



# FORWARD

2016 ANNUAL REPORT



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# hello!

from the president and chief executive  
officer and chairman of the board

Since Southwest Power Pool first defined our mission statement in 1992, it has served as a constant reminder to our staff and stakeholders of the dual focus we must maintain on both the here-and-now and still-to-come: "Helping our members work together to keep the lights on ... today and in the future."

## 2016 Milestones

2016 was a milestone year for SPP. We celebrated our 75th anniversary and all the memorable accomplishments throughout our history that brought us to where we are today. We also made history several times.

Beginning in early spring 2016 and continuing throughout the year, SPP set North American Independent System Operator/Regional Transmission Organization (ISO/RTO) records for wind energy and wind penetration, then subsequently broke those records and set new ones. Our installed wind-generation capacity increased in 2016 alone by more than 30 percent: up from 12 gigawatts (GW) to more than 16 GW. Thanks to the continued maturation of our market and planning processes and expertise of our staff, we serve ever-increasing percentages of our total load with wind. Our maximum simultaneous wind-generation peak rose from 9,948 MW in 2015 to 12,336 MW in 2016. Wind penetration — the amount of total load served by wind at a given time — has increased from a 38 percent peak in 2015 to 49.2 percent in 2016, and we expect to cross the 50 percent mark soon.

In April, we reduced our planning-reserve margin requirements from 13.6 percent to 12 percent, which is expected to save our load-serving members \$90 million a year in capacity costs or \$1.4 billion over the next 40 years. Concurrently, our stakeholders and board approved enforcement policies and a defined deliverability approach that bolsters both the confidence

*"... we reached a milestone in the value that we provide our members and their customers, with total savings from our Integrated Marketplace crossing the \$1 billion mark."*

*“SPP’s process balances the company’s values of collaboration, efficiency and transparency alongside expectations of confidentiality and equity set by FERC Order 1000.”*

and flexibility of our resource adequacy construct. This marked the first time SPP has ever had an enforcement policy with financial incentives and the first time since 1998 we have reduced our reserve-margin requirement.

Also in April, we completed our first competitive transmission-owner selection process, accepting the recommendation of an industry expert panel (IEP) complying with Federal Energy Regulatory Commission (FERC) requirements to remove federal rights of first refusal for certain transmission projects. SPP’s process balances the company’s values of collaboration, efficiency and transparency alongside expectations of confidentiality and equity set by FERC Order 1000. Under the process, interested parties were able to apply to participate in the competitive bidding process; the IEP reviewed, scored and ranked qualified proposals; and ultimately, the board of directors approved the IEP’s recommendations.

In September 2016, we reached a milestone in the value that we provide our members and their customers, with total savings from our Integrated Marketplace crossing the \$1 billion mark. In its first year of operation after launching in March 2014, the marketplace delivered \$380 million in net savings to SPP’s members. The markets have provided market participants hundreds of millions of dollars in net savings annually and in September 2016 crossed the \$1 billion threshold. Savings from SPP’s markets make up just a portion of the overall value the RTO affords its members. These and other services — including transmission expansion planning, reliability coordination, training and more — provide net benefits in excess of \$1.7 billion annually at a benefit-to-cost ratio of more than 11-to-1.

In October 2016, we were successful in our efforts to convince the U.S. Commodity Futures Trading Commission (CFTC) that its proposed action to allow private rights of action against ISO/RTOs was inappropriate. SPP led a coordinated effort involving

the ISO/RTO Council (IRC); SPP member companies; trade associations; leadership of the House Energy and Commerce Committee, Senate Energy and Natural Resources Committee and House and Senate Agriculture Committees; and FERC, which ultimately resulted in favorable exemptions for the concerned parties.

At the outset of 2016, we dubbed it “the year of audits.” At its close, we can happily report that not only did the last 12 months live up to that expectation, but also we rose to the challenge. Over the course of the year, we favorably completed a FERC audit of our Integrated Marketplace and Market Monitoring Unit (MMU) and compliance with FERC’s uniform accounting system and Form 1; an audit of compliance with FERC Order 693 pertaining to standards related to our planning authority, reliability coordinator, balancing authority and transmission service provider roles (our first as a consolidated balancing authority); a financial audit on which we received our 19th consecutive unqualified opinion on our financial statements; and a SOC1 Type II audit on which we earned our seventh unqualified audit opinion. This is noteworthy given our staff’s involvement in complex projects throughout the year and the audit’s ever-growing scope and complexity.

