

<b>SPP Five Year Forecast (\$ millions)</b>					
	<u>2023 Budget</u>	<u>2024 Forecast</u>	<u>2025 Forecast</u>	<u>2026 Forecast</u>	<u>2027 Forecast</u>
<b>Revenues</b>					
Tariff Administration Service	\$184.5	\$201.7	\$203.6	\$200.7	\$201.0
Fees & Assessments	30.0	30.6	31.3	31.9	32.5
Contract Services Revenue	14.2	14.1	14.2	14.5	14.8
Other Revenues	20.9	15.4	11.4	11.6	11.9
<b>Total Revenues</b>	<b>\$249.7</b>	<b>\$261.8</b>	<b>\$260.5</b>	<b>\$258.8</b>	<b>\$260.2</b>
<b>Expense</b>					
Salary & Benefits	\$131.2	\$138.0	\$143.8	\$146.7	\$149.6
Communications & Maintenance	25.2	27.6	28.3	28.9	29.4
Assessments & Fees	28.8	29.6	30.5	31.1	31.8
Outside Services	17.2	18.2	16.4	16.8	17.1
Services Reimbursed	12.0	6.5	2.4	2.5	2.5
Depreciation	16.7	17.5	19.0	19.4	19.8
Interest Expense	6.0	5.5	4.7	4.3	4.1
Administrative	5.8	6.0	6.1	6.2	6.3
Travel & Meetings	2.1	2.4	2.4	2.5	2.5
Other (Income) / Expense	0.7	0.7	0.7	0.8	0.8
<b>Total Expense</b>	<b>\$245.6</b>	<b>\$251.9</b>	<b>\$254.5</b>	<b>\$259.1</b>	<b>\$263.9</b>
<b>Net Income (Loss)</b>	<b>\$4.0</b>	<b>\$9.9</b>	<b>\$6.0</b>	<b>(\$0.3)</b>	<b>(\$3.6)</b>
Debt Repayment	\$31.0	\$31.2	\$28.2	\$21.7	\$18.8
Net Revenue Requirement	\$184.5	\$201.7	\$203.6	\$200.7	\$201.0
Capital Expenditures	\$17.4	\$15.2	\$13.0	\$13.0	\$13.3

## IV. RESOURCE UTILIZATION

SPP's 2023 budget incorporates the funds necessary to provide day-to-day operations while pursuing strategic goals and organizational objectives. The chart below shows the various resource components and their corresponding 2023 budget amounts compared to the 2022 budget and forecast, and the 2023 forecast estimated in the 2022 budget cycle. The following section discusses major components in detail.

	<u>2022 Budget</u>	<u>2022 Forecast</u>	<u>2023 Budget</u>	<u>Prior 2023</u>
Salary & benefits	\$114.4	\$119.5	\$131.2	\$118.8
Communications & maintenance	23.4	22.4	25.2	24.9
Outside services & consulting	15.8	15.6	17.2	15.5
Services reimbursed	10.2	8.5	12.0	10.2
Interest expense	7.1	7.0	6.0	6.0
Administrative	5.5	5.7	5.8	5.7
Travel & meetings	1.7	1.4	2.1	2.0
<b>Total operating expense *</b>	<b>\$178.1</b>	<b>\$180.1</b>	<b>\$199.4</b>	<b>\$183.1</b>

\* Excludes depreciation, FERC fees & other (income)/expense

### Salary & Benefits

The largest component of the budget is associated with staffing costs, and the 2023 budget reflects a significant increase over the 2022 forecast primarily due to incremental staffing and recommended compensation adjustments based on analysis conducted by the human resources committee.

	<u>2022 Budget</u>	<u>2022 Forecast</u>	<u>2023 Budget</u>	<u>2023 Prior</u>
Base salaries	\$71.1	\$73.5	\$83.4	\$74.0
Premium, retention & severance pay	1.3	4.8	1.5	1.3
Total salaries	\$72.4	\$78.3	\$84.9	\$75.3
Benefits & taxes	42.0	41.1	46.3	43.4
Total salary, benefits & taxes	\$114.4	\$119.5	\$131.2	\$118.8
Less retirement valuation adjustments (non-cash)	(5.9)	(4.8)	(5.0)	(6.1)
Total salary, benefits & taxes net of adjustments	\$108.5	\$114.7	\$126.2	\$112.7
Headcount	657	680	716	657

### INCREMENTAL STAFFING

SPP identified common themes related to SPP's 2026 Aspire strategic plan among the 2023 incremental staffing recommendations, leading them to produce a consolidated recommendation for the entire portfolio of position requests. These recurring themes included

risk mitigation for existing and future work, building bench strength throughout the organization to achieve organizational readiness and addressing specific resource capacity shortages.

Risk mitigation was identified as the most significant driver for incremental positions in the recommendation. Many of SPP's strategic initiatives, projects and regulatory recommendations are undertaken to reduce operational, compliance, financial and other types of risks.

Some risk mitigation examples identified in the incremental staffing justifications included:

- 1) Achieving seamless boundaries and optimizing seams to further reduce the risks of system outages and impact from weather and other adverse transmission system events
- 2) Ensuring appropriate staffing levels and cross-training to reduce risks associated with key employee turnover, over-utilization and burnout
- 3) Improving model coordination, timeliness and accuracy for both east and west interconnections (and ties) to reduce impacts associated with inaccuracies and latency in the planning and operations teams

SPP recognizes the need for knowledge, skills and significant effort to achieve organizational readiness. Organizational readiness is much more complex than a simple succession planning exercise. Rather, it ensures that SPP's staffing levels can successfully support and foster both short and long-term growth. As each aspect of SPP's business become continually more complex and intertwined, staff will need continued development of skillsets, institutional knowledge and business relationships to be successful. Acquiring and developing staff with these attributes has always been a hallmark of SPP's success and remains just as critical to SPP fulfilling its mission.

SPP measured resource capacity as compared to the volume of work to simply maintain the foundational business of SPP, the rising reliability and security risks associated with that work, and the effort required in achieving the deliverables as identified by SPP. This significant volume of work has been derived from:

- 1) SPP's day-to-day functional processes and deliverables required to support existing tariff requirements and to "keep the lights on" in an ever-changing and more complex industry;
- 2) SPP's existing project pipeline, which includes 51 current/in-flight projects plus numerous upcoming/budgeted projects, and 5 programs; and

- 3) SPP's recently adopted strategic plan, Aspire 2026, which includes 5 strategic opportunities and 6 enabling capabilities, which all require strategic initiatives to accomplish.

More information on the benefit of these budgeted investments is provided in detail in section VI .

## **Alternatives to Incremental Staff**

SPP explored alternative ways to mitigate risk other than through incremental staffing. For example, the possibility of outsourcing the work identified in the resource capacity exercise was also vetted, but it was determined that keeping institutional knowledge within SPP's employee base is critical for short and long-term growth. Additionally, the cost differential between outsourcing and full-time employees typically favors the hiring of full-time employees. While outsourcing can provide short-term benefit, overall organizational readiness requires SPP staff to be effectively knowledgeable and skilled in the right areas. Outsourcing, when feasible and economically advantageous, will be utilized to achieve identified goals and deliverables.

Other alternatives discussed were the potential for delaying certain stakeholder and/or staff initiatives, postponing scheduled cost-saving projects and absorbing some amount of the additional identified risks. Ultimately, these alternatives were determined to be unhealthy for SPP's short and long-term goals and would exacerbate the very risks they are intended to mitigate.

## **STAFFING COMPONENTS**

### **Headcount Changes**

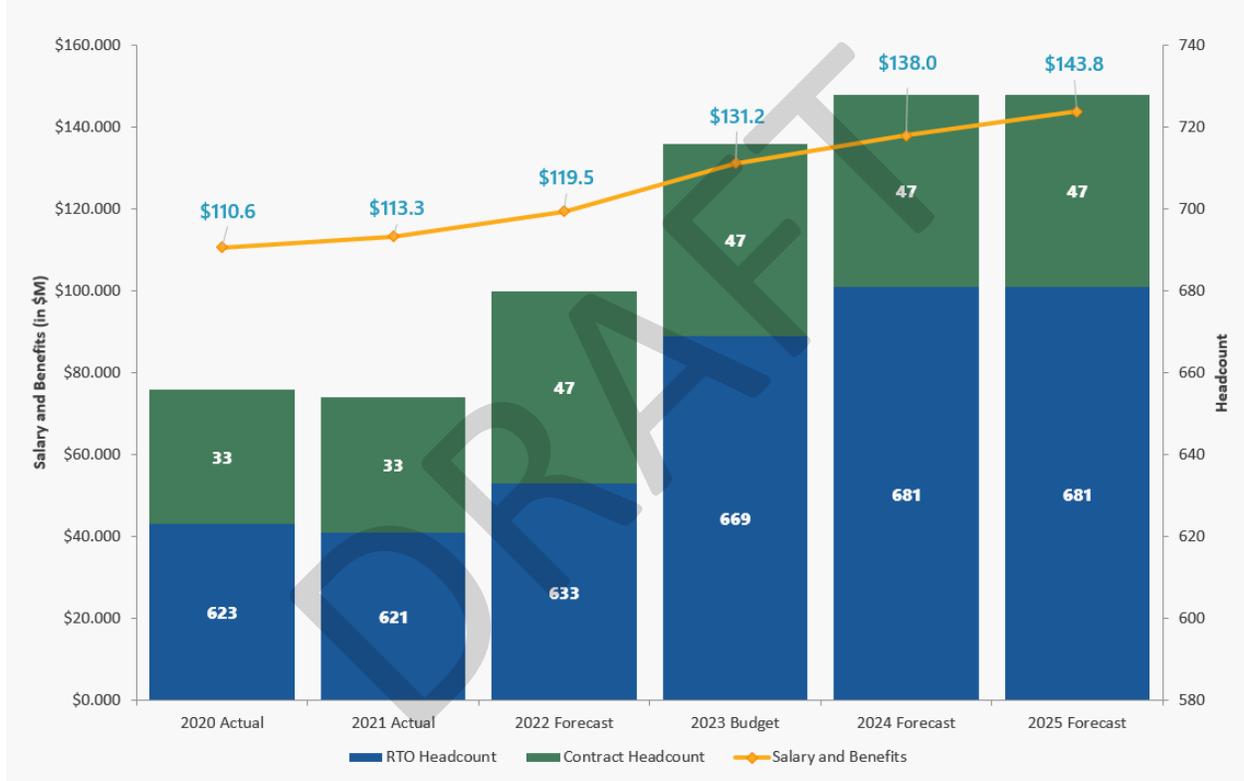
The 2022 budget did not include the 14 positions currently assigned to Western Resource Adequacy Program (WRAP) since the contract was not in place at the time of the 2022 budget but was approved by the finance committee in executive session on October 14, 2022. Those 14 positions in addition to nine incremental positions added during 2022 results in 680 total headcount for the 2022 forecast. The 2023 budget includes 36 incremental positions resulting in headcount of 716 for 2023.

## 2022 - 2025 Headcount

2022 Budget headcount	657
WRAP contract services positions	14
Incremental positions approved in 2022	9
2022 Forecast headcount	680
2023 incremental positions	36
2023 Budget headcount	716

## HEADCOUNT, SALARY & BENEFITS

Data represents actual for 2020 - 2021; forecast for 2022 and budget/forecast for 2023-2025.



The base salary budget assumes an increase of 6.0 percent for market adjustments, promotions and merit increases, and a vacancy factor of 4.0 percent.

<b>Salary expenses (\$ millions)</b>	<b>2022 Budget <sup>(1)</sup></b>	<b>2022 Forecast</b>	<b>2023 Budget <sup>(2)</sup></b>	<b>2023 Prior <sup>(2)</sup></b>
Base salaries at beginning of year	\$70.7	\$70.7	\$78.2	\$73.1
Merit increase	2.1	3.3	3.9	2.2
Premium pay	1.3	1.3	1.3	1.3
Incentive/retention pay	0.0	3.3	0.2	0.0
Severance pay	0.0	0.2	0.0	0.0
Incremental staff	0.3	1.1	3.2	0.0
Promotions	0.5	0.5	0.9	0.6
Vacancy	(2.6)	(2.2)	(2.7)	(1.9)
<b>Total salary expenses</b>	<b>\$72.4</b>	<b>\$78.3</b>	<b>\$84.9</b>	<b>\$75.3</b>

(1) 2022 budget vacancy 3.5% & market/promotion 3.0%

(2) 2023 budget vacancy 4.0% & market/promotion 6.0%; 2023 prior vacancy 2.5% & market/promotion 3.0%

The average vacancy rate is expected to be approximately 4.4 percent for 2022. A vacancy rate of 4.0 percent was applied to the 2023 budget as SPP anticipates staff turnover in 2023 to be relatively consistent with 2022. This equates to headcount vacancy averaging 29 positions during the calendar year.

	<b>2022 Budget</b>	<b>2022 Forecast</b>	<b>2023 Budget</b>	<b>2023 Prior</b>
Vacancy rate	3.5%	4.4%	4.0%	2.5%

## Benefits and Taxes

The table below provides a breakdown of employee benefits and taxes:

<b>Benefits &amp; Taxes (\$ millions)</b>	<b>2022 Budget</b>	<b>2022 Forecast</b>	<b>2023 Budget</b>	<b>2023 Prior</b>
Retirement plans (401K, pension, deferred comp)	\$15.3	\$13.7	\$15.3	\$15.8
Performance compensation	12.7	13.0	14.7	13.1
Payroll taxes	6.0	6.3	7.0	6.2
Medical benefits	5.9	6.1	7.0	6.2
Other employee benefits	0.5	0.6	0.5	0.5
Dental benefits	0.4	0.4	0.5	0.4
Life insurance benefits	0.5	0.4	0.5	0.5
Continuing education	0.6	0.6	0.9	0.6
<b>Total benefits &amp; taxes</b>	<b>\$42.0</b>	<b>\$41.1</b>	<b>\$46.3</b>	<b>\$43.4</b>

The 2022 forecast and 2023 budget amounts for pension expense are based on the most recent actuarially calculated pension costs. Pension expense was calculated assuming a long-term asset return of 7 percent (consistent with the assumed rate of return in SPP's investment policy statement). SPP will make cash contributions of \$5.4 million to the pension plan during 2022, and contributions to the plan are budgeted at \$5.7 million in 2023. Only the cash contribution portion of pension expense is included in the NRR.

	<u>2022 Budget</u>	<u>2022 Forecast</u>	<u>2023 Budget</u>	<u>2023 Prior</u>
<b>Pension expense (\$ millions)</b>				
Cash contributions (included in NRR)	\$5.3	\$5.4	\$5.7	\$5.4
Other costs	4.9	2.5	5.5	5.0
Total expense	\$10.2	\$7.9	\$11.2	\$10.4

Performance compensation is budgeted at the target level of 17.6 percent of base salaries and is paid in March of the following year. The performance compensation program is a key component to achieving the 50<sup>th</sup> percentile total compensation benchmark set by the human resources committee. Funding for the 401(k) matching contribution is projected at 4.2 percent of base salary expense (including performance compensation) based on recent company trends.

## Medical Benefits Costs

**The net cost of the self-funded medical plan in the 2023 budget is \$7.0 million, which represents an 18 percent increase from the 2022 budget and a 15 percent increase from the 2022 forecast.**

Total gross claims for 2023 are estimated to be \$7.5 million, which is a \$0.9 million increase from the 2022 forecast due to inflation and additional headcount.

<b>Healthcare Costs (\$ millions)</b>			
	<u>2022 Budget</u>	<u>2022 Forecast</u>	<u>2023 Budget</u>
Gross claims	\$6.3	\$6.6	\$7.5
Admin fees	1.1	1.0	1.2
Employee contributions	(1.5)	(1.5)	(1.7)
Net expenses	\$5.9	\$6.1	\$7.0
Number of employee participants	624	614	683

Approximately 95 percent of employees use the SPP medical plan as primary insurance, which is comparable with previous years. The estimated number of employee participants in 2023 is 683 (as compared to 614 in 2022), with an estimated number of insured participants of 1,850 (as compared to 1,701 in 2022).

## OUTSIDE SERVICES AND CONSULTING

*SPP engages outside resources for professional services, staff augmentation and run-time services for areas outside SPP's normal business capabilities and SaaS subscriptions.*

Outside services consist of third-party expertise to assist SPP in deploying a variety of services. These type of activities include professional services (engaged to provide services such as outside legal counsel, board of directors, audits), staff augmentation (utilized where staffing constraints require additional resources), run-time services (utilized to perform certain functions outside of SPP's normal business capabilities) and software as a service subscriptions (SaaS).