Lastly — and at long last — we implemented the provisions of Attachment Z2 of the SPP tariff regarding compensation for regional use of sponsored transmission upgrades. Doing so certainly counts as a success of sorts, as it marks the end of a long effort, but that success came only after eight years of disappointment while our staff and stakeholders struggled with an “onion” of processes and formulas that revealed only more complexity with every layer that was peeled back. Though we celebrate the milestone we achieved in 2016, we aren’t finished with this effort yet. We’ve formed a task force that is hard at work assessing whether and how we can bring much needed simplicity to our settlement processes.

*“As SPP crosses the threshold into the next quarter century of our existence, then, we look not back but forward. We recommit ourselves to continuous improvement ...”*

## Looking Ahead

Given such a banner year, we could all be forgiven for wanting to rest on our laurels or to indulge a bit longer in nostalgia. If our history teaches us anything, however, it's that nothing stays the same. We'll go a step further to point out that if nothing stays the same, it stands to reason that we are all — individually and collectively — always either improving or worsening.

As SPP crosses the threshold into the next quarter century of our existence, then, we look not back but forward. We recommit ourselves to continuous improvement, acknowledging a year — and yes, a long history — with many wins to our credit. We do so not in the spirit of self-satisfaction but out of a desire to use those accomplishments as a springboard to further growth and future endeavors.

The pages of this annual report serve as a snapshot in time. They reflect on the noteworthy goings-on from all corners of our organization throughout 2016. We believe, though, that the facts and figures presented here do more than chronicle a year of our company's ongoing story: They point ahead to the next chapter.

We hope as you read the 2016 annual report, for which we've chosen the theme Forward, you'll join us in celebrating the past 75 years, noting what we've accomplished by working together and considering where we're headed.

Take care,

Nicholas A. (Nick) Brown  
President and chief executive officer

James E. Eckelberger  
Chairman of the board of directors





# the power of relationships.

member value

For 75 years, SPP has worked diligently to ensure the supply of the most reliable and cost-efficient electric power for our entire region. We also create value for our members by centralizing shared services; providing an expert, holistic, regional view of matters facing our stakeholders; and providing economies of scale afforded by our business model.

## Celebrating 75 Years of Reliability

In recognition of the 75th anniversary of its foundation in 1941, SPP invited member representatives, government officials and community leaders to a celebration at the Little Rock Marriott Downtown on Oct. 24, 2016.

At the event, Arkansas Gov. Asa Hutchinson, FERC Commissioner Colette Honorable and Chairman of the SPP board of directors Jim Eckelberger spoke about SPP's accomplishments and regional and national impact over the course of its history.

The Arkansas Symphony Orchestra Brass Quintet performed a piece titled "Heralding Light," created in commemoration of SPP's anniversary. SPP presented a video documentary and book, both titled "The Power of Relationships," chronicling the organization's history.

In a message printed in the event's program, SPP President and CEO Nick Brown wrote, "Reliability is job one for SPP. We exist to help our members keep the lights on, today and in the future. We do so not through hard work, innovation or efficiency, though each is a necessary component of our success. For SPP, reliability is accomplished through strong, healthy relationships with those we serve."

SPP has long distinguished itself through our relationship-based approach to doing business. We exist because of

*"For SPP, reliability is accomplished through strong, healthy relationships with those we serve."*

FERC Commissioner Colette Honorable — former chairwoman of the Arkansas Public Service Commission — shared her thoughts about SPP at our 75th anniversary dinner on Oct. 24, 2016.



our stakeholders. Without their support — logistically, financially, politically and often even emotionally — we would not be where we are today. Because of the strength of our relationships, our legacy of success and deliberate focus on continuous improvement and building consensus among our members, SPP has every reason to think our future is just as bright as our history.

## Value of Transmission

SPP and its stakeholders have long considered a robust transmission grid to be a prerequisite to reliable, efficient operations. It was not until 2016, though, that we were able to quantify transmission infrastructure's value to our region.

We conducted a study of 348 transmission upgrades constructed at a cost of \$3.4 billion in capital investment in the SPP region from 2012 to 2014. The study showed that these projects directly resulted in more than \$240 million in fuel cost savings for utilities during the first year of operation of the company's wholesale energy market.

Whereas previous studies projected the expected future value of transmission construction based on available forecast data, the 2016 Value of Transmission study used actual historical operating data obtained during the first year of operation of SPP's Integrated Marketplace to document transmission value already realized.