The majority of the outside services budget is related to staff augmentation for various initiatives (primarily in engineering and IT), software as a service (SaaS) subscriptions, outside legal counsel and board compensation. The following table summarizes various outside services functions:

(\$ millions)	<u>2022 Budget</u>	<u>2022 Forecast</u>	<u>2023 Budget</u>	<u>2023 Prior</u>
Engineering GI Studies pass-thru expenses	\$9.8	\$8.3	\$11.6	\$9.8
FERC Order 1000 pass-thru expenses	0.4	0.2	0.4	0.4
Total services reimbursed	\$10.2	\$8.5	\$12.0	\$10.2
Software as a Service (SaaS)	\$2.7	\$2.7	\$3.1	\$2.8
IT staff aug/consulting for KTLO and new cyber/architectural initiatives	2.2	2.0	2.6	3.4
Engineering staff aug for modeling, SCRIPT, ITP planning	2.5	2.4	2.0	1.7
Outside legal counsel	1.7	1.3	1.6	1.1
Board of directors compensation	1.3	1.2	1.5	1.3
Corporate facilities & onsite security	0.9	0.9	0.9	1.0
Operations market support, congestion hedging, EIDSN, IDC	0.9	0.8	0.8	0.9
Contract services consulting engagements and subscriptions	0.3	0.7	0.7	0.3
Weather forecasting services	0.7	0.6	0.6	0.7
Human resources & corporate training	0.8	0.6	0.5	0.5
Accounting & auditing	0.5	0.5	0.5	0.5
DEI and other strategic initiatives	0.3	0.4	0.4	0.3
Legal cyber security assessment & incident response	0.0	0.3	0.4	0.0
Compliance controls program review, GRC support	0.2	0.2	0.4	0.0
Regional State Committee (RSC)	0.3	0.1	0.4	0.3
MMU legal & special consulting engagements	0.2	0.4	0.3	0.2
Miscellaneous administrative services (credit rating, brokerage fees)	0.3	0.3	0.3	0.3
Corp communications & customer relations services	0.1	0.1	0.1	0.1
Order 1000	0.1	0.0	0.1	0.1
Total outside services & consulting (excluding reimbursed)	\$15.8	\$15.6	\$17.2	\$15.5
Total outside services & consulting	\$26.0	\$24.1	\$29.1	\$25.7

The increase in SaaS in IT is driven primarily by OATI annual fixed-price increases as well as incremental SaaS costs for a new document repository which replaces the current tool (which was owned and ran on-premise, but reached end of vendor support). Various other SaaS costs remain relatively consistent with the 2022 forecast with only minimal annual increases.

	<u>2022 Budget</u>	<u>2022 Forecast</u>	<u>2023 Budget</u>	<u>2023 Prior</u>
<b>SaaS - IT and Other (\$ millions)</b>				
IT various hosted services (OATI, cybersecurity, document management)	\$2.0	\$2.0	\$2.1	\$2.1
Human capital HR and corporate training tools	0.3	0.3	0.3	0.3
Stakeholder relations issue track and training learning management	0.3	0.3	0.4	0.3
Project management workfront portfolio management	0.1	0.1	0.1	0.1
Operations OASIS and Webtrans	0.0	0.0	0.1	0.0
Total SaaS	\$2.7	\$2.7	\$3.1	\$2.8

*The overall increase in outside services from the 2022 forecast is the result of various offsetting factors.*

<b>Outside Services &amp; Consulting Excluding Reimbursed Expenses (\$ millions)</b>	
2022 Forecast	\$15.6
IT ongoing/new initiatives	0.6
SaaS subscriptions	0.4
Regional State Committee (RSC) expenses	0.3
Board of directors compensation	0.3
Litigation anticipated for 2021 winter event, zonal placement, Z2	0.2
Compliance controls program review, GRC support	0.2
Miscellaneous other	0.1
Engineering staff aug for modeling, SCRIPT, ITP planning	(\$0.4)
2023 Budget	\$17.2

## Engineering Outside Services & Consulting

The engineering organization engages consultants primarily for planning and tariff services processes associated with 1) SPP tariff or North American Reliability Corporation (NERC) required engineering studies, 2) support of reliability and economic planning processes during peak periods associated with the Integrated Transmission Planning (ITP) process, 3) SPP Strategic Initiatives prioritized and deemed critical for immediate implementation and 4) transmission project cost estimation related to FERC Order 1000. Engineering also engages consultants to assess new approaches and tools to refine performance objectives that align with future planning needs.

<b>Engineering Outside Services and Consulting (\$ millions)</b>	<u>2022 Budget</u>	<u>2022 Forecast</u>	<u>2023 Budget</u>	<u>Prior 2023</u>
Pass-thru studies consulting	\$9.8	\$8.3	\$11.6	\$9.8
Other outside services & consulting	2.6	2.5	2.1	1.8
Total engineering outside services and consulting	\$12.4	\$10.8	\$13.7	\$11.6

***The largest component of consulting in engineering is attributed to work on generator interconnection (GI) studies, whose costs are billed to study participants and offset by associated revenues.***

The SPP generator interconnection queue process provides a means for generation planners and developers to submit new generation projects into the queue for validation, study, analysis and, ultimately, interconnection to the transmission system. SPP's GI study process is based on the Revised SPP Tariff Attachment V's "Generator Interconnection Procedure (GIP)", effective January 2022.

The number of new studies, and the complexity of existing studies, required by the Tariff continues to increase substantially. Some of these studies are new, based on Order 845, requiring the GI department to adjust its resource plan. The GI queue currently has a four-year lag, which reduces the ability to facilitate the interconnection of renewable generation in the SPP footprint and seams areas. Contractor engagement to augment current staff is critical to address the volume of studies in the GI backlog. SPP has established a three-year plan for the backlog mitigation whereas SPP will reduce the need for consultants over the three year period.

The increase in GI consulting expense has no impact to the NRR since SPP bills contractor costs (as well as costs for SPP staff time) to the study participants as part of overall study charges.

<b>Net studies revenue/(expense) (\$ millions)</b>	<b><u>2022 Budget</u></b>	<b><u>2022 Forecast</u></b>	<b><u>2023 Budget</u></b>	<b><u>Prior 2023</u></b>
Engineering staff time revenue	\$8.0	\$7.1	\$7.9	\$8.0
Pass-thru consulting revenue	9.8	8.3	11.6	9.8
Pass-thru consulting expense	(9.8)	(8.3)	(11.6)	(9.8)
<b>Net studies revenue/(expense)</b>	<b>\$8.0</b>	<b>\$7.1</b>	<b>\$7.9</b>	<b>\$8.0</b>

The impact is an increase in 2023 but significant reductions are reflected in 2024 and 2025 since consultants are currently engaged to work on the GI studies backlog which is anticipated to diminish significantly over the next three years.

<b>(\$ millions)</b>	<b><u>2022 Forecast</u></b>	<b><u>2023 Budget</u></b>	<b><u>2024 Forecast</u></b>	<b><u>2025 Forecast</u></b>
Pass-thru studies consulting	\$8.3	\$11.6	\$6.1	\$2.0

The remaining outside services and consulting costs are lower than the 2022 forecast as a result of the regional cost allocation review (RCAR) project that concluded in 2022, along with more efficient use of resource capacity from contractors and staff.

<b>Engineering other outside services(\$ millions)</b>	<b><u>2022 Budget</u></b>	<b><u>2022 Forecast</u></b>	<b><u>2023 Budget</u></b>	<b><u>Prior 2023</u></b>
Other outside services & consulting	\$2.6	\$2.5	\$2.1	\$1.8

Outside consultants are utilized to provide various services to augment SPP staff including the following:

- Regional planning support: Outside consulting is budgeted to support planning processes during peak periods associated with managing the 20-year ITP plan, Integrated Transmission Planning (ITP) and Coordinated System Plan (CSP) studies.
- Engineering strategic initiatives: The 2023 budget includes consulting in order to research, analyze and develop a “Grid of the Future” report specific to SPP’s footprint with inputs from the industry, staff and membership. These efforts take into consideration FERC Order 2222 compliance requirements and the Notice of Proposed Rulemaking (NOPR) on ambient adjusted line ratings as well as resource mix projections, resource attributes required for reliability and technology advancements and capabilities.
- Transmission owner selection process (FERC Order 1000): As part of the ITP assessment, SPP conducts economic, reliability, public policy, short circuit and operational needs assessments, as detailed in Section 4 of the ITP Manual, which results in a comprehensive list of needs being posted for SPP stakeholders. SPP notifies stakeholders of the identified transmission needs and stakeholders may submit a DPP to seek approval for construction as a competitive upgrade. SPP developed the Transmission Owner Selection Process (TOSP) to meet FERC Order 1000 to select proposals for projects qualifying as competitive. SPP engages consultants to maintain independence in the cost estimate process required in the TOSP.
- Generator Interconnection: The transition study T3 recommendation from the Holistic Integrated Tariff Team (HITT) recommendation will be repeated for any generators that have been granted Network Resource Interconnection Service (NRIS) since the original transition study conducted in 2022 was completed. Additionally an Energy Resource Interconnection Service (ERIS) threshold study will be conducted in 2023 as recommended by the NRIS, ERIS and Deliverability Task Force (NEDTF). Consulting costs for this HITT recommendation is included in the 2023 budget.
- SCRIPT Consolidated Planning Process: The 2023 budget includes consulting to augment essential SPP staff so those policy and technical experts can engage in the SCRIPT project. The SCRIPT project is a multi-team effort to successfully develop and implement new processes to lower costs and create more equitable cost sharing, increase economic benefits, open new markets for energy, create more timely processes and enhance reliability and grid resiliency. The SCRIPT consolidation effort specifically targets combining, modifying or eliminating transmission planning and study processes to develop more optimal solutions that meet a broader set of customer needs; synergize

analysis so that beneficiaries and cost-causers can be identified in a holistic, uniform fashion; improve planning efficiency, effectiveness and timeliness; reduce the number of model sets needed; and reduce reliance on customer-requested, queue-driven studies.

## Information Technology (IT)

*IT utilizes outside services for a variety of functions including hosted services, data storage, consulting for key projects and initiatives. The largest component of the IT budget consists of SaaS as well as services to implement new projects.*

The primary IT initiatives are centered on critical infrastructure protection (CIP) security, automation and infrastructure consolidation activities. Cyber-security services include vulnerability assessments, patch assessments, static code analysis, distributed denial of service (DDOS), cyber information sharing/collaboration and third-party supply chain risk assessments.

Approximately 70 percent of the budget is related to ongoing services that continue every year (SaaS, security subscriptions, off-site data center, etc.). The remainder of the budget is comprised of short-term project engagements and staff augmentation assistance that vary in scope from year to year.

<b>IT Outside Services and Consulting (\$ millions)</b>	<b><u>2022 Budget</u></b>	<b><u>2022 Forecast</u></b>	<b><u>2023 Budget</u></b>	<b><u>Prior 2023</u></b>
Services to implement new projects	\$1.3	\$1.3	\$1.7	2.5
Ongoing/existing services for KTLO (keeping the lights on)	0.9	0.7	0.7	0.9
Staff augmentation	0.0	0.0	0.2	0.0
IT outside services & consulting (excluding SaaS)	\$2.2	\$2.0	\$2.6	\$3.4
IT SaaS	2.0	2.0	2.1	2.1
IT outside services & consulting (including SaaS)	\$4.2	\$4.0	\$4.7	\$5.4

Certain software vendors are advocating changing from client ownership of software licenses to cloud-based term services. This change will be reflected as an increase in SaaS expenses in upcoming years, with a partial offset in capital and maintenance expenses. In addition, SPP is considering migrating the service management platform to a SaaS solution in 2024 which includes a one-time conversion cost estimated at \$1.0 million and \$0.3 million in ongoing SaaS fees.

The growth in new services is driven by further maturation of SPP’s cybersecurity practices, upgrading key application areas to current levels and architecture improvements to accommodate more secure and efficient use of internal and external applications.

New services in 2023 continue to focus on cybersecurity maturity via direction from the SPP oversight committee, as well as architectural initiatives to better position SPP for cloud security,

usage and automation. The key drivers are in cybersecurity (managed phishing services and managed endpoint detection and response (EDR) services), architectural and systems integration services (SaaS email and collaboration consulting services) and staff augmentation for database administrator (DBA) backup and automation activities due to staffing shortages.

## Legal, Regulatory and Regional State Committee (RSC)

SPP employs outside legal counsel for various litigation matters throughout the year. These services provide unique legal expertise on specific FERC matters and allows SPP to leverage the counsel's experience with FERC, while utilizing their knowledge of RTO-specific issues.

Legal, Regulatory & RSC Outside Services and Consulting (\$ millions)	2022 Budget	2022 Forecast	2023 Budget	Prior 2023
Legal	\$1.7	\$1.6	\$1.9	\$1.2
Regulatory (FERC Order 1000, IEP)	0.4	0.2	0.4	0.4
Regional State Committee	0.3	0.1	0.4	0.3
Regulatory, Legal & RSC	\$2.4	\$1.9	\$2.8	\$1.9
IEP Revenue from participants	(0.4)	(0.2)	(0.4)	(0.4)
Total excluding pass-thru expenses	\$2.0	\$1.8	\$2.4	\$1.5

The largest driver of outside services legal costs is related to FERC litigation. The increase in 2023 is driven by litigation related to the zonal placement process and ongoing FERC and federal court litigation related to the winter weather event of February 2021. SPP also expects FERC to issue orders related to Z2 that will likely result in additional outside counsel costs.

The 2023 regulatory department budget includes costs for an industry expert panel (IEP) to oversee the FERC Order 1000 bidding process for one competitive project carried forward from 2022 and one additional in 2023. These costs are offset by revenue to be collected from the competitive process participants with no impact to the NRR.

The Regional State Committee (RSC) provides collective state regulatory agency input on matters of regional importance related to the development and operation of bulk electric transmission. The budget is created and submitted to SPP by the RSC each year and includes all costs associated with RSC travel, meetings and consulting. The budget assumes the committee will engage a consultant in 2023. This results in an increase over the 2022 forecast since no consulting costs were incurred in 2022.

Outside Services and Consulting (\$ millions)	2022 Budget	2022 Forecast	2023 Budget	Prior 2023
Regional State Committee	\$0.3	\$0.1	\$0.4	\$0.3

## MAINTENANCE

*Maintenance expense is primarily related to contractual agreements covering technology hardware and software assets and expenses for general upkeep of physical facilities. The increase in the 2023 budget is primarily related to new architecture and cybersecurity-related initiatives as well as annual increases on existing contracts.*

Maintenance Expense (\$ millions)	<u>2022 Budget</u>	<u>2022 Forecast</u>	<u>2023 Budget</u>	<u>Prior 2023</u>
Enterprise technology	\$16.5	\$15.8	\$17.7	\$17.9
General facilities	1.3	1.2	1.4	1.4
Contract services	0.3	0.5	0.7	0.3
<b>Total</b>	<b>\$18.2</b>	<b>\$17.5</b>	<b>\$19.9</b>	<b>\$19.6</b>

### Enterprise Technology Maintenance

Enterprise technology maintenance expense covers maintenance on hardware and software assets in the existing portfolio and maintenance on incremental purchases and new systems developed across the organization.

Enterprise technology maintenance agreements encompass necessary coverage such as defect restorations, security patches, product updates and version upgrades of software products. SPP retains maintenance agreements on the majority of in-use installed hardware and software. The level of maintenance is selected based on factors including the criticality of the application and the environment (testing, development or production).

The three primary components of enterprise technology maintenance include hardware maintenance, perpetual software maintenance and software subscriptions.

Components within each maintenance category include:

- Maintenance/support agreements for hardware (servers, storage, network, etc.)
- Maintenance/support agreements for software (operating systems, databases, tools, office products, usage licenses, subscription licenses)
- Maintenance/support agreements for business applications (market, reliability, transmission, settlements, leveraged services, etc.)

The scope of this budget encompasses over 1,600 hardware products and over 33,000 software entitlements. Approximately 85 percent of the maintenance budget is under multi-year contracts in support of the existing environment with expenses being amortized over the life of the agreement. The remaining 15 percent is attributed to variable time-and-material contracts

(expensed throughout the year as services are rendered) and one-time maintenance costs that are expensed at the time of product purchase (e.g., server warranties).

<b>IT Maintenance Expense 2022 Forecast vs. 2023 Budget</b>		
<b>(\$ millions)</b>		
<b>2022 IT maintenance forecast</b>		<b>\$15.8</b>
New security and automation products	8%	1.5
Year-over-year growth of existing products	5%	0.8
New corporate, engineering and operations projects	2%	0.3
Reduction in costs for server warranties and software license true-ups	-4%	(0.7)
<b>2023 IT maintenance budget</b>		<b>\$17.7</b>

## General Plant Maintenance

In addition to maintenance for hardware and software, other facility expenses are included in the general plant maintenance budget such as janitorial expense, landscape services and preventive maintenance.

SPP utilizes historical data to estimate costs associated with general upkeep such as waste removal, landscape maintenance, janitorial services, etc. These costs remain fairly constant with minimal projected increases. Costs associated with facilities systems and equipment maintenance are generally defined in multi-year service agreements (e.g. elevators, chillers, generators, etc.). Additional maintenance costs are required for general repairs and upkeep of SPP facilities.

Additional funding for aging facilities results in an increase in general plant maintenance expense year over year.

<b>Maintenance Expense (\$ millions)</b>	<b>2022 Budget</b>	<b>2022 Forecast</b>	<b>2023 Budget</b>	<b>Prior 2023</b>
General facilities	\$1.3	\$1.2	\$1.4	\$1.4

## Contract Services

The WEIS maintenance budget is driven by the IT hardware, software and market system applications used to support the WEIS service. The RC West maintenance budget includes various subscriptions and support specific to RC West. Maintenance costs for WEIS and RC West remain relatively consistent year-over-year.

The 2023 WRAP budget includes a full year of maintenance on hardware and purchased software associated with the WRAP program whereas the 2022 forecast included only a partial year of costs due to mid-year purchases in 2022 as the implementation was ramping up.

<b>Maintenance Expense (\$ millions)</b>	<b><u>2022 Budget</u></b>	<b><u>2022 Forecast</u></b>	<b><u>2023 Budget</u></b>	<b><u>Prior 2023</u></b>
WEIS	\$0.2	\$0.2	\$0.2	\$0.2
WRAP	0.0	0.1	0.4	0.0
RC West	0.1	0.1	0.2	0.1
<b>Total</b>	<b>\$0.3</b>	<b>\$0.5</b>	<b>\$0.7</b>	<b>\$0.3</b>

## OTHER OPERATING EXPENSES

### Administrative Expenses

<b>Administrative (\$ millions)</b>	<b><u>2022 Budget</u></b>	<b><u>2022 Forecast</u></b>	<b><u>2023 Budget</u></b>	<b><u>Prior 2023</u></b>
Insurance	\$2.0	\$2.2	\$2.1	\$2.0
Dues	0.8	0.8	0.9	0.8
Equipment	0.7	0.7	0.8	0.7
Utilities	0.7	0.7	0.7	0.7
Office	0.6	0.6	0.7	0.7
Property tax	0.6	0.6	0.6	0.6
Donations	0.2	0.0	0.0	0.2
<b>Total Administrative</b>	<b>\$5.5</b>	<b>\$5.7</b>	<b>\$5.8</b>	<b>\$5.7</b>

The largest component of administrative expenses is related to insurance costs, but also includes items such as professional dues and association memberships, small equipment purchases, utility, office expenses and property taxes. Charitable donations have been removed from the 2022 forecast and 2023 budget based on FERC's ongoing review of donation practices of utilities.

### IT Communications Infrastructure

<b>Communications (\$ millions)</b>	<b><u>2022 Budget</u></b>	<b><u>2022 Forecast</u></b>	<b><u>2023 Budget</u></b>	<b><u>Prior 2023</u></b>
Network	\$5.0	\$4.8	\$5.2	\$5.1
Cellular, satellite, long distance	0.2	0.1	0.1	0.2
<b>Total</b>	<b>\$5.2</b>	<b>\$4.9</b>	<b>\$5.3</b>	<b>\$5.3</b>

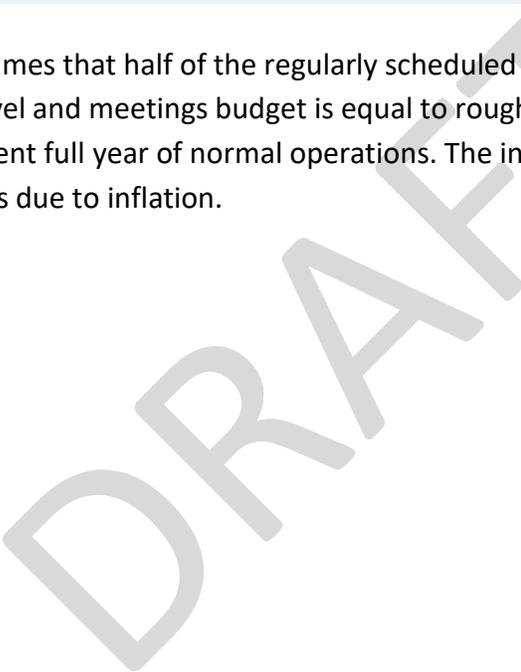
Communications infrastructure includes all expenditures related to SPP's internal and external networks and telecommunications. Network communications include frame relay and circuit

costs, including components for bandwidth between data centers, and circuits to members, market participants, and other service organizations. The majority of expenses in this budget are ongoing and under long-term contracts, making the overall spend consistent each year.

**Travel and Meetings**

<b>Travel &amp; Meetings (\$ millions)</b>	<b><u>2022 Budget</u></b>	<b><u>2022 Forecast</u></b>	<b><u>2023 Budget</u></b>	<b><u>Prior 2023</u></b>
Travel expenses	\$1.1	\$0.9	\$1.4	\$1.4
Board and committee meetings	0.2	0.2	0.3	0.2
Working group meetings	0.1	0.0	0.1	0.1
Other meetings	0.3	0.2	0.3	0.3
<b>Total</b>	<b>\$1.7</b>	<b>\$1.4</b>	<b>\$2.1</b>	<b>\$2.0</b>

The 2023 budget assumes that half of the regularly scheduled meetings will be conducted in-person. The 2023 travel and meetings budget is equal to roughly 61 percent of the actual spend in 2019, the most recent full year of normal operations. The increase is primarily associated with rising travel costs due to inflation.



## V. CAPITAL PROJECTS

*Based on historical spending trends and the most current information on cost, timing and resource projections, a \$16.0 million allocation of funds is requested for 2023 capital activities.*

In preparing the recommendation for the current budget cycle, the Project Review and Prioritization Committee (PRPC) considered projects on the merit of strategic plan alignment, member value, resource impact, and risk. The project and portfolio process has continued to evolve, this past year in particular due to the launch of SPP's first Comprehensive Roadmap (the Roadmap). Programs and projects managed by SPP's Project Management Office (PMO) and overseen by the PRPC are currently a subset portfolio of the Roadmap efforts. The newly created Strategic Services group will be focused on bringing greater conformity and consistency to the way SPPs manages its strategic efforts from conception to implementation. As the Roadmap and supporting processes become fully developed and mature, greater alignment with the project portfolio will be achieved and ultimately a more direct conduit to the capital spending requested through the annual budget process will be established.

As presented in the following sections, foundation work necessary for 2023 is estimated to be \$12.0 million. Estimated capital spending on enterprise projects currently projected to start in 2023 range from \$4.5 to \$8.2 million. Historically, SPP annually spends an average of \$10.0 million on foundational capital activities and \$4.0 million on enterprise projects. Based on historical trends for spending, and the most current information on cost, timing and resource projections, a \$16.0 million allocation is requested for 2023 capital activities.

Projects expected to commence in 2023 and foundational capital activities will be discussed in more detail in the following sections. Information regarding carryover projects and those anticipated to start in 2024 and beyond is included in Supplementary Schedules section IX.

### 2023 CAPITAL PROJECTS

*SPP expects to commence projects in 2023 with total estimated capital costs ranging from \$4.5 to \$8.2 million.*

The following table illustrates the estimated range of capital costs for those projects that are expected to commence in 2023. A brief overview of these projects is presented immediately following the table.

Cost Projections for 2023 Projects (\$ millions)				
Projects with 2023 Start Dates	Estimated Costs	Estimate Basis	Contingent Upon	Resource Estimates/ Requirements
FERC Order 881 *	\$2.0 - \$4.0	Internal	FERC Approval	pending
Markets UI/API Rewrite *	\$0.6 - \$1.0	Internal	n/a	yes
Identity Access Management User Lifecycle	\$1.0 - \$1.5	Vendor	IAM Deployment Project	yes
Data Aging and Archiving	\$0.3 - \$0.6	Internal	n/a	yes
Freeze Date Replacement	\$0.6 - \$1.0	Vendor	FERC/Other Approval	pending
Data Loss Prevention	\$.02 - \$0.06	Internal	n/a	yes
Z2 FERC Remand Order	\$0.0 - \$0.02	Internal	FERC Approval	yes
<b>Estimated Costs for 2023 Projects</b>	<b>\$4.5-\$8.2</b>			

\* New to the portfolio in 2022 (i.e not presented in previous budget cycles)

## FERC Order 881

FERC Order No. 881 was issued with an effective date of March 14, 2022 with compliance filings due within 120 days. SPP completed their filing of Attachment M on July 12, 2022.

Requirements must be implemented no more than three years from the compliance filing due date (July 2025). The order requires new systems and/or processes including: SPP Transmission Line Facility Ratings Database (10 days hourly values and four seasonal values, updated hourly), new Rating Validation Software, importing weather data, and maintaining equipment mapping. The largest impact to existing systems includes new configurations to the Energy Management System (EMS) to read ratings from the database. At this time, it is uncertain whether various elements of this development will be performed in-house or externally contracted, the outcome for which could materially impact the actual capital expenditures needed for this project.

## Markets UI/API Rewrite

The current markets user interface (MUI) is written using software that is no longer supported by the vendor which necessitates a rewrite of the application. SPP would like to move the development and maintenance of this tool, along with the market participant application programming interface (API), in-house. This will address security concerns with deprecated software, lessen dependency on current vendor, and result in long term savings with avoidance of future external development costs.

## Identity and Access Management (IAM) User Lifecycle Management

This project complements and expands the functionality of the IAM – Deployment Project to address SPP’s long-term IAM needs. This additional functionality will allow SPP to fully utilize the automated capabilities of the IAM solution and reduce both compliance and security risk surrounding access management. The additional functionality to be implemented is summarized as follows:

- Self Service Password Management
- User Lifecycle Management
- Advanced User Lifecycle Management
- Access Requests
- Next Generation Ticketing
- Iterative Integration of Additional Applications

The start date for this project is dependent on the progress of the IAM Deployment project which is currently underway.

## Data Aging and Archiving

Excessive data retention can pose a risk to SPP in the event that personally identifiable information (PII), outdated document drafts, etc., are not removed in a timely fashion and could be damaging to SPP if disclosed or if the data is breached. Additionally, excessive or outdated data retentions cause operational and manual bottlenecks. This project is to implement an automated aging and archiving solution to achieve the following:

- Better management of exploding volume of data
- Reduce operational and manual bottlenecks to information systems
- Decrease disk usage and improve system performance
- Purge and/or identify outdated records and documents
- Reduce risk of data exposure in the event of a data breach

## Freeze Date Replacement

SPP’s congestion management process details the method used to allocate rights for transmission service on flowgates with shared impacts between one or more parties of the Congestion Management Process (CMP) members. The project will update the process that calculates the firm flow entitlements on reciprocal constraints used in real-time congestion

processes in accordance with new rules and requirements agreed upon by CMP members. The project start date is pending: 1) methodology approval from the CMP council and 2) formal filing of approved language changes with FERC.

## **Data Loss Prevention**

The landscape of where data lives is changing as SPP purchases more cloud services and places data in physical locations outside of SPP's complete control and visibility. Data loss prevention (DLP) technologies identify, monitor and protect data in use or in motion on the network whether on premise or in cloud services and data at rest whether on storage, desktops, laptops and/or mobile devices. This project will implement tools that will help SPP identify, monitor and protect data regardless of the physical location; mitigate the risk of data loss by preventing outbound flow of sensitive information; enforce data security policies and provide a centralized management framework; and provide data discovery and classification.

## **Z2 FERC Remand Order**

SPP is currently waiting for final instruction from FERC on how to effectuate a resolution of the resettlement of the historical period from 2008-2015. SPP has evaluated two options - 1) a historical day by day resettlement and 2) an accelerated netting solution. Option 1 would require a significant time investment (8-10 years) and would necessitate the development of a software solution. Option 2 removes the need to develop a new tool and also eliminates most difficulties associated with collection efforts that would likely occur with the historical day by day resettlement option.

***The following projects are not financially represented in the 2023-2025 budget. They are mentioned here for informational purposes only to acknowledge their potential impacts on future work once more definitive information becomes known relative to scope, resource requirements, and timing.***

## **FERC Order 2222**

SPP submitted its compliance filing for FERC Order 2222 on April 29, 2022. The filing proposed revised tariff language necessary for compliance with FERC's order. Multiple project submissions into the project pipeline will occur with FERC approval. The scope and extent of the implementation projects is pending the approved changes to the tariff. As more information is solidified, budget and resource estimates will be compiled and schedules will be developed.

## Winter Weather Event Improvements

This program covers implementation of SPP board-approved recommendations to improve SPP and member entities' ability to respond to the impact of extreme weather conditions. The initiative encompasses a broad range of improvements, from policy development to governing document revisions to implementation of member-impacting processes. The Improved Resource Availability Task Force (IRATF) is approving solution designs as they are developed; if solutions require system changes, the program will report any potential expenditures needed.

## West RTO

Terms and conditions for western membership was approved by the board in October 2021. The West RTO effort remains in the scoping phase where system changes, resource needs, budget estimates and schedules are being refined. Depending on the timing of when these various elements become known, the budget would likely be submitted for approval outside of the normal budget cycle.

## Markets+

Markets+ is a conceptual bundle of services proposed by SPP that would centralize day-ahead and real-time unit commitment and dispatch, provide hurdle-free transmission service across its footprint and pave the way for the reliable integration of a rapidly growing fleet of renewable generation. Budget will be prepared and approved outside normal budget process as a contract services engagement.

## FOUNDATION CAPITAL EXPENDITURES

The following section describes the various categories of foundation capital expenditures.

	<b>2023 Budget</b>	<b>2024 Forecast</b>	<b>2025 Forecast</b>	<b>Total Capital</b>
<b>Foundation (\$ millions)</b>				
Information Technology	\$8.2	\$8.4	\$8.5	\$25.1
Operations	2.8	2.5	2.5	7.8
Engineering	0.1	0.1	0.1	0.3
Facilities	0.9	0.4	0.0	1.4
Total Foundation	\$12.0	\$11.4	\$11.1	\$34.5

## Information Technology

The IT Foundation budget captures corporate-wide hardware and software requirements to support SPP’s business applications and systems. This budget is used for ongoing upgrades and replacements of SPP’s aged hardware infrastructure, as well as incremental hardware, software, and application requirements driven by new corporate initiatives. The 2023 budget and 2024-2025 forecast by category for IT Foundation is illustrated below. See Supplementary Schedules section IX for detailed information on planned expenditures in 2023 for IT Foundation Expenditures.

### IT Infrastructure Refresh

This category includes upgrades and replacements of aged technology and software to support existing systems and services (markets, reliability, settlements, corporate functions, etc.).

	2023 Budget	2024 Forecast	2025 Forecast	Total Capital
<b>IT Foundation (\$ millions)</b>				
Infrastructure Refresh				
Servers	\$2.5	\$2.8	\$3.1	\$8.4
Storage	1.1	1.6	1.8	4.5
Network	1.5	1.7	1.6	4.8
Software licenses and upgrades	1.3	0.7	0.8	2.7
<b>Total IT Infrastructure Refresh</b>	<b>\$6.4</b>	<b>\$6.7</b>	<b>\$7.2</b>	<b>\$20.3</b>

### IT New Initiatives

The new initiatives category consists primarily of software purchases related to new technology /functionality. SPP recently developed a five-year strategic plan for technology, which included a number of architectural enhancements to better position SPP for security, automation, and cloud service activities. These enhancements will be layered and implemented over the five-year period, with many beginning in 2022 and requiring a multi-year implementation.

	2023 Budget	2024 Forecast	2025 Forecast	Total Capital
<b>IT Foundation (\$ millions)</b>				
New Initiatives				
Servers	\$0.7	\$0.9	\$0.7	\$2.3
Software licenses and upgrades	0.3	0.5	0.3	1.1
Storage	0.4	0.3	0.3	1.0
Network	0.4	0.0	0.0	0.4
<b>Total New Initiatives</b>	<b>\$1.8</b>	<b>\$1.7</b>	<b>\$1.3</b>	<b>\$4.8</b>

## Operations Marketplace and Other System Enhancements

The operations foundation budget primarily consists of planned enhancements to the market operations system (MOS). This includes modifications to the market operator interface (MOI), market user interface (MUI) and market clearing engine (MCE) applications as well as the market database (MDB). MOS enhancements drive over 75 percent of the operations foundation budget. The remainder includes enhancements for numerous other systems and tools as summarized in the table below.

(\$ millions)	2023 Budget	2024 Forecast	2025 Forecast	Total Capital
<b>Operations Marketplace and Other System Enhancements</b>				
Market Operation System (MOS)	\$2.0	\$2.0	\$2.0	\$6.0
Energy Management System (EMS)	0.1	0.1	0.1	0.3
Congestion Hedging System (iHedge)	0.3	0.3	0.3	0.8
Centralized Modeling Tool (CMT)	0.3	0.0	0.0	0.3
Dispatch Training Simulator (DTS)	0.1	0.1	0.1	0.2
Miscellaneous (CROW, PMU, DSA Tools)	0.1	0.1	0.1	0.2
<b>Total Operations Marketplace and Other System Enhancements</b>	<b>\$2.8</b>	<b>\$2.5</b>	<b>\$2.5</b>	<b>\$7.8</b>

## Facility Related Capital Projects

	2023 Budget	2024 Forecast	2025 Forecast	Total Capital
<b>Facilities (\$ millions)</b>				
Various facility improvements	\$0.9	\$0.4	\$0.0	\$1.4
<b>Total Facilities</b>	<b>\$0.9</b>	<b>\$0.4</b>	<b>\$0.0</b>	<b>\$1.4</b>

Significant facility initiatives in 2023 consist of the following:

- Installation of hot aisle containment solution to address the incremental stress placed on both the Chenal and Maumelle data center cooling systems that occurred when additional storage devices were installed in early 2022.
- Updates to technology supporting the map boards in both datacenters given current equipment is over a decade old and is requiring an increasing amount of upkeep. This work will provide a more reliable solution, adjust to the needs of real time operations, and increase the ability to troubleshoot issues when they arise.
- Purchase of four replacement CRACs (computer room air conditioning units), expanding video conferencing capabilities, and reconfiguring training space.