In addition to fuel cost savings, the study quantified other benefits associated with the transmission expansion upgrades, including reliability and resource adequacy benefits, generation-capacity cost savings, reduced transmission losses, increased wheeling revenues and public policy benefits associated with more optimal wind development facilitated by the transmission upgrades. The net present value of all quantified benefits is expected

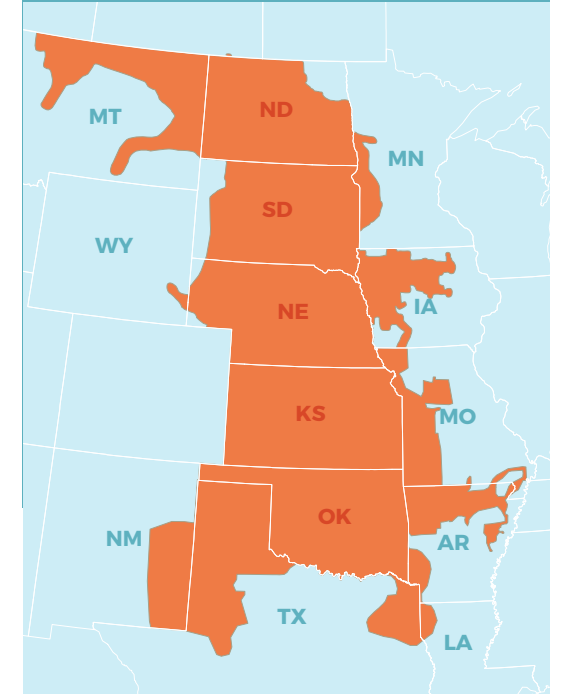
Service territory  
**546,000 square miles**

Population served  
**17.5 million**

Substations  
**4,835**

Generators (RTO)  
**790**

Peak load (July 21, 2016)  
**50,622 MW**



*“... the true value of transmission-expansion projects in SPP likely far exceeds the calculated amount, and SPP’s stakeholders can anticipate continued and increasing value from future transmission upgrades going forward.”*

to exceed \$16.6 billion over a 40-year period, resulting in a benefit-cost ratio of at least 3.5-to-1. This means the investments are expected to produce more than \$3.50 in overall benefits for every \$1 in transmission-related costs.

“Transmission does more than just keep the lights on. It’s an enabling resource that paves the way for numerous benefits to our stakeholders and their customers,” Brown said. “A modernized transmission system increases reliability, reduces costs by providing access to a wholesale energy market and effectively integrates wind and other renewable energy to the grid.”

“The SPP Value of Transmission study is a path-breaking effort,” Johannes Pfeifenberger, Judy Chang and Onur Aydin of the Brattle Group noted in a letter accompanying the study. Compared to past transmission-planning studies, “It provides a more accurate estimate of the total benefits that a more robust and flexible transmission infrastructure provides to power marketers, market participants and, ultimately, retail electric customers.”

Also noted in the Brattle Group letter: “The estimated present value of the production cost savings in the SPP study likely is understated” due to several factors, including the fact that many of the major transmission projects evaluated were not yet in service during most of the period analyzed. In other words, the true value of transmission-expansion projects in SPP likely far exceeds the calculated amount, and SPP’s stakeholders can anticipate continued and increasing value from future transmission upgrades going forward.

## \$363M Transmission Upgrades

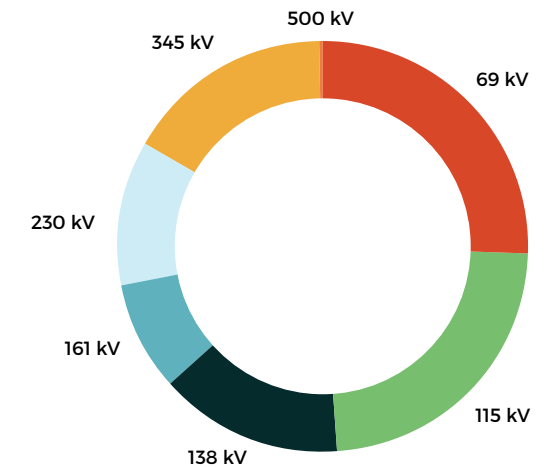
In April 2016, the board approved 86 transmission upgrades representing \$363 million in new engineering and construction costs. Proposed as part of SPP’s 2016 Integrated Transmission Planning Near-Term Assessment to address 262 projected reliability needs on the RTO’s transmission system, the portfolio of planned development include a \$20.5 million project to address needs in the Tulsa, Okla., area; a \$30.5 million project to address needs near Woodward, Okla., through construction of a new substation and 138 kilovolt (kV) line; and a \$145.7 million project to construct new substations and 115 kV lines to address needs near the Bakken shale formation in northwestern North Dakota.

## Planning Reserve Reduction

Also in April 2016, the board approved the reduction of SPP’s planning-reserve margin from 13.6 percent to 12 percent, lowering capacity requirements in SPP by about 900 MW. The reduction is expected to save our load-serving members approximately \$90 million annually or \$1.4 billion over the next 40 years.

SPP Vice President of Engineering Lanny Nickell cites three primary factors that enabled us to take this cost-saving step while maintaining reliability: significant transmission buildout — nearly \$6 billion in the last decade — that allows the RTO to deliver resources from any part of its footprint to wherever they’re needed; geographic diversity, magnified by the expansion of SPP’s service territory into all or part of 14 states as of October 2015; and the success of SPP’s markets, which integrates more than 700 generating resources into the organization’s capacity mix.

## Miles of transmission lines: 65,755 total



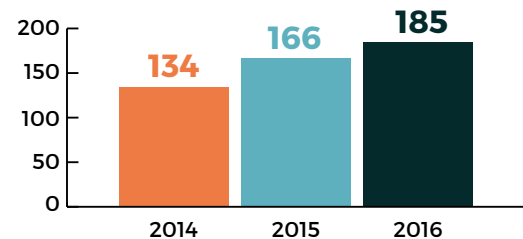
69 kV	16,808
115 kV	15,512
138 kV	9,471
161 kV	5,596
230 kV	7,518
345 kV	10,758
500 kV	92

Demand response (market)  
**1500 MW of behind-the-meter generation**

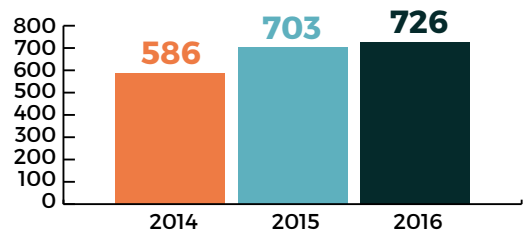
Planning reserve margin  
**Required 13.6% Actual 24%**  
Reduction to 12% established for summer 2017



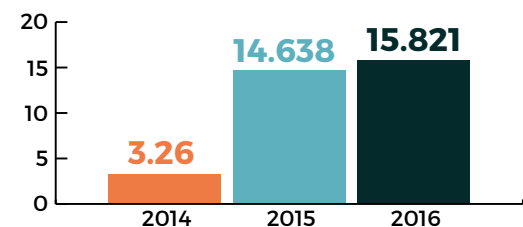
### Number of market participants 2014-2016



### Number of market resources 2014-2016



### Market settlement dollars 2014-2016 (in \$ billions)



“This action greatly illustrates the power of our stakeholder process,” Nickell said. “Our staff and stakeholders worked together diligently to assess and confirm the feasibility and benefits of lowering our reserve margin, and thanks to their consensus-building efforts, our entire region will now benefit from improved reliability and capacity savings.”

## Marketplace Savings Cross \$1B Threshold

As of September 2016, our wholesale electricity markets had reduced the cost of electricity by more than \$1 billion since 2014 when we launched our Integrated Marketplace: the mechanism through which we facilitate the sale and purchase of electricity to ensure cost-effective electric reliability throughout our 14-state region. When we launched the marketplace in March 2014, SPP became the first RTO to do so on time and on budget.

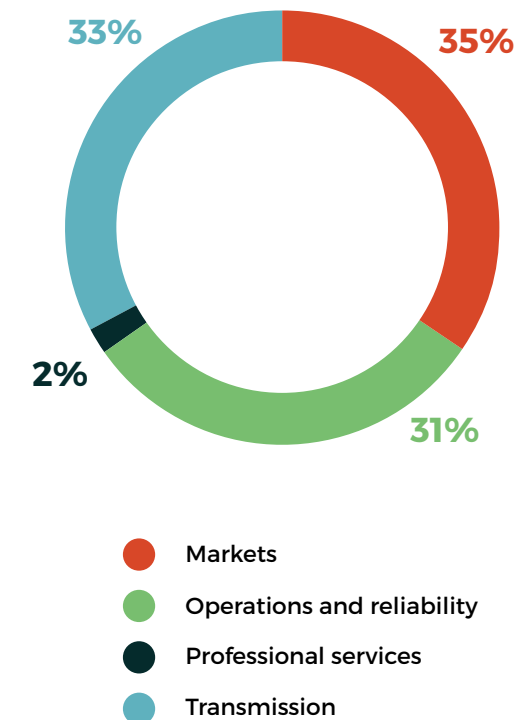
In its first year of operation, the Integrated Marketplace delivered \$380 million in net savings to SPP’s member companies and their customers, paying for itself in less than a year. The markets have provided market participants hundreds of millions of dollars in net savings annually and in September 2016 crossed the \$1 billion threshold.