## Capital Spending Summary

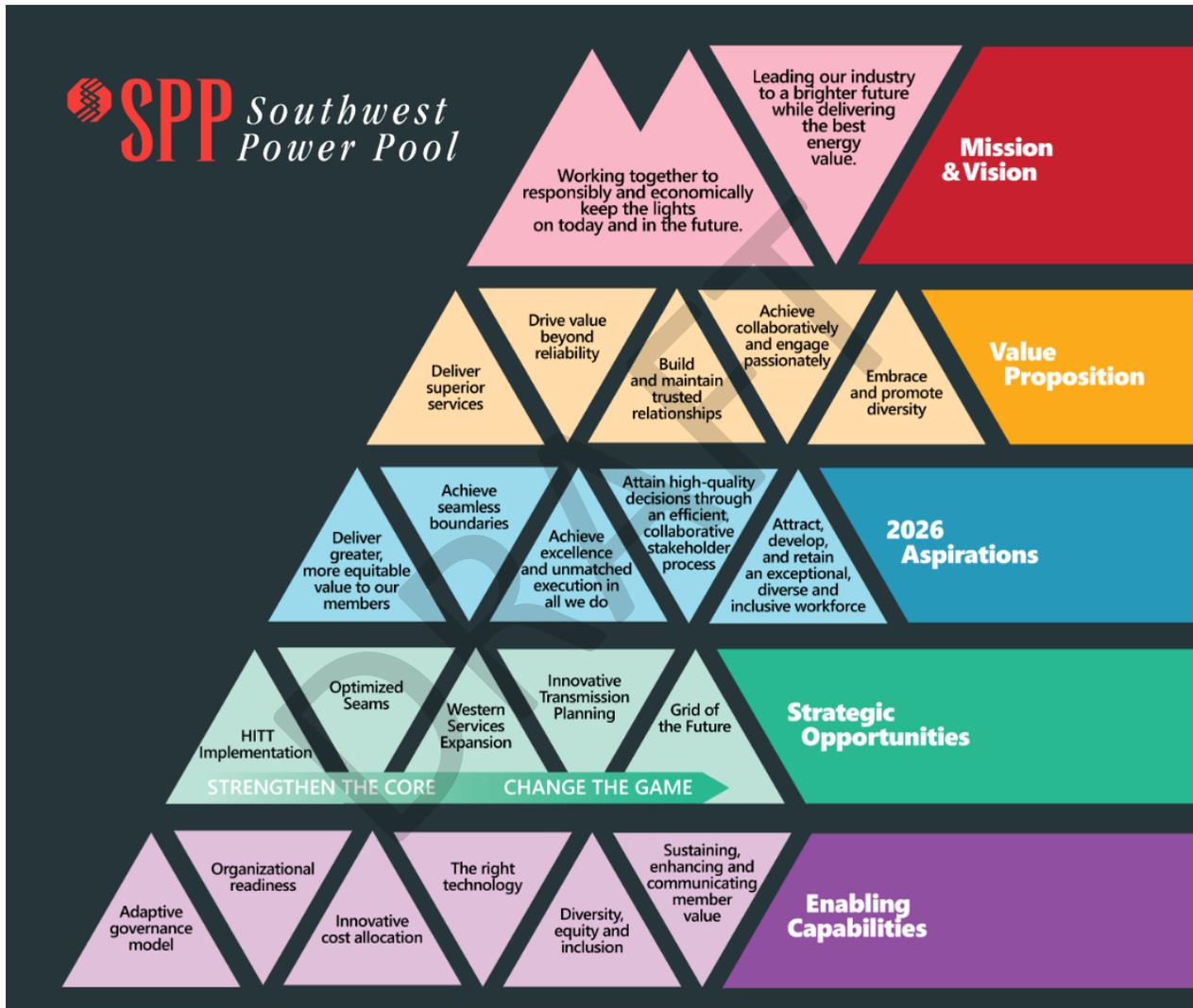
*SPP expects 2023-2025 capital expenditures to be approximately \$44.9 million.*

The following table summarizes estimated capital spending for projects in the 2023-2025 budget cycle, including projects approved in previous years not expected to be completed in 2022 (i.e. carryover projects). The table does not include recommended projects with no capital spend or those projects covered by departmental operating budgets.

2023 - 2025 Capital Projects Forecast (\$ millions)					
	<u>Prior Year(s)</u>	<u>2023 Budget</u>	<u>2024 Forecast</u>	<u>2025 Forecast</u>	<u>Total Capital</u>
<b>Capital Projects</b>					
<b>Carryover</b>					
SCRIPT	\$0.3	\$1.1	\$0.5	\$0.3	\$2.2
IAM Deployment	0.5	0.2	0.0	0.0	0.7
HITT Uncertainty Product	0.2	0.7	0.0	0.0	0.9
Electric Storage Resources	0.2	0.1	0.0	0.0	0.3
ICCP Upgrade	0.1	0.1	0.0	0.0	0.1
<b>New Projects</b>					
FERC Order 881	0.0	1.1	1.5	0.5	3.0
Markets UI/API Rewrite	0.0	0.5	0.3	0.0	0.8
IAM User Lifecycle	0.0	0.5	0.8	0.0	1.3
Data Aging and Archiving	0.0	0.6	0.0	0.0	0.6
Freeze Date Replacement	0.0	0.4	0.4	0.0	0.8
Data Loss Prevention	0.0	0.1	0.0	0.0	0.1
Z2 FERC Remand Order	0.0	0.0	0.0	0.0	0.0
HITT Multi-Day Unit Commitment	0.0	0.0	0.0	0.8	0.8
Interface Pricing & Pseudo Tie Modeling	0.0	0.0	0.0	0.2	0.2
<b>Total Capital Projects</b>	<b>\$1.2</b>	<b>\$5.2</b>	<b>\$3.5</b>	<b>\$1.7</b>	<b>\$11.6</b>
<b>Foundation</b>					
Information Technology		\$8.2	\$8.4	\$8.5	\$25.1
Operations		2.8	2.5	2.5	7.8
Engineering		0.1	0.1	0.1	0.3
Facilities		0.9	0.4	0.0	1.4
<b>Total Foundation *</b>		<b>\$12.0</b>	<b>\$11.4</b>	<b>\$11.1</b>	<b>\$34.5</b>
<b>2023 - 2025 Capital Budget Before Contract Services</b>	<b>\$1.2</b>	<b>\$17.2</b>	<b>\$14.9</b>	<b>\$12.8</b>	<b>\$46.1</b>
<b>2023-2025 SPP RTO Capital Budget</b>					<b>\$44.9</b>
<b>Contract Services</b>					
RC West EMS/CMT Enhancements		\$0.0	\$0.0	\$0.0	\$0.1
WEIS Ongoing WEIS Market Enhancements		0.2	0.2	0.2	0.6
<b>Total Contract Services (funded thru contract revenues)</b>		<b>\$0.2</b>	<b>\$0.2</b>	<b>\$0.2</b>	<b>\$0.7</b>
<b>2023 - 2025 Capital Budget Including Contract Services</b>		<b>\$17.4</b>	<b>\$15.2</b>	<b>\$13.0</b>	<b>\$45.5</b>
* Foundation projects are reforecast during each budget cycle and do not include any carry-over funds.					

## VI. INVESTMENT OF INCREMENTAL NRR

*In addition to increased labor costs associated with inflationary pressures, the Aspire 2026 strategic plan initiatives necessitate additional workforce to develop and implement in accordance with the timelines identified in the planning horizon.*



The \$18.1 million increase in the 2023 budgeted run-rate NRR (referenced in section III. 2023 Net Revenue Requirement) is primarily driven by both incremental and inflationary factors as outlined in the table below and discussed in detail following.

### 2022 NRR Forecast vs 2023 NRR Budget (\$ millions)

2022 Adjusted run-rate NRR	\$173.8
Incremental increases	9.2
Inflationary increases	8.2
Net other increases	0.7
2023 Budget run-rate NRR	\$191.9

\* Excludes PY recovery, 2022 non-recurring compensation expense and RC West & WEIS expenses

## INCREMENTAL WORKLOAD AND STAFFING

*Resource-planning efforts have concluded that successfully achieving its strategic opportunities and aspirations will require additional human resources, as will other work to be performed in the interest of investing to achieve strategic objectives, developing bench strength and addressing resource-capacity shortages. The 2023 budget includes 36 incremental positions.*

### 2022 NRR Forecast vs 2023 NRR Budget (\$ millions)

Salary & benefit increases (incremental)	\$6.3
HW & SW maintenance for new projects	1.3
Increases in outside services (excluding pass-thru)	1.6
Incremental increases	\$9.2

## Incremental Salary & Benefits Impact

The budgeted investment for the 36 incremental positions is \$4.7 million, including \$0.4 million for two positions in the independent SPP Market Monitoring Unit (MMU). The budget includes 13 positions to be added in SPP's IT organization, eight in engineering, six in operations, three in human capital, two in project management and two in external affairs and stakeholder relations. The remainder of the incremental impact includes the full-year impact of the positions added during 2022 of approximately \$1.2 million, the increase in pension contributions in 2023 of \$0.3 million and miscellaneous other increases of \$0.1 million.

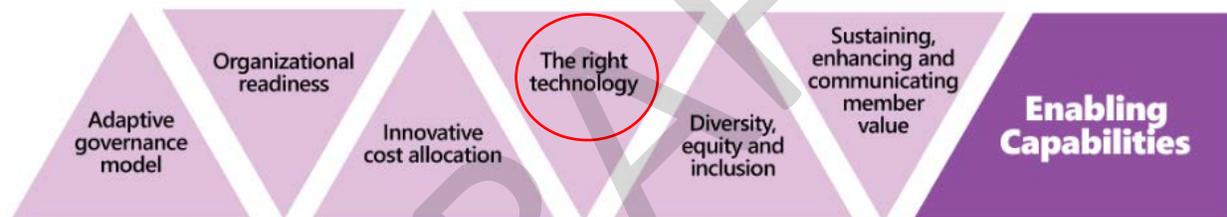
More information regarding the specific needs for positions in each of these areas is below.

### *IT: 13 incremental positions*

As SPP considered its greatest resource needs related to information technology, IT leaders looked for positions that would present significant or critical risk if not hired. The risk factors they considered included:

- 1) Exposure to security, reliability, financial (sanctions and fines), compliance, and reputational risks
- 2) Increased burnout and loss of human capital, which is also a threat to SPP's mission
- 3) Impact of ability to effectively and efficiently fulfill its mission in support of SPP's strategic initiatives and business objectives

The Aspire 2026 strategic plan identifies enabling capabilities designed to support strategic opportunities and that indicate how resources should be allocated to execute SPP's strategy. All incremental IT position support **the right technology** enabling capability.



Technology readiness and risk mitigation are the driving factors for the increase in staff with the primary focus on security and vulnerability. Some of the work related to these topics are directed by the SPP board of directors, and others are driven by FERC mandates as a result of CIP audits.

The original FIRSTeam was established to ensure **organizational readiness** for day-to-day and future responsibilities. They also help detect and address issues before they result in operational interruption, which supports the enabling capability of **sustaining, enhancing, and communicating member value**. In order to better support the IT systems and processes used by operations staff, an additional FIRSTeam staff was established in 2022. The 2023 budget includes a supervisor and an analyst to support the new FIRSTeam. Incremental resources are also included for the build-out of the new architecture in conjunction with the ICCP Upgrade project and for future projects including FERC Orders 881 and 2222, both of which also support **sustaining, enhancing, and communicating member value**.

One new position will help proactively develop the systems, technologies, data acquisition and management capabilities, protocols, processes and policies needed to optimize SPP’s current and future IT capabilities associated with the **Grid of the Future** strategic opportunity.

Three incremental positions are included to address various risk management and **organizational readiness** requirements associated with growth in databases, increases in SPP desktop support needs and incremental support for multi-use collaboration tools.

The number of databases supported by SPP database staff has increased by 400% over the past eight years and this number is expected to continually increase with the expansion of the SPP footprint. A permanent database administration (DBA) staff member is included in the budget to develop automation processes to standardize and simplify the maintenance of existing database systems, which will ensure continued availability of our existing systems and increase efficiencies in the standardization and automation of maintenance, compliance and cybersecurity processes.

SPP’s user desktop environment plays a vital role in SPP’s cybersecurity. Over 500 corporate virtual machines and personal computers have been added over the past two years. A support position is included in SPP’s IT support services (ITSS) department to focus on mounting security concerns and to address new/increased workload related to SPP growth associated with the new hybrid working environment.

An incremental position is included for focus on installation, implementation, patching and daily upkeep of the collaboration/planning software suite, which is utilized across multiple SPP departments and integrates with numerous other products. This responsibility requires the full focus of a full-time employee in order to provide acceptable customer service to the business owners of the currently assigned applications.

*Engineering: Eight incremental positions*

The Engineering organization’s resource needs relate directly to four of the five strategic opportunities identified in the Aspire 2026 strategic plan. Those opportunities along with a list of major deliverables are summarized below.



The HITT recommendations were developed to help SPP and its members reliably provide electricity in a rapidly changing environment, keep SPP's markets cost-effective and efficient, and align transmission costs to get electricity to customers in a more equitable manner. The following initiatives are in support of **HITT Implementation** in order to respond to the rapidly evolving electric grid by handling a changing generation mix that includes new technologies and changes to federal/state regulations.

- Execution of CRIS (capacity resource interconnection service)
- Implementation of Attachment AQ process modifications

Seamless relationships with neighboring transmission owners, reducing cost of, and improving delivery of, power across borders. Engineering initiatives requiring additional workload in support of **Optimized Seams** include the following:

- Implementation of five-year horizon plan
- Delivery of Common Seams Initiative
- Development of SCRIPT T1-T8 Policy

The Aspire 2026 **Innovative Transmission Planning** effort was designed to strategically develop 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. Additional staff will be involved in the following initiatives associated with these efforts. Development of consolidated planning processes.

- Implementation of SCRIPT automation
- Eliminate GI Backlog
- Implementation of planning process improvements

SPP must continue to, and improve our ability to, anticipate changes in how the grid will be used. We can then proactively address, drive, and shape some of that anticipated change. This opportunity encompasses both the improved policies and optimized operations that will help us achieve our aspirations. Incremental engineering staff will support this Aspire 2026 **Grid of the Future** strategic opportunity in the following areas:

- Implementation of distributed energy resources (DER)/electric storage resources (ESR) policy into modeling processes and integration into tariff studies
- Facilitation of the Future Grid Strategy Advisory Group policies and implementation strategy development
- Management of staff resource capacity and SPP roadmap initiative prioritization

Incremental positions will also address work efforts associated with resource adequacy as well as ensure compliance with the recently issued FERC NOPRs. Additional details associated with those efforts are summarized below.

- **Resource Adequacy**

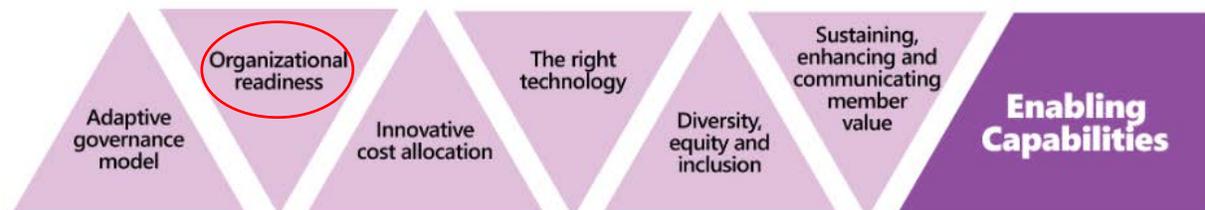
- Implement winter weather event (WWE) recommendations
- Develop and implement inverter based resource integration study (IBIS) recommendation
- WWE modeling improvements delivery
- Delivery of critical resource adequacy initiatives fuel assistance (FA) and resource planning and availability (RPA)
- Develop winter season resource adequacy requirements
- Insure quality engagement and collaboration with stakeholders on critical performance-based accreditation (PBA) and increased planning reserve margin (PRM) obligations and improvements

- **FERC Notices of Proposed Rulemaking (NOPR)**

- There have been two major NOPRs to transmission planning and generation interconnection functions. While SPP is working to respond in 2022, it is expected these become orders by the end of 2022 or early 2023. These two orders will affect most engineering initiatives.

*Operations: Six incremental positions*

SPP’s Operations organization anticipates increased workload driven by recent developments related to the FERC 2021 audit and the February 2021 winter weather event, including implementation of recommendations from FERC and the SPP board of director recommendations related to the winter weather event. **Organizational readiness** and risk mitigation are the driving factors for the increase in staff to address these issues.



The need to enhance SPP’s preparedness for extreme weather events and a changing resource mix makes reliable operation of the grid increasingly complex and dynamic. FERC, NERC and the

Midwest Reliability Organization (MRO) all have increased expectations related to regional reliability. In turn, these have led NERC Registered Entities to develop recommendations and requirements intended to increase awareness and preparedness that span the next-day, seven-day, and seasonal horizons.