“Our markets provide tremendous value to the SPP region; that’s something we’ve known and demonstrated since they launched,” SPP Vice President of Operations Bruce Rew said. “The billion-dollar mark is an exciting milestone, and I’m proud that we reached it so quickly.”

## The Value of SPP

Savings from SPP’s markets and transmission planning efforts make up just a portion of the overall value we afford our members. These and other services — including reliability coordination, training, and more — provide net benefits to our members in excess of \$1.7 billion annually at a benefit-to-cost ratio of 11-to-1 (up from 10-to-1 in 2015). This means a typical residential customer using 1,000 kWh saves \$5.71 per month because of the services SPP provides.

### Value of SPP \*



\* Numbers are rounded.

# keeping the lights on.

the changing grid

“Evolutionary versus revolutionary” is part of our value proposition: the traits that distinguish us and set our business model apart from others. It means that we commit to steady, dependable, continuous improvement that ensures both the reliability of our service and our flexibility to keep pace with changes that affect our industry.

In 2016, we demonstrated our continued and successful evolution in many facets of our organization, from the effective management of a grid that’s increasingly proliferated with renewable generation sources to changes in our day-ahead market commitment processes that better accommodate the harmonization of gas and electric resources.

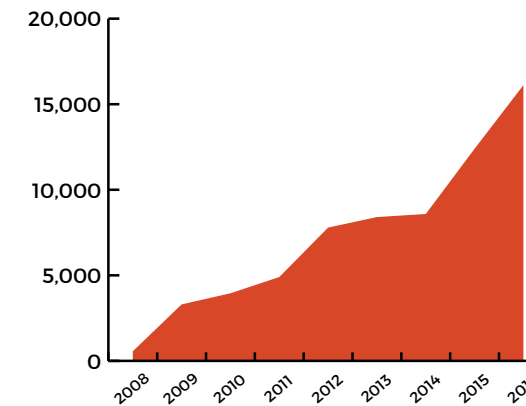
## Wind Integration

SPP overcame significant operational challenges and proved many experts’ assumptions false by successfully integrating substantial amounts of wind power into its system in 2016. It was assumed a decade ago — when wind comprised less than 1 percent of SPP’s generation mix — that an ISO/RTO could never serve more than 20-30 percent of its load reliably with a variable resource like wind. Today, it’s the third most-prevalent fuel source in the SPP region — making up about 15 percent of our generating capacity, behind only natural gas and coal — and serves continually more and more of our load without any undesirable impacts to reliability.

Installed wind-generation capacity increased in 2016 alone by more than 30 percent: up 4,000 MW from 12 GW to more than 16 GW. As a result — and thanks to the continued maturation of SPP’s market processes and the expertise of its operations staff — we are able

## Installed wind capacity: 2008-2016

(Source: Annual State of the Market Reports)



SPP’s installed wind capacity has risen steadily and dramatically over the last several years.

2008:	~560 MW
2009:	~3,400 MW
2010:	~4,000 MW
2011:	~5,000 MW
2012:	7,790 MW
2013:	8,405 MW
2014:	8,583 MW
2015:	12,397 MW
2016:	16,114 MW

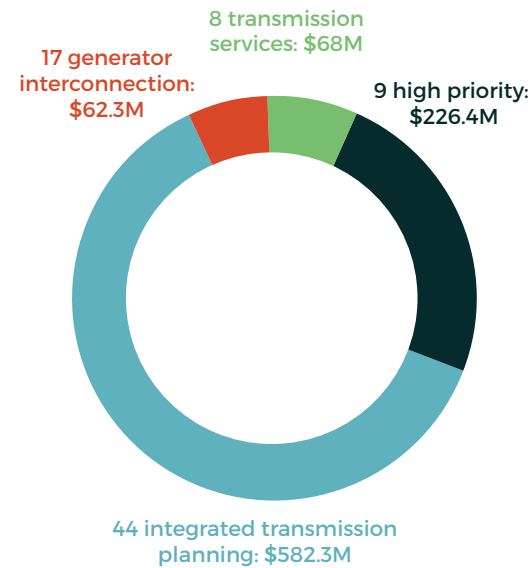
GI queue

**16,900 MW**

The SPP Generator Interconnection Queue process provides a means for generation planners and developers to submit new GI projects into the queue for validation, study, analysis and ultimately execution of a generator-interconnection agreement.