Incremental positions in the operations organization are needed to:

- Assist in minimizing reliability risk while still maximizing economic benefits for members and market participants by allowing for optimization of multi-day-ahead commitment of long-lead time resources during tight balancing authority capacity conditions and factoring in uncertainty of wind and load forecast on multi day ahead basis.
- Maintain reliability with more complex operational challenges resulting from resource capacity, changing resource mix, fuel supply limitations and more extreme weather conditions.
- Minimize risk of SPP BA issuing level 2 or 3 energy emergency alerts (EEA) and facing a load shed situation.
- Provide maximum maintenance windows for transmission and generation equipment of members and market participants while still maintaining risk levels of operating RC and BA footprint at acceptable levels.

#### *Human Capital: Three incremental positions*

Attracting and recruiting talent has become more challenging in the current job market. Coupled with an ever-increasing workload and constantly changing technology, recruiting and employee-engagement challenges put SPP at risk of not having enough staff to perform its critical work or having a workforce that is trained to perform that work efficiently and effectively.

**Organizational readiness** is critical for SPP's overall recruitment strategy to increase the number of diverse applicants and expand recruiting nationally and in consideration of remote work. In addition to focus on recruiting, a new position is budgeted to create training content designed specifically for new hires and experienced professionals in engineering and other technical roles.

#### *Project management: Two incremental positions*

The two incremental project management positions will work to better align projects with **strategic opportunities** and **enabling capabilities** via tracking and reporting. Departmental objectives will be linked to SPP's strategy, vision and mission, and the comprehensive roadmap will be incorporated into the time reporting tool for management and reporting.

*External Affairs and Stakeholder Relations: Two incremental positions*

SPP is experiencing an increase in both quantity and complexity of stakeholder interactions, and incremental headcount in the external affairs organization is needed to support the higher level of service and maintain the quality of the service provided to stakeholders. An additional position is included to oversee NERC credential maintenance training and PRPC projects some of which support the **optimized seams and western expansion** strategic opportunities.

**Incremental Maintenance Impact**

The maintenance increase for new projects (\$1.3 million) includes path A/B PRPC projects (data aging and archive, freeze date, MUI rewrite and SCRIPT), incremental engineering and operations licenses and multiple new IT initiatives. Maintenance is discussed in detail in resource utilization section IV.

**Incremental Outside Services Impact**

The net increase in incremental outside services (\$1.6 million) is associated with new IT initiatives, additional SaaS subscriptions, RSC expenses to include outside consultant and increase in board of directors compensation. Outside services are discussed in detail in resource utilization section IV.

**MARKET ADJUSTMENTS AND INFLATION**

In addition to the incremental impacts to the NRR, market adjustments and inflationary factors also contribute to the

2022 NRR Forecast vs 2023 NRR Budget (\$ millions)	
Salary & benefit increases (market/promotions/merit)	\$6.3
HW & SW maintenance year-over-year increases	0.8
Increased costs for travel & meetings	0.8
Increased fees/taxes on existing communications circuits	0.4
Inflationary increases	\$8.2

**Salary & Benefits Impact**

The 2023 salary and benefits budget includes an increase over the 2022 forecast of \$4.8 million (6.0 percent) for market adjustments, promotions and merit increases, and \$0.6 million increase in healthcare costs. The full-year effect of the incremental 2.5% merit applied in May 2022 also contributes to an increase of \$0.9 million over the 2022 forecast.

The increase in the 2023 budget for market adjustments, promotions and merit increases reflects economic inflation and nation-wide competition for STEM-related job roles. The increase in the promotion pool budget addresses the addition of job role levels in key job families, promotes growth opportunities and fosters retention by offering expanded career paths in key areas of the company. Both of these strategies are supported by the human resources committee and take into consideration an independent consulting firm’s recent compensation analysis.

**Travel & Meetings Impact**

The travel and meetings budget reflects Inflationary adjustments and the impacts of increased travel, mostly by staff in departments with responsibilities directly related to stakeholder service. Examples include travel associated with providing onboarding services and outreach to stakeholders, supporting of SPP’s Grid of the Future and Western Services Expansion strategic opportunities, and focusing on proactive stakeholder support and deeper project and initiative engagement.

**Maintenance and Communications Impact**

Inflationary adjustments are also reflected in year-over-year growth in maintenance for existing products (\$0.8 million) and fees/taxes on existing communications circuits (\$0.4 million).

**NET OTHER NRR IMPACTS**

Net other increase to the NRR is primarily due to lower expenses associated with the initial ramp up of implementation for WRAP in 2022 and WEIS onboarding fees that were recognized over 12 months with 10 months of revenues recognized in 2022 and only 2 months in 2023. This NRR increase is partially offset by an additional revenues associated with SPP billable resources for GI studies (which contributes to a decrease in the NRR for 2023) and a lower capital expenditure reserve in 2023.

<b>2022 NRR Forecast vs 2023 NRR Budget (\$ millions)</b>	
Net change in contract services	\$1.5
Increase in misc income (GI studies staff time)	(0.6)
Miscellaneous other fav/unfav changes	(0.2)
Net other increases	<u>\$0.7</u>

## VII. DEBT SERVICE

*SPP's capital spending is financed through financial institutions and investors at competitive terms.*

SPP's capital projects are funded from borrowings under medium and long-term credit agreements, primarily with institutional investors. The duration of these borrowings is intended to match the useful life of the acquired assets. Annual principal and interest payments for borrowings (net of capitalized interest) are included in the NRR calculation whereas the capital project costs are excluded from the calculation. Principal payments associated with borrowings for contract services are also excluded from the NRR calculation, as principal and interest obligations are recovered from contract customers as part of annual contract billing during the initial term of each contract.

SPP began utilizing an \$80 million revolving line of credit in 2019 to fund capital expenditures. Capital expenditures in 2019 and 2020 were funded from this funding source. Lenders converted advances from the credit line to four-year term notes at the end of each year.

SPP also utilized its unsecured revolving line of credit to fund implementation costs for western contract services. Total draws were converted into four-year term notes at the end of implementation. Implementation draws during 2019 of \$4.7 million were converted in 2020 into term notes for the reliability coordination services contract. Term note conversion in 2021 for implementation of the energy imbalance market was \$8.4 million.

SPP received funds in late 2021 from a new \$28.0 million loan to fund 2021 and 2022 capital expenditures. Principal payments on this new funding are deferred until 2026.

SPP plans to renew its \$80.0 million line of credit with a 5-year loan term in 2023 and will utilize it to fund capital spending. The conversion for 2023 capital spend is expected to occur in early 2024 with principal repayments commencing also in 2024.

The schedule below shows the principal amounts outstanding for SPP's existing and new borrowings at the beginning and end of the 2023-2025 budget periods as well as the annual principal payments.

Future Debt Repayments (\$ millions)								
	Issue Date	Issue Amount	Due Date	Balance 1/1/23	2023 Prin. Pmts.	2024 Prin. Pmts.	2025 Prin. Pmts.	Balance 12/31/2025
Existing Debt	2007-2021	\$354.4	2024-2042	\$156.7	(\$28.7)	(\$27.2)	(\$24.0)	\$76.8
New Debt								
New term note due 2028 (2023 capex)	1/1/2024	\$10.0	Dec-2028	\$0.0	\$0.0	(\$1.8)	(\$1.9)	\$6.3
New term note due 2029 (2024 capex)	1/1/2025	\$10.0	Dec-2029	\$0.0	\$0.0	\$0.0	(\$1.8)	\$8.2
<b>Total RTO Debt</b>		<b>\$374.4</b>		<b>\$156.7</b>	<b>(\$28.7)</b>	<b>(\$29.0)</b>	<b>(\$27.6)</b>	<b>\$91.3</b>
Contract Services Debt	2020-2021	\$13.1	2023-2025	\$5.0	(\$2.3)	(\$2.2)	(\$0.6)	\$0.0
<b>Total Debt</b>		<b>\$387.4</b>		<b>\$161.7</b>	<b>(\$31.0)</b>	<b>(\$31.2)</b>	<b>(\$28.2)</b>	<b>\$91.3</b>

DRAFT

## VIII. CONTRACT SERVICES

*SPP provides services to several utility customers in the western region under stand-alone contracts separate from the SPP regional tariff.*

### WESTERN INTERCONNECTION UNSCHEDULED FLOW MITIGATION PLAN (WIUFMP)

SPP administers the WIUFMP on behalf of SPP members (or affiliates of members) Northwestern Energy, Tri-State Generation and Transmission, and Western Area Power Administration as well as three entities unaffiliated with SPP which are California Independent System Operator, NV Energy and PacifiCorp.

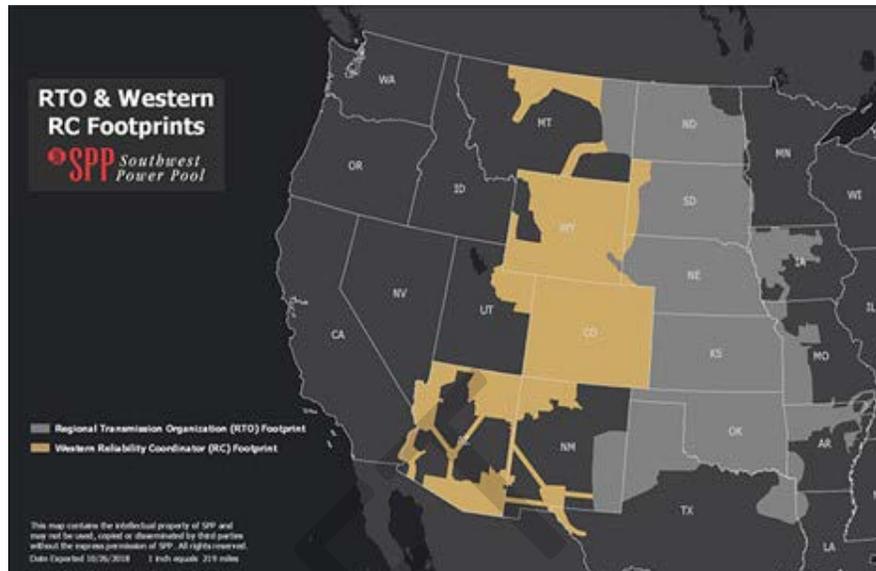
SPP's role as administrator is the collection of fees from users of phase-shifting transformers and other qualified devices on particular transmission lines in the western interconnection and distribution of those collections to the WIUFMP device owners.



The contract began in 2018 and automatically renews for one year terms on December 31 unless terminated by either SPP or the device owners. The contract specifies a fixed charge for this service which is recovered from collections prior to distributions to WIUFMP device owners.

## WESTERN RELIABILITY COORDINATION (RC WEST) SERVICE

SPP serves as the reliability coordinator for 16 entities operating in the western interconnection, including the following SPP members (or affiliates of members): Western Area Power Administration-DSW, Western Area Power Administration-RMR, Tri-State Generation and Transmission and Basin Electric Power Cooperative. Services under the contract began in December 2019, and the contract's initial term ends in 2024.



## WESTERN ENERGY IMBALANCE SERVICE (WEIS)

SPP began operation of the western energy imbalance service market on February 1, 2021. The market includes the entities under the western joint dispatch agreement, including the following SPP members (or affiliates of members): Western Area Power Administration-UGP, Western Area Power Administration-RMR, Municipal Energy Agency of Nebraska, Tri-State Generation and Transmission and Basin Electric Power Cooperative. Xcel Energy-Colorado, Platte River Power Authority, and Black Hills Colorado Electric, LLC joined WEIS in April 2023. Colorado Springs Utilities joined in August 2022, and Public Service Company of Oklahoma is expected to join in 2023. The initial four-year term of the contract term runs through 2024.

## WESTERN RESOURCE ADEQUACY PROGRAM (WRAP)

In 2019, Western Power Pool (WPP) and a broad coalition of stakeholders initiated an effort to establish the Western Resource Adequacy Program (WRAP). The WRAP seeks to enhance and increase reliability for entities across the western footprint while maintaining existing responsibilities for reliable operations and observing existing frameworks for planning, purchasing and delivering energy. The program includes legacy as well as new participants. In 2021, WPP chose SPP to provide program operator services for the WRAP for an initial term of 5 years.

## **SUMMARY OF CONTRACT SERVICES IMPACT ON 2023 NRR**

The RC West and WEIS contracts are administered to provide recovery of all direct costs incurred by SPP under the contracts which includes recovery for debt and interest obtained to fund implementation costs and an allocation of shared overhead. It is this shared overhead that serves to reduce the NRR for SPP. The rate of the contracts are adjusted annually based on costs of service, true up from prior years, changes in NEL, etc. and also reflect recovery for debt obtained to fund implementation costs plus interest. The contracts are expected to generate revenues of \$9.5 million in 2023. The budget assumes \$1.9 million for shared overhead recovery under the contracts which translate 1 for 1 in reducing SPP's NRR in 2023. In addition, new WEIS customers were charged an onboarding fee which is a direct offset to the NRR of \$0.1 million in 2023.

The WRAP agreement outlines program operator services will be completed by SPP for a fixed fee. The revenues are offset by direct costs incurred by SPP during the various implementation phases including staffing, travel, maintenance and consulting costs. The net revenue and expenses represents a \$1.8 million NRR reduction in 2023.

The 2023 budget does not include any impact associated with West RTO membership or Markets+ services. The budgets will be submitted for approval outside of the normal budget cycle as necessary once all contractual terms have been finalized.

## IX. SUPPLEMENTAL ANALYSIS AND SCHEDULES

### INCOME STATEMENT 2022-2023 COMPARISON

(\$ millions)	2022 Budget	2022 Forecast	2023 Budget
<b>Revenues</b>			
Tariff Administration Service	\$176.3	\$181.0	\$184.5
Fees & Assessments	26.0	26.6	30.0
Contract Services Revenue	9.8	15.4	14.2
Other Revenues	19.1	16.8	20.9
<b>Total Revenues</b>	<b>\$231.2</b>	<b>\$239.8</b>	<b>\$249.7</b>
<b>Expense</b>			
Salary & Benefits	\$114.4	\$119.5	\$131.2
Employee Travel	1.1	0.9	1.4
Administrative	5.5	5.7	5.8
Assessments & Fees	27.2	27.2	28.8
Meetings	0.6	0.5	0.7
Communications	5.2	4.9	5.3
Maintenance	18.2	17.5	19.9
Services & RSC	15.8	15.6	17.2
Services Reimbursed	10.2	8.5	12.0
Depreciation	17.8	17.4	16.7
Interest Expense	7.1	7.0	6.0
Other (Income) / Expense	(0.7)	(1.5)	0.7
<b>Total Expense</b>	<b>\$222.4</b>	<b>\$223.2</b>	<b>\$245.6</b>
<b>Net Income (Loss)</b>	<b>\$8.8</b>	<b>\$16.7</b>	<b>\$4.0</b>
Debt Repayment	\$30.4	\$31.1	\$31.0
Net Revenue Requirement	\$176.3	\$173.7	\$184.5
Capital Expense	\$18.4	\$18.4	\$17.4
Headcount	657	680	716

## INCOME STATEMENT 2023-2025

(\$ millions)	2023 Budget	2024 Forecast	2025 Forecast
<b>Revenues</b>			
Tariff Administration Service	\$184.5	\$201.7	\$203.6
Fees & Assessments	30.0	30.6	31.3
Contract Services Revenue	14.2	14.1	14.2
Other Revenues	20.9	15.4	11.4
<b>Total Revenues</b>	<b>\$249.7</b>	<b>\$261.8</b>	<b>\$260.5</b>
<b>Expense</b>			
Salary & Benefits	\$131.2	\$138.0	\$143.8
Employee Travel	1.4	1.6	1.6
Administrative	5.8	6.0	6.1
Assessments & Fees	28.8	29.6	30.5
Meetings	0.7	0.8	0.8
Communications	5.3	5.5	5.7
Maintenance	19.9	22.1	22.6
Services & RSC	17.2	18.2	16.4
Services Reimbursed	12.0	6.5	2.4
Depreciation	16.7	17.5	19.0
Interest Expense	6.0	5.5	4.7
Other (Income) / Expense	0.7	0.7	0.7
<b>Total Expense</b>	<b>\$245.6</b>	<b>\$251.9</b>	<b>\$254.5</b>
<b>Net Income (Loss)</b>	<b>\$4.0</b>	<b>\$9.9</b>	<b>\$6.0</b>
Debt Repayment	\$31.0	\$31.2	\$28.2
Net Revenue Requirement	\$184.5	\$201.7	\$203.6
Capital Expense	\$17.4	\$15.2	\$13.0
Headcount	716	728	728

## 2023 CONSOLIDATING INCOME STATEMENT

(\$ millions)	<u>SPP RTO</u>	<u>Contracts</u>	<u>Total SPP</u>
<b>Revenues</b>			
Tariff Administration Service	\$184.5	\$0.0	\$184.5
Fees & Assessments	30.0	0.0	30.0
Contract Services Revenue	0.0	14.2	14.2
Other Revenues	20.9	0.0	20.9
<b>Total Revenues</b>	<b>\$235.5</b>	<b>\$14.2</b>	<b>\$249.7</b>
<b>Expense</b>			
Salary & Benefits	\$124.5	\$6.7	\$131.2
Employee Travel	1.3	0.1	1.4
Administrative	5.8	0.0	5.8
Assessments & Fees	28.8	0.0	28.8
Meetings	0.7	0.0	0.7
Communications	4.9	0.4	5.3
Maintenance	19.1	0.7	19.9
Services	16.5	0.7	17.2
Services Reimbursed	12.0	0.0	12.0
Depreciation	15.6	1.1	16.7
Other expense	0.7	0.0	0.7
Interest Expense	5.9	0.1	6.0
<b>Total Expense</b>	<b>\$235.7</b>	<b>\$10.0</b>	<b>\$245.6</b>
<b>Net Income (Loss)</b>	<b>(\$0.2)</b>	<b>\$4.2</b>	<b>\$4.0</b>
Debt Repayment	\$28.7	\$2.3	\$31.0
Capital Expense	\$17.2	\$0.2	\$17.4
Headcount	639	77	716

## BALANCE SHEET

(\$ millions)	<u>12/31/2022</u>	<u>12/31/2023</u>
<b>ASSETS</b>		
Current Assets		
Cash & Equivalents	\$86.6	\$75.5
Restricted Cash Deposits	1,100.1	1,500.0
Accounts Receivable (net)	193.0	206.4
Other Current Assets	12.6	12.8
Total Current Assets	<u>1,392.2</u>	<u>1,794.8</u>
Total Fixed Assets	65.3	65.5
Total Other Assets	9.5	9.6
Investments	127.7	130.6
<b>TOTAL ASSETS</b>	<b><u>\$1,594.7</u></b>	<b><u>\$2,000.6</u></b>
<b>LIABILITIES &amp; EQUITY</b>		
Liabilities		
Current Liabilities		
Accounts Payable (net)	\$238.2	\$252.0
Customer Deposits	1,100.1	1,500.0
Current Maturities of LT Debt	31.0	29.4
Other Current Liabilities	156.4	159.5
Line of Credit	0.0	10.0
Deferred Revenue	8.2	8.2
Total Current Liabilities	<u>1,533.9</u>	<u>1,959.2</u>
Long Term Liabilities		
Long-Term Debt	130.2	101.0
Other Long Term Liabilities	42.8	48.7
Total Long Term Liabilities	<u>173.1</u>	<u>149.7</u>
Net Income	16.7	4.0
Members' Equity	(129.0)	(112.3)
Total Members' Equity	<u>(112.3)</u>	<u>(108.3)</u>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b><u>\$1,594.7</u></b>	<b><u>\$2,000.6</u></b>

## CASH FLOW FORECAST

(\$ millions)	<b>2023</b>	<b>2024</b>	<b>2025</b>
	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>
<b>Operating Activities</b>			
Net income/(loss)	\$4.0	\$9.9	\$6.0
Add Depreciation	16.7	17.5	19.0
Add Fees & Assessments adjustment *	(0.5)	(0.3)	-
Changes in current assets and liabilities	6.8	-	-
<b>Net cash provided by operating activities</b>	<b>27.0</b>	<b>27.1</b>	<b>25.0</b>
<b>Investing activities</b>			
Acquisition of property and equipment	(17.4)	(15.2)	(13.0)
<b>Net cash used in investing activities</b>	<b>(17.4)</b>	<b>(15.2)</b>	<b>(13.0)</b>
<b>Financing activities</b>			
Repayments of long-term debt	(31.0)	(31.2)	(28.2)
Draws from line of credit	10.0	10.0	16.0
Repayments of line of credit	-	(10.0)	(10.0)
Issuance of long-term debt	-	10.0	10.0
<b>Net cash provided/(used) in financing activities</b>	<b>(21.0)</b>	<b>(21.2)</b>	<b>(12.2)</b>
Increase/(Decrease) in Cash and Cash Equivalents	(11.4)	(9.3)	(0.2)
<b>Cash and Cash Equivalents, Beginning of Year **</b>	<b>20.5</b>	<b>9.1</b>	<b>(0.2)</b>
<b>Cash and Cash Equivalents, End of Year **</b>	<b>\$9.1</b>	<b>(\$0.2)</b>	<b>(\$0.4)</b>
* Schedule 12 FERC fee revenues and expenses do not impact operating cash			
** Operating account only			

# SCHEDULE 1A RATES

(Internal Note: Rate schedule still under review, numbers below remain preliminary at this time)

Rates are calculated based on amounts presented in this budget document and are not considered final until published in the formula rate template.

## Schedule 1A Rate Allocation

<u>Rate Schedule</u>	<u>NRR</u>	<u>MWh</u>	<u>Rate/MWh</u>
1-A1 Transmission Service	\$ 85.70	411.9	\$ 0.208
1-A2 TCR Service	\$ 4.52	821.5	\$ 0.006
1-A3 IM Clearing	\$ 19.64	660.1	\$ 0.030
1-A4 IM Facilitation	\$ 74.68	577.5	\$ 0.129

*Note: NRR and MWh represented in millions*

# CAPITAL PROJECTS LIST

\$ millions	Prior Year(s)	2023 Budget	2024 Forecast	2025 Forecast	Total Capital
<b>Capital Projects</b>					
<b>Carryover</b>					
SCRIPT	\$0.3	\$1.1	\$0.5	\$0.3	\$2.2
IAM Deployment	0.5	0.2	0.0	0.0	0.7
HITT Uncertainty Product	0.2	0.7	0.0	0.0	0.9
Electric Storage Resources	0.2	0.1	0.0	0.0	0.3
ICCP Upgrade	0.1	0.1	0.0	0.0	0.1
<b>New Projects</b>					
FERC Order 881	0.0	1.1	1.5	0.5	3.0
Markets UI/API Rewrite	0.0	0.5	0.3	0.0	0.8
IAM User Lifecycle	0.0	0.5	0.8	0.0	1.3
Data Aging and Archiving	0.0	0.6	0.0	0.0	0.6
Freeze Date Replacement	0.0	0.4	0.4	0.0	0.8
Data Loss Prevention	0.0	0.1	0.0	0.0	0.1
Z2 FERC Remand Order	0.0	0.0	0.0	0.0	0.0
HITT Multi-Day Unit Commitment	0.0	0.0	0.0	0.8	0.8
Interface Pricing & Pseudo Tie Modeling	0.0	0.0	0.0	0.2	0.2
<b>Total Capital Projects</b>	<b>\$1.2</b>	<b>\$5.2</b>	<b>\$3.5</b>	<b>\$1.7</b>	<b>\$11.6</b>
<b>Foundation</b>					
Information Technology		\$8.2	\$8.4	\$8.5	\$25.1
Operations		2.8	2.5	2.5	7.8
Engineering Department		0.1	0.1	0.1	0.3
Facilities		0.9	0.4	0.0	1.4
<b>Total Foundation *</b>		<b>\$12.0</b>	<b>\$11.4</b>	<b>\$11.1</b>	<b>\$34.5</b>
<b>2023 - 2025 Capital Budget Before Contract Services</b>	<b>\$1.2</b>	<b>\$17.2</b>	<b>\$14.9</b>	<b>\$12.8</b>	<b>\$46.1</b>
<b>2023-2025 SPP RTO Capital Budget</b>					<b>\$ 44.9</b>
<b>Contract Services</b>					
RC West EMS/CMT Enhancements	\$ -	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.1
WEIS Ongoing WEIS Market Enhancements		0.2	0.2	0.2	0.6
<b>Total Contract Services (funded thru contract revenues)</b>	<b>\$ -</b>	<b>\$ 0.2</b>	<b>\$ 0.2</b>	<b>\$ 0.2</b>	<b>\$ 0.7</b>
<b>2023 - 2025 Capital Budget Including Contract Services</b>		<b>\$ 17.4</b>	<b>\$ 15.2</b>	<b>\$ 13.0</b>	<b>\$ 45.5</b>

\* Foundation projects are reforecast during each budget cycle and do not include any carry-over funds.

**SUPPLEMENTARY CAPITAL EXPENDITURES DATA**  
**2023 CARRYOVER PROJECTS**

<b>2023 - 2025 Capital Projects Forecast (\$ millions)</b>					
	<u>Prior Year(s)</u>	<u>2023 Budget</u>	<u>2024 Forecast</u>	<u>2025 Forecast</u>	<u>Total Capital</u>
<b>Carryover</b>					
SCRIPT	\$0.3	\$1.1	\$0.5	\$0.3	\$2.2
IAM Deployment	0.5	0.2	0.0	0.0	0.7
HITT Uncertainty Product	0.2	0.7	0.0	0.0	0.9
Electric Storage Resources	0.2	0.1	0.0	0.0	0.3
ICCP Upgrade	0.1	0.1	0.0	0.0	0.1
	<u>\$1.2</u>	<u>\$2.2</u>	<u>\$0.5</u>	<u>\$0.3</u>	<u>\$4.2</u>

Descriptions for those projects expected to be underway in 2022 with carryover activity into 2023 and beyond are as follows:

**SCRIPT**

The Strategic and Creative Re-Engineering of Integrated Planning (SCRIPT) was formed to recommend broad changes to SPP’s transmission planning processes that would better meet customer needs while resolving concerns about the nature of transmission investment amid rapid industry changes. The final report with high-level recommendations was approved by the Board in October 2021. The SCRIPT Program will implement the processes, tools, study, strategic initiatives and resource plans necessary to achieve the recommendations. The SCRIPT Program is comprised of four separate work streams- GI Backlog Mitigation, Consolidated Planning Process, Data Collection and Automation, and Planning Process Improvements. While many of these efforts will be completed in the 2024-2025 timeframe, full implementation of all SCRIPT deliverables will likely not occur until 2026.

**IDENTITY ACCESS MANAGEMENT (IAM) DEPLOYMENT**

The project includes the installation of the IAM solution into production to run user access certification campaigns and support provision campaigns (Phase 2) and to identify and integrate additional applications into the solution (Phase 6). This project was originally put on hold in late 2021 due to resource constraints. It is expected that with the onboarding of internal resources, the project will resume in 3Q’2022. Completion of these phases directly impact the timing of the complimentary project, IAM User Lifecycle which is tentatively scheduled to start in 2023.

## UNCERTAINTY PRODUCT DEVELOPMENT

This project originates from revision request RR449 and is the result of the HITT Initiative R4, to implement an Uncertainty Market Product, by creating a market-based approach for uncertainty management. Design work was completed in June 2022 with development work expected to be completed in January 2023. May 2023 is the targeted implementation date.

## ELECTRIC STORAGE AND HYBRID

SPP is working to scope and implement a solution that can model and study electric storage resources (ESRs) and hybrid resources as generation or as load, or as both generation and load. This effort is in response to findings from the ESR whitepaper and the HITT initiative being directed by the ESR Steering Committee, as well as requirements from FERC Order 2222. Project is tentatively scheduled to kick off in 4<sup>th</sup> quarter of 2022.

## ICCP UPGRADE

This project addresses the software upgrades required to continue operations of the intercontrol center communications protocol (ICCP) system. The ICCP system is a critical CIP application that requires continual patch source and vendor support to operate reliably. To maintain reliable operations and remain up-to-date with support versions of both vendor and infrastructure software, the system must be updated no later than May 2023. The project is currently underway with software installation to be completed in the 3<sup>rd</sup> quarter of 2022 and internal testing scheduled for the 4<sup>th</sup> quarter of 2022.

## 2024 AND BEYOND PROJECTS

2023 - 2025 Capital Projects Forecast (\$ millions)						
	Prior Year(s)	2023 Budget	2024 Forecast	2025 Forecast	Total Capital	
<b>New Projects Starting Beyond 2023</b>						
HITT Multi-Day Unit Commitment	\$0.0	\$0.0	\$0.0	\$0.8	\$0.8	
Interface Pricing & Pseudo Tie Modeling	0.0	0.0	0.0	0.2	0.2	
Total Capital Projects	\$0.0	\$0.0	\$0.0	\$1.0	\$1.0	

Descriptions for those projects expected to commence 2024 and beyond are as follows:

### HITT MULTI-DAY UNIT COMMITMENT

This work would seek to address the sub-optimal market options for long lead resources as well as a more forward look at resource availability and needs by creating a Multi-Day Economic

Commitment Product that provides prices assurance, fuel assurance and addresses the changing needs of the grid. Project is currently forecasted to start in 2024.

**INTERFACE PRICING & PSUEDO TIE MODELING**

SPP will collaborate with MISO to design a common methodology for modeling pricing interfaces and treating pseudo-tie-congesting charges. Once SPP and MISO agree on a methodology, they will begin designing, testing and implementing the changes. Multiple vendor changes may be required to properly model the new interfaces. Settlement changes will be required to remove pseudo-tie overlapping congestion charges. Based on the slow progression of SPP and MISO reaching an agreement, the anticipated start date of this project is 2025.

**IT FOUNDATION CAPITAL EXPENDITURES**

The following section provides additional details supporting the IT Foundation Capital Expenditures as presented in the Capital Spending section of this document.

**IT INFRASTRUCTURE REFRESH**

	<u>2023 Budget</u>	<u>2024 Forecast</u>	<u>2025 Forecast</u>	<u>Total Capital</u>
<b>IT Foundation (\$ millions)</b>				
Infrastructure Refresh				
Servers	\$2.5	\$2.8	\$3.1	\$8.4
Storage	1.1	1.6	1.8	4.5
Network	1.5	1.7	1.6	4.8
Software licenses and upgrades	1.3	0.7	0.8	2.7
<b>Total IT Infrastructure Refresh</b>	<b>\$6.4</b>	<b>\$6.7</b>	<b>\$7.2</b>	<b>\$20.3</b>

The major initiatives in the 2023 budget include the following:

- Servers: SPP has approximately 130 servers targeted for replacement during 2023. The cost per server ranges from \$10,000 to \$55,000 (capital expense portion), contributing to a total budget of \$2.5 million for 2023. Higher performing technology (e.g., hyper-converged appliances) will be considered in an effort to further consolidate the physical server footprint.
- Storage: During 2023, SPP’s primary storage investments are to accommodate continual growth and lifecycle currency in SPP’s long term retention platforms. Additionally, upgrades to storage capacity at certain offsite locations are planned in 2023.

- Network: The following key areas are planned to be addressed in 2023 and include several efforts that represent a continuation of activities started in 2022 in addition to the implementation of several new technology refreshes:
  - Core Switch Upgrades/Replacements: This represents a continuation of current efforts to accommodate greater throughput via 40 Gigabit and 100 Gigabit technology in support of SPP’s blade server technology as well as standalone physical servers that require 10 Gigabit performance.
  - Firewall replacement between data centers: This represents a continuation of the 2022 effort that will allow for greater throughput between the Chenal and Maumelle datacenters in support of server backups and database synchronization of highly available applications.
  - VPN upgrade/replacement: This represents a continuation of the effort to replace the existing VPN network solution with a more secure and robust platform. The need for a reliable VPN solution will continue to be essential given SPP’s commitment to a flexible work environment.
  - Various aged technology refreshes (NEW in 2023)
    - Application Load Balancing refresh
    - Edge/Internet router refresh
    - Voice over IP (VoIP) system refresh
    - Cabinet/closet switch refresh
    - Multifactor Authentication
- Software Licenses and Upgrades: SPP plans to perform upgrades to several applications in 2023 and acquire incremental licenses for a number of existing products. A summary of major activities by area is included below:
  - Service Administration Team: As part of hardware growth within the storage hardware platform(s), SPP must maintain associated software licensing for these environments. Additionally, SPP currently uses several tools to monitor the storage infrastructure, and these will need to be upgraded in accordance with the hardware growth.
  - Service Management Team: The software utilized to provide baseline inventories of CIP assets will be upgraded in 2023 to ensure SPP is running on a

current supported version. Additionally, it is anticipated that additional licenses of the software utilized for hardware and software discovery will be needed in 2023 to address growth within lower level environments. Lastly, an upgrade to the system supporting change management is needed in 2023 to maintain vendor support.

- Cyber Security and Quality Control: To comply with CIP13 Supply Chain requirements, SPP acquired a software product in 2020 to assist with vendor risk assessments. The team expects to renew/acquire additional licenses (aka tokens) in 2023 based on the increase in CIP assets. Additional licenses of the software utilized to identify security vulnerabilities are also anticipated in 2023.
- IT Applications, Database Administration, Architecture, and Data Services:
  - Market software upgrades: Evergreen middleware software upgrades are required to maintain currency with SPP’s market system.
  - ETL and Data Replication Tools: SPP will need to begin planning and evaluating solutions for the replacement of ETL (extraction, transformation, and loading) and data replication software due to future end of product support and vendor enhancements.
  - Data Visualization: SPP utilizes software to collect, integrate, analyze and provide data visualizations to support better SPP business decision making. The current data visualization tool continues to be adopted by more business users/teams within SPP.
  - SPP.org enhancements: Software upgrade requiring contractor assistance.

## IT NEW INITIATIVES

	<u>2023 Budget</u>	<u>2024 Forecast</u>	<u>2025 Forecast</u>	<u>Total Capital</u>
<b>IT Foundation (\$ millions)</b>				
New Initiatives				
Servers	\$0.7	\$0.9	\$0.7	\$2.3
Software licenses and upgrades	0.3	0.5	0.3	1.1
Storage	0.4	0.3	0.3	1.0
Network	0.4	0.0	0.0	0.4
<b>Total New Initiatives</b>	<b>\$1.8</b>	<b>\$1.7</b>	<b>\$1.3</b>	<b>\$4.8</b>

The following represents a summary of the primary initiatives by functional area that drive the capital expenditures:

- Architectural
  - Multi Factor Authentication: Logging into systems with a username and password is no longer secure due to the increase in sophisticated social engineering and phishing attacks that compromise this information. An enterprise multi-factor authentication solution will help in securing data and data access for applications, network access, and cloud services.
  - Container Orchestration: Container orchestration is the automation of much of the operational effort required to run containerized workloads and services. This includes a wide range of things needed to manage a container's lifecycle, including provisioning, deployment, scaling (up and down), networking, load balancing and more. Container orchestration will provide benefits in the following areas:
    - Reduce server footprint (reduce costs)
    - Speed up deploying applications (speed to market)
    - Reduce time/resources to deploy security patches (reduce risk exposure)
    - Provide a platform that can take advantage of the cloud in the future
  - Centralized Key Management: Encryption solutions are a core tool for SPPs data protection. As SPP deploys an increasing number of encryption solutions, managing inconsistent policies, varying protection levels, and escalating costs will become prevalent issues. A centralized key management system will provide benefits in the following areas:
    - Consolidate data encryption policies
    - Meet regulatory and compliance requirements for encrypting data
    - Separate encrypted data from keys allowing data to be stored in the cloud
  - Zero Trust: Zero trust is essentially the practice of putting the equivalent of a firewall around every server, denying everything by default. The federal government has mandated that all government agencies implement zero trust by 2024. Some experts believe that FERC will likely follow suit and mandate zero trust for all ISO/RTOs. Even if FERC does not mandate this, zero trust will greatly

reduce the impact and risk of breach. This effort consists of incremental software subscriptions, additional hardware, and consulting services.

- Network
  - Containerization Security: Containerization security consists of a product/tool that can provide network/cyber security within a virtualized environment. It's like an application based firewall/IPS that resides within a virtual server environment that can monitor and protect communications between virtual servers and appliances that may be on a single physical server and within the same IP space. Products have been identified for a proof of concept to address the containerization security dilemma.
  - Encryption/line card hardware for cloud services: Modules for our external routers will allow us to encrypt links/traffic to cloud services or 3rd party hosted data centers for secure data communications to those remote facilities. The software/perpetual fees is associated with encryption and packet inspection licenses.
- Systems Integration
  - Continuous Integration/Continuous Delivery (CI/CD) Automation: The CI/CD pipeline is an agile workflow focused on a frequent and reliable software delivery process. This solution will be used to collaborate across the organization, ship secure code faster, and drive business results. The ability to automate various phases of the CI/CD pipeline helps development teams improve quality, work faster and improve other metrics.
  - Information Security Improvements: Implementation of new features and enhancement of existing functionality of the security tool currently utilized for highly-sensitive information. This includes but is not limited to automation and management of changing passwords, application and docker container integrations and implementing a privileged session manager.

MarketPlace Portal and Phone Application: The marketplace portal is evolving to include an iOS\Android phone application. Several technical enhancements are required to deploy a phone application to these devices. Licenses, digital certificates and development platforms will be procured to produce this new software.

## X. SPP OPERATING PLAN

DRAFT



# 2023 OPERATING PLAN

By the SPP Finance Department

Published July 6, 2022

# CONTENTS

---

- CONTENTS..... 2
- APPROACH ..... 4
- SPP OVERVIEW..... 4
- Governing Documents ..... 5
  - Tariff..... 5
  - Membership Agreement ..... 5
  - Bylaws..... 5
  - Protocols and Business Practices ..... 5
- Organizational Structure ..... 5
- Funding ..... 6
- 2023 EXPECTED BUSINESS ENVIRONMENT ..... 7
- Electrification ..... 7
- Changing generation mix ..... 7
- Increased planning reserve margin requirements..... 8
- Transmission planning and cost allocation ..... 8
- Evolving energy markets ..... 9
- Western Energy Services ..... 9
- Federal and State Energy Policies ..... 10
- Regulatory..... 10
- Cybersecurity risks ..... 12
- Economic Pressures on Human Capital ..... 12
- CORPORATE AND DEPARTMENTAL 2023 OBJECTIVES..... 14
- Corporate Strategic Opportunities and Enabling Capabilities..... 14
- Departmental Objectives..... 15
  - Operations ..... 15
  - Information Technology ..... 16
  - Finance ..... 18
  - Engineering ..... 19
  - Process Integrity ..... 20

Human Capital .....22

2023-2025 Prioritized Projects and Programs ..... 24

Appendix 1: SPP Working Groups ..... 25

Appendix 2: SPP Staff Organization..... 26

## APPROACH

---

SPP's 2023 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 2023 Operating Plan was developed to identify and recognize where departmental objectives and initiatives affect SPP's ability to meet the objectives of the SPP Strategic Plan, **Aspire 2026**. This will provide SPP's management team with a clear understanding of opportunities to measure, prioritize, and allocate resources to meet corporate and departmental objectives. By documenting and relating departmental activities to the strategic plan, management can make informed budget and resource decisions for the coming fiscal year while acknowledging current business, financial, legislative and regulatory environments, which could influence ultimate delivery.

SPP reviews enterprise project requests and approves those that align with and support SPP's value propositions and strategic objectives. For the 2023-2025 budget planning cycle, SPP recommends a portfolio of 21 enterprise efforts for 2023.

## 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 14 states, and it provides contract-based reliability, market, and resource adequacy services to customers in every state in the Western Interconnection.

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.

SPP's staff of more than 600 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 Corporate Governance Committee and SPP's board of directors.

### 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 administration of the tariff, including coordinating the sale of transmission service. SPP also has well-documented market protocols detailing the administration of the market rules in the tariff. 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 1) 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 2) 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 December 2021. SPP issued notes in December 2021 to fund capital expenditures incurred through 2022. Additionally, SPP maintains an \$80 million revolving/term facility to fund capital expenditures and other corporate needs. A five-year extension and amendment to this facility was approved by the FERC in June 2022.

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.

# 2023 EXPECTED BUSINESS ENVIRONMENT

---

In 2023, SPP will face opportunities and challenges related to continued electrification, changing generation mix, increased planning reserve margin requirements, transmission planning and cost allocation, evolving energy markets, expansion of SPP services to the west, regulatory issues and cybersecurity risks.

## ELECTRIFICATION

In its [Annual Energy Outlook published in March 2022](#), the U.S. Energy Information Administration forecast that energy consumption will continue to grow across the nation through the year 2050, as population and economic growth will outpace gains in energy efficiency. The report also notes, "... electricity continues to be the fastest-growing energy source in buildings, with renewables and natural gas providing most of the incremental electricity supply."

SPP anticipates further 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 900 generators participating in its markets — has changed dramatically in the last 10 years. As of the beginning of 2022, SPP's generation fuel mix is primarily coal (35.6%), wind (34.6%) and gas (20%). Coal was on a continual decline in production and capacity from 2014-2020, but because of high natural gas prices in 2021, gas generation was displaced and coal ended 2021 as SPP's number-one fuel source in terms of energy production in its Integrated Marketplace. Still, new coal generation is not planned in the SPP footprint, and older plants are being, or are 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 more than 90% of its load with electricity from renewable generation resources. 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.

## INCREASED PLANNING RESERVE MARGIN REQUIREMENTS

Aside from cybersecurity, one of SPP's biggest corporate risks related to reliability is resource adequacy (RA). Generation retirements, load-profile changes, and uncertainty related to the operation of current and new variable generation all pose challenges to resource adequacy and necessitate a heightened focus, as electric reliability remains a critical component of SPP's and its members' missions.

SPP has undertaken multiple RA policy initiatives. One is the development of the Effective Load Carrying Capability (ELCC) methodology for wind, solar, hybrid, and electric storage resources (ESRs). In 2022, SPP sought to increase the summer Planning Reserve Margin (PRM) and introduce Performance Based Accreditation (PBA) on conventional resources. Many of the Improved Resource Availability Task Force's (IRATF) recommendations are intended to enhance RA. Other efforts that fall in the 2023 Operating Plan's horizon are a move toward a winter PRM and the potential development of more granular seasonal/monthly requirements.

SPP has also increased its involvement in industry efforts like EPRI's 'Resource Adequacy for a Decarbonized Future', as well as the recently formed Climate Resilience and Adaptation Initiative (READi). Both efforts help collaborate, share knowledge, and perform needed gap analyses on RA policies, tools, processes, and methodologies.

SPP's staff, market monitor and members will focus on further valuing the generation attributes necessary to continue reliably integrating the region's changing fuel mix. SPP's 2023-25 roadmap will also emphasize development of policies that enhance and better position RA for the footprint in the future.

## 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 2021, SPP's median spot wholesale energy prices remained the lowest in any organized market in the U.S. 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 identified terms and conditions under which they could move forward to place western facilities under the RTO's tariff. The SPP board approved those terms and conditions in July 2021 and agreed to extend the date by which they are effective to March 2023.

## 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 and proposals become final appears to have increased, with actionable requirements of undetermined dates.

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 committee and working group 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 primarily on FERC, but with the recent passage of the Infrastructure Investment and Jobs Act, there is added focus on the Department of Energy and its efforts to facilitate the building of transmission lines. In addition, the Environmental Protection Agency (EPA) recently proposed a Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Ozone National Ambient Air Quality Standards. SPP has been reviewing these EPA actions to determine their effect on resources within the SPP footprint to maintain reliability under normal and extreme weather conditions. Further complicating environmental regulations on utilities, the U.S. Supreme Court recently restricted the EPA's authority to mandate carbon emissions reductions.

In November 2021, the United States Senate confirmed Willie Phillips to fill the commission seat vacated at FERC following the departure of Commissioner Neil Chatterjee earlier in 2021. The confirmation of Commissioner Phillips to FERC established a Democratic majority at FERC for the first time since 2017. While President Biden nominated Chairman Rich Glick for a new five-year term in 2021, the Senate Energy and Natural Resources Committee did not immediately schedule a confirmation hearing, which brings some regulatory uncertainty surrounding FERC's actions if he is not reconfirmed.

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. Under Chairman Glick's leadership, FERC has also moved forward on looking for ways to reduce greenhouse gas emissions through rulemaking proceedings to reform transmission planning, cost allocation, and generator interconnection to help eliminate barriers to wind, solar, electric storage and other clean energy technologies. Further, the FERC – NARUC Joint Task Force Meetings on Transmission have demonstrated the importance of SPP's stakeholder process in regional planning and building transmission. Specifically, the states on the task force agree that FERC needs to have respect for state concerns early in the process and allow the states a voice in determining cost allocation and resource adequacy. FERC Commissioners, in particular Mark Christie, have asked whether SPP's Regional State Committee could serve as a model to other RTOs for increasing state involvement in cost allocation and transmission planning.

## 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 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.

## ECONOMIC PRESSURES ON HUMAN CAPITAL

The current and ongoing uncertain economic conditions in the US – including but not limited to high inflation, supply chain issues, and labor costs and challenges – has impacted SPP and its members. SPP anticipates that the ongoing instability in the economic environment will continue into 2023 and beyond, and present additional challenges to SPP. Day-to-day operating costs are increasing at a rapid rate, while federal and state regulators are directing pressure on utilities to maintain low cost of service to the end-user community.

These circumstances will put SPP under additional pressure to maintain an experienced staffing base and acquire new employee talent in the interest of delivering quality operational and financial results. Due to the nation-wide demand for resources with certain technical expertise and experience, SPP's turnover rate has increased from a traditional annualized rate of approximately 4.5% to an all-time high of more than 10% across the company, with certain departments having a turnover rate as high as 20%. Numerous key staff with 8-10 years of experience at SPP in areas such as engineering and other technical areas have taken advantage of the market for their skills and have left SPP for other employment opportunities. SPP must and will be diligent in identifying and implementing creative ways to hire and maintain replacement and incremental employees.

SPP will require meaningful increases in staffing levels to be successful in meeting the strategic opportunities and enabling capabilities identified in **Aspire 2026** and the departmental objectives noted in this 2023 Operating Plan. SPP is experiencing human resource capacity limitations due to the volume of work and deliverables identified and planned for the current year, 2023 and beyond.

The current project pipeline has more than 50 current/in-flight projects plus an additional 20 strategic initiatives for the 2022-23 cycle. Many of these projects, strategic initiatives, and regulatory recommendations and requirements are necessary to specifically address and minimize operational, compliance, financial and other types of risk inherent in our industry. The

vast majority of these initiatives represent incremental workload and efforts and cannot be absorbed by existing SPP staff.

The work needed of SPP to fulfill its ongoing responsibilities and achieve its **Aspire 2026** goals will require higher financial commitment from SPP's members and customers. SPP recognizes this comes at a time when our members and customers are dealing with increased demands to maintain or reduce the cost of the services they provide to their own customers. Thus, SPP and its stakeholders must be deliberate and thoughtful about objectives, timelines and financial realities as we move forward together.

# CORPORATE AND DEPARTMENTAL 2023 OBJECTIVES

---

## CORPORATE STRATEGIC OPPORTUNITIES AND ENABLING CAPABILITIES

SPP's five-year strategic plan is detailed in the company's **Aspire 2026** document published July 14, 2021. The building blocks of **Aspire 2026** anchor with six enabling capabilities that provide a foundation on which SPP can pursue strategic opportunities. The six enabling capabilities are:

- Adaptive Governance Model
- Organizational Readiness
- Innovative Cost Allocation
- The Right Technology
- Diversity, Equity and Inclusion
- Sustaining, Enhancing and Communicating Member Value

Five strategic opportunities set the high-level direction that will guide SPP's actions over the next four years. They are:

- HITT Implementation
- Optimized Seams
- Western Services Expansion
- Innovative Transmission Planning
- Grid of the Future

Descriptions of each of these items, along with additional information and a one-page summary of SPP's strategy, are included in the [2021-26 Strategic Plan published on SPP.org](#).

The departmental objectives included in this 2023 SPP Operating Plan were developed in correlation to these enabling capabilities and strategic opportunities. In the following section, several departments outline the specific activities they will undertake in 2023 in support of SPP's strategic plan. Each department will identify specific factors to measure and track success in

meeting their stated 2023 departmental objectives, and will provide quarterly updates using these measurements that will be reported to the appropriate board-level committees throughout 2023.

## DEPARTMENTAL OBJECTIVES

### OPERATIONS

The key role of system operations is to keep the lights on while providing the most value possible in our core business functions of reliability coordination, balancing authority, markets and tariff administration. SPP is expected to perform this function with excellence as operational challenges continue to grow and become more complex.

SPP must ensure the proper training and preparedness of system operators and perform development and maintenance of their tools and displays. SPP leads the industry in renewable penetration records, but its uncertainty response team (URT) has not grown at the same rate in terms of the number of resources required to appropriately manage operational risk. Due to the complexities of the electric system, analysts are relied on more than ever to prepare system operators for the challenging operating conditions. Fuel shortages (both renewable and conventional), extreme weather and forced outages are just a few of the drivers for this increased workload.

The key role of Operations Engineering Support is to maintain the network model and the data integrity of the applications used by System Operations and ensuring compliance and reliability in real-time, next-day and near-future horizons. Another key area is balancing the number of requested transmission maintenance outages and generation maintenance outages and their impact on reliability in real time and near term. Focus will remain on assuring low risk levels for operating the system reliably and timely identifying potential reliability challenges for tomorrow. Near term, including seasonal outlooks, will require ensuring identified impacts can be mitigated with normal congestion management actions including those on seams that require coordination with neighboring entities.

These daily efforts to maintain reliable operation of the grid will be impacted by anticipated changes to resource mix and by climate changes that result in more extreme weather events. Operating the system reliably will become continually more complex and dynamic, and SPP must be prepared to adapt and implement changes to studies, analysis and expertise so that it can anticipate those changes and address their potential impacts in studies and analysis.

The major areas of Operations focus in 2023 are:

- Maintaining reliable operations of the bulk electric system.
- Refining URT processes and performance metrics.

- Refining operator training to be as “real” as possible.
- Refining tools and displays to give system operators the best information possible that they can discern quickly.
- Addressing FERC recommendations resulting from the FERC 2021 Audit.
- Addressing FERC recommendations resulting from February 2021 cold weather event.
- Addressing the Board recommendations resulting from February 2021 cold weather event, in particular those related to fuel assurance, resource planning and availability, and emergency response processes and planning.
- Addressing FERC Order 881, FERC Order 2222 and NERC Project 2015-009.
- Increasing awareness of and preparedness for the potential impacts of extreme weather events, changes to SPP’s balancing authority (BA) resource mix and developments behind the meter that will impact BA load profiles.
- Proactively participating in industry discussions and providing leadership on critical topics such as: energy adequacy, voltage and reactive support, frequency response, impacts of increased extreme weather events, fuel assurance challenges, impacts of changing resource mix, dynamic line rating use and robustness of inverter-based resource (IBR) technology.
- Responding to increased requirements from FERC, NERC, and MRO. SPP will need to step up awareness and increase preparedness for these regulatory expectations, and SPP expects several new requirements in the near term.

## 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 focus for IT in 2023 are:

- Risk Management
- Quality and Efficiency
- Technology Readiness
- Value and Affordability
- IT Staff Readiness

## *RISK MANAGEMENT*

SPP IT strives to mitigate and manage risk associated with all IT functions. Foremost to this effort is cybersecurity, ranked as SPP's top corporate risk. Another area of focus is CIP compliance, which helps SPP mitigate risk to the bulk electric system. CIP compliance, if done improperly, creates security, financial and reputational risk for SPP.

## *QUALITY AND EFFICIENCY*

SPP continues to grow in complexity and scale as SPP provides new services to our stakeholders and as existing services require additional infrastructure. To remain successful and manage SPP's resources most effectively, SPP continues to partner with stakeholders across the enterprise to create and implement collaborative solutions that are focused on continuous improvement and efficiency.

## *TECHNOLOGY READINESS*

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

SPP must have the right technology in place at the right time. As current solutions and architecture are identified as beginning to reach the end of their lifecycles, SPP must be prepared to utilize newer technologies that will provide value in terms of lower overall costs and/or increased efficiency. As SPP services continue to expand, SPP will be required to handle and store increasing volumes of information. In some cases, the ability to provide solutions may be constrained by the growth of computing models that some of SPP's services utilize. It is crucial that IT anticipate and be prepared to adapt to SPP's growth while doing so affordably.

## *VALUE AND AFFORDABILITY*

To properly manage costs and keep SPP affordable to its members, SPP must be capable of identifying costs of providing services to SPP stakeholders. Additionally, SPP must continually review opportunities to deliver services cost efficiently without sacrifice to end-user expectations. SPP's value and affordability initiative is aimed at ensuring that SPP is maximizing the benefit-to-cost relationship across its primary service functions.

SPP will examine anticipated technology needs and challenges in light of external benchmarks and trends. This will help ensure that SPP is prepared to implement solutions in a way that provides both value and affordability to its stakeholders.

## *IT STAFF READINESS*

SPP IT will attract, develop, retain and lead an exceptional, diverse, and inclusive workforce through:

- **Leadership Development:** IT will require effective leadership at all levels of the organization in order to succeed. IT will also focus on efforts to develop potential successors for key IT management roles.
- **Technical Skills Development:** IT will assess and develop staff with the technical skills needed to ensure that staff have the knowledge, skills and abilities to develop and deploy the technology solutions needed to support SPP's strategic roadmap
- **Recruitment and Retention:** IT will focus on developing avenues to find excellent people to fill open positions as well as ensuring we retain valuable staff.

## FINANCE

### *CORPORATE RISK MANAGEMENT*

SPP will enhance its corporate risk management practices by establishing a formalized and systematic program customized from the International Organization for Standards (ISO) 31000 Risk Management Framework and utilizing the existing Governance, Risk and Compliance (GRC) system.

Further enhancement of the corporate risk management program will promote consistency across the organization and provide a systematic link between controls, objectives and corporate risk management. These enhancements will begin in 2022 with system integration in 2023. System buildout and enhancements along with data migration and mapping will be the key deliverables measured during 2023.

## ENGINEERING

In addition to required production work, SPP's five-year strategic plan includes strategic initiatives owned by the Engineering Organization that began in 2022 and will extend into 2023, and which are directly related to certain enabling capabilities and strategic opportunities. Engineering is also the primary functional area responsible for nearly 80 of the currently active initiatives in the SPP Roadmap. Specific areas of focus include:

- **HITT Implementation:** Evaluation and approval of CRIS deliverability areas, CRIS transition levels, and evaluation of ERIS thresholds used in GI studies.
- **Optimized Seams:** Complete development of 5-year plans with seams neighbors, regulatory approval of SPP-MISO JTIQ cost allocation, regulatory approval of TMEP process with MISO, and resolution of SCRIPT transfers recommendations
- **Innovative Transmission Planning:** Continue processing backlogged GI study clusters, work with CPPTF to finalize implementation and transition plan for consolidated planning process, and implement non-consolidation SCRIPT recommendations. The 20-year assessment is scheduled to conclude the first half of 2023, which directly informs all subsequent planning functions for the next five years (or until the next 20-year assessment is performed, whichever comes first).
- **Grid of the Future:** Working with the FGSAG, develop recommendations for future grid initiatives and submit initiatives into SPP Roadmap process, develop and implement ESR and DER policies, and implement Winter Weather Event recommendations.
- **Resource Adequacy:** SPP will continue to work with SAWG, as well as all applicable WPP groups for the WRAP, in order to create and implement next-generation resource adequacy policies, methodologies, tools, and processes. 2023 includes implementing Performance-Based Accreditation (PBA) and increased Planning Reserve Margin (PRM) beyond policy approval.
- **FERC Notices of Proposed Rulemaking (NOPR):** There have been two major NOPRs to transmission planning and generation interconnection functions. While SPP is working to respond in 2022, it is expected these become orders by the end of 2022 or early 2023. These two orders will affect most Engineering initiatives. SPP and members are attempting to move any activities between now and the release of the order(s) to have least sunk costs.

Key performance success metrics and reporting will be formalized within the newly developed SPP Roadmap process, via quarterly reporting to MOPC, SPC, and BOD.

## PROCESS INTEGRITY

### *COMPLIANCE AND RELIABILITY STANDARDS DEPARTMENTS*

The overarching goal for the Process Integrity group in 2023 is a continuation of compliance support to the business units through standards development, compliance monitoring and oversight, and control programs/tools development and management.

In addition to identifying potential noncompliance instances and assisting mitigation as quickly as possible, SPP's compliance and reliability standards staff will strive to enhance Organizational Readiness Grid of the Future, Western Services Expansion, and Right Technology by:

- Formalizing the controls program to expand and improve:
  - Control documentation and procedures.
  - Control design assessment and testing procedures.
  - Controls consistency across business unit functions.
- Providing for enhanced visibility and performance measures by building on:
  - Benchmark of compliance and controls program maturity by Ernst & Young.
  - Identification of recommendations and a roadmap to enhance future maturation of the compliance and reliability standards department processes.
  - A catalog of NERC compliance-related controls in the Governance, Risk and Compliance (GRC) tool.
  - Identification of performance metrics with SPP executives and Oversight Committee that will allow compliance management to track program maturation to a future, desired state.
- Engaging with WECC regulators and stakeholders to enhance compliance perspective relative to SPP expansion efforts for NERC registrations and services provided in WECC (West Services Expansion).
- Working closely with business units in the development and implementation of new and changing NERC Reliability Standards projects especially those that encompass aspects of Grid of the Future and Right Technology initiatives.
- Tracking standards implementation projects to provide reasonable assurance of compliance.

- Engaging in industry initiatives to identify compliance-related risks, especially those associated with the effects of the changing grid and emerging technologies (e.g., FERC, NERC, Midwest Reliability Organization (MRO), WECC and others).

### *INTERREGIONAL AFFAIRS FOCUS ON STANDARDS DEVELOPMENT*

Interregional Affairs' approach to standards development at NERC and NAESB relies on collaborative efforts both internally with SPP staff and members and externally with other industry participants. Staff engages in these forums at the highest levels of leadership to share SPP's unique perspectives and policy guidance that are informed by SPP's responsibilities for reliability, transmission tariff compliance and the Strategic Opportunity - Grid of the Future.

SPP is geographically and strategically situated to be a staging ground for new technologies in wind, solar, battery and distributed energy resources – all activities NERC and NAESB are currently addressing. For the SPP Aspire 2026 objective to making high-quality decisions, IA advises on potential impacts associated with ongoing activities that can affect SPP compliance and costs at external standards forums.

The department forms a conduit to shape policy decisions at NERC and NAESB for development of continent-wide standards and business practices beneficial to SPP. Participation in the ISO RTO Council is a key mechanism to leverage these standards forums. Collaboration with members of the ISO RTO Council is an effective and efficient use of industry expertise and knowledge and provides Member Value.

The initiatives undertaken by Compliance focused on the Organizational Readiness Enabling Capability will be a by-product of the Ernst & Young independent assessment of SPP's compliance and controls program. That assessment will result in a recommendations report, based in part on the evaluation of the maturity of SPP's existing program, the desired future state, and the actions that can be taken to positively affect the maturation level over time.

Initiatives undertaken focusing on the Right Technology Enabling Capability and Grid of the Future opportunity by the compliance group staff are the continuation of engagement in industry forums, standards development, and other opportunities as FERC, NERC, MRO and WECC address emerging technologies and changing risks as they pertain to SPP's compliance obligations to NERC Reliability Standards.

Compliance group staff will increase its presence and engagement in WECC working groups, committees, and other opportunities, especially as they pertain to increasing services in the Western Interconnection.

### *COMPLIANCE AND RELIABILITY STANDARDS DEPARTMENTS*

The recommendation report from Ernst & Young will provide a recommended roadmap for SPP to work toward desired maturation levels. Measurements of increasing maturation, implementation of identified roadmap initiatives, and development and reporting of other

performance metrics will provide appropriate measurements of the steps taken to mature the group's staff and processes.

With respect to FERC, NERC, MRO and WECC activities, SPP will continue to track its engagement with industry efforts (such as standards development, working groups, committees, and task forces) to ensure as much as possible that SPP is appropriately aligned with those efforts.

Staff will report to executives and the SPP Oversight Committee on the activities and progress along these fronts on a regular basis.

### *NERC AND NAESB STANDARDS*

Successful adoption and positive outcomes of NERC and NAESB activities in 2023 include: progress towards adoption of NERC standards for Energy Assurance and modeling of Inverter-Based Resources for fault ride through capability; ISO RTO Council support for NAESB gas-electric coordination related activities; and, ISO RTO Council support for SPP led comments to NERC Members Representative Committee for guidance to NERC Board and Executives.

Initiatives undertaken by the Interregional Affairs staff focusing on the Grid of the Future opportunity and winter weather improvements include continued short-term and long-term engagement in NERC and NAESB Standards Development activities.

## HUMAN CAPITAL

The Human Capital organization supports SPP's Strategic Plan by delivering programs aimed at recruiting, developing and retaining diverse talent and establishing policies and practices that ensure compliance with federal and state employment laws. The Human Capital initiatives for 2023 – 2026 lead and support the *Enabling Capabilities* outlined in SPP's Mission and Vision.

Key deliverables will focus on four areas:

- Learning and Development
- Recruitment
- Inclusion and Engagement, and
- Foundational Services

Initiatives include: enhanced technical learning and career tracks for Engineering roles; expanding recruiting efforts to include more Historically Black Colleges and Universities; maturation and expansion of DEI initiatives internally and externally; improved performance management programs; and, the development of more flexible work schedules and compensation strategies.

It is understood that people deliver the suite of SPP's functions and services and it is the role of the Human Capital organization to support all employees, both staff and management, in their respective efforts to achieve the corporate mission and vision.

## 2023-2025 PRIORITIZED PROJECTS AND PROGRAMS

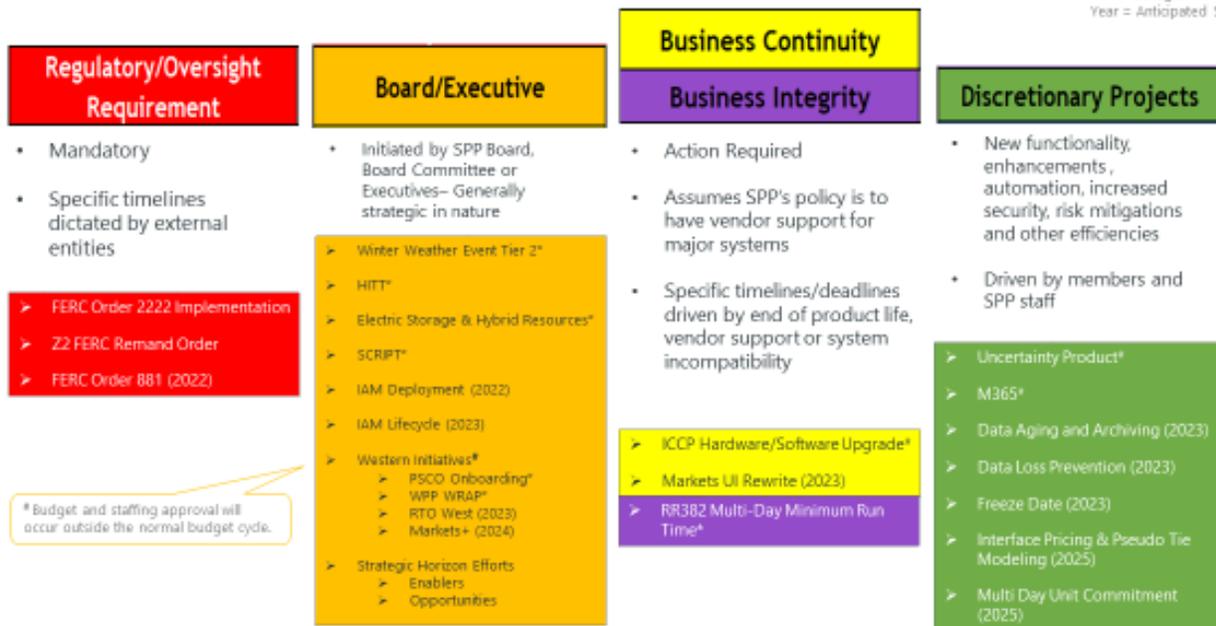
SPP’s Project Review and Prioritization Committee (PRPC) reviews enterprise project requests and approves those that align with and support SPP strategic opportunities and enabling capabilities. Business owners, with the support of the PMO and the sponsoring director, develop a comprehensive justification overview that continues to be revised as more is known about the effort. That document is used throughout the life cycle of the project from ideation to implementation and closeout. In some cases, the PRPC recognizes that while it is too early to submit a comprehensive overview, there is awareness of looming enterprise efforts that will require coordinated planning and accordingly will have an impact on resources available for project work. Those efforts are reviewed and included in the portfolio as soon as practical.

The project and portfolio review process has further evolved, as evidenced this past year in particular due to the launch of SPP’s first Comprehensive Roadmap. Programs and projects managed by the PMO are a subset portfolio of the roadmap efforts. Inefficiencies and elimination of duplicative efforts have been, and are being, identified to bring conformity and consistency to the way the organization manages strategic efforts

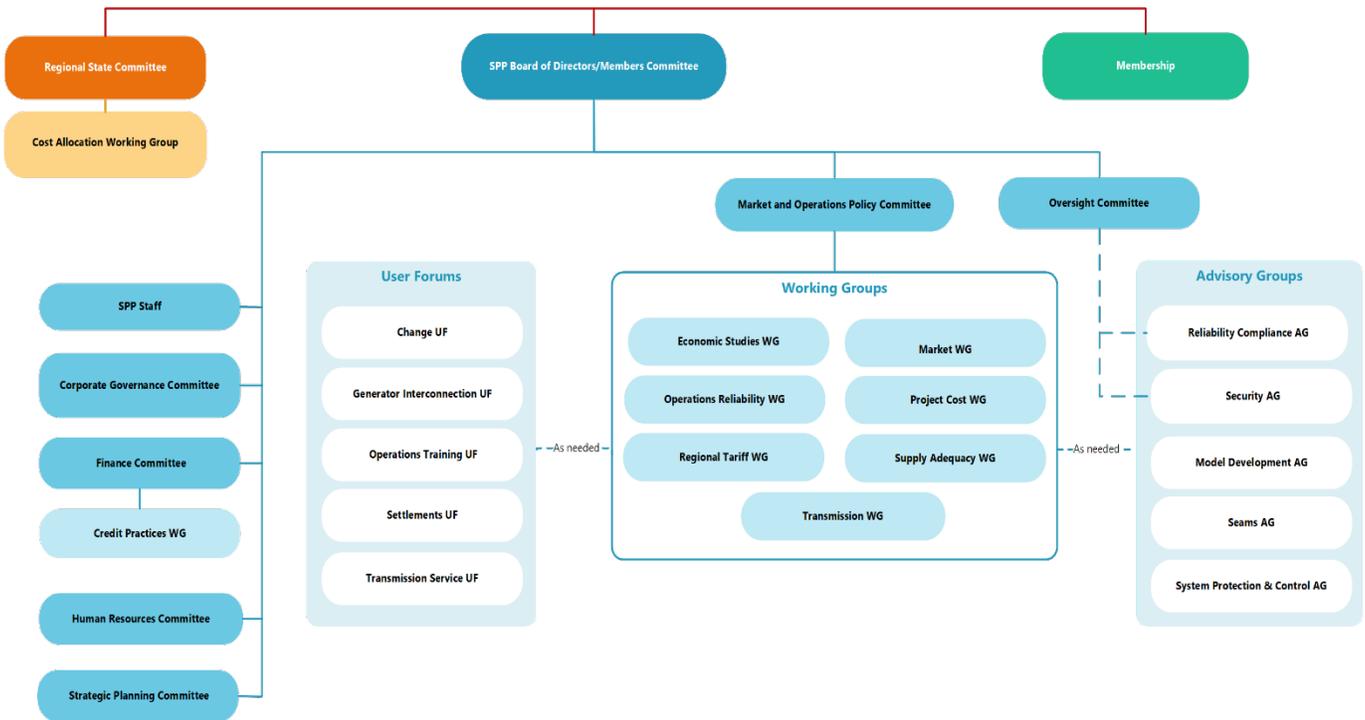
For the 2023-2025 budget planning cycle, the PRPC recommends the following portfolio of enterprise efforts that will be staged as internal resources are available.

### PRIMARY PROJECT DRIVERS -> CATEGORIES

\* = In-flight  
Year = Anticipated Start Date



# APPENDIX 1: SPP WORKING GROUPS



## APPENDIX 2: SPP STAFF ORGANIZATION