**Projects completed in 2016: 78**

SPP monitors approved projects' progress by soliciting feedback from project owners at least quarterly. In 2016, our members completed 78 transmission upgrades with engineering and construction costs totaling about \$939 million.



- \$582.3M 44 integrated transmission planning
- \$226.4M 9 high priority
- \$ 68.0M 8 transmission service
- \$ 62.3M 17 generator interconnection

to serve an ever-increasing percentage of our total load with wind. SPP's maximum simultaneous wind-generation peak rose from 9,948 MW in 2015 to 12,336 MW in 2016. Also, wind penetration — the amount of total load served by wind at a given time — has increased from a 38 percent peak in 2015 to 49.2 percent in 2016.

Such rapid and substantial integration of wind into our system comes with many challenges, including dramatic swings in wind output upward of 10 GW in less than 24 hours, significant and sudden loss of wind generation due to icing and uncertainties inherent to wind forecasting. SPP also experienced an increase in congestion and congested flowgates with additional wind during the year: At high wind levels the SPP transmission system experiences approximately double the number of congested flowgates compared to periods with moderate levels of wind.

Despite these challenges, SPP's operations staff works diligently to mitigate impacts and stay ahead of contingencies that threaten the reliability of the system, and efforts like the 2016 Variable Integration Study clarify SPP's operational focus to keep the lights on today and in the future.

**Transmission Planning**

Since it was approved by FERC in 2010, SPP's Integrated Transmission Planning (ITP) process has helped determine the transmission needs for our region and has facilitated investment in over \$5.5 billion of cost-effective transmission to meet reliability, economic and public policy needs. Between the ITP and other earlier planning processes, SPP has directed nearly \$10 billion in transmission investment over the last decade. These investments are intended to create a cost-effective, flexible and robust transmission network that

will improve access to the region's diverse generating resources and facilitate efficient market processes.

**NTCs Issued**

ITP plans that are reviewed by the Markets and Operations Policy Committee and approved by the SPP board of directors allow staff to issue Notification to Construct (NTC) letters for approved projects needed within the four-year financial commitment horizon. Staff issues Notification to Construct with Conditions (NTC-C) letters for projects that require a further refinement of the Study Estimate. When an NTC or NTC-C is issued, the projects are reviewed during the ITP study process to ensure its continued need and required in-service date.

In 2016, SPP issued 47 NTCs, representing 138 projects to be constructed through 2021 with estimated construction costs of \$991.98 million.

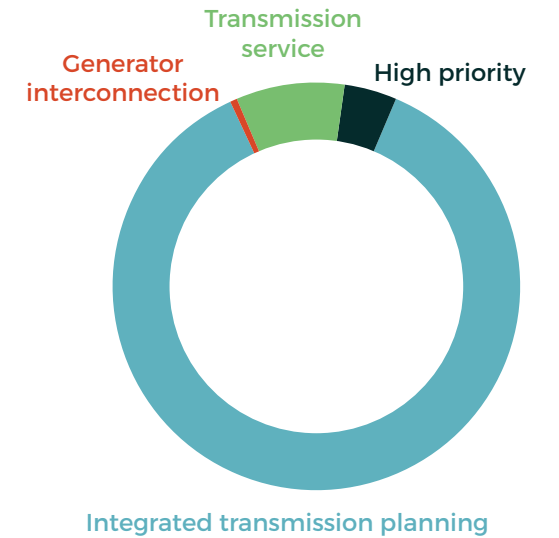
**Enhanced Combined Cycle/Gas Day**

FERC Order 809 sought to improve coordination of wholesale natural gas and electricity market scheduling, and in 2015, it adopted a proposal by the North American Energy Standards Board to amend the timely nomination cycle deadline for scheduling gas transportation and "to add a third intraday nomination cycle during the gas operating day to help shippers adjust their scheduling to reflect changes in demand." Effective with SPP's Oct. 1, 2016, operating day, we instituted the FERC-ordered timelines for gas-day nominations.

SPP worked actively with its members through the Change Working Group to ensure a successful and smooth transition to the new timeline. Beginning Sept.

**Notifications to construct issued: 47 total**

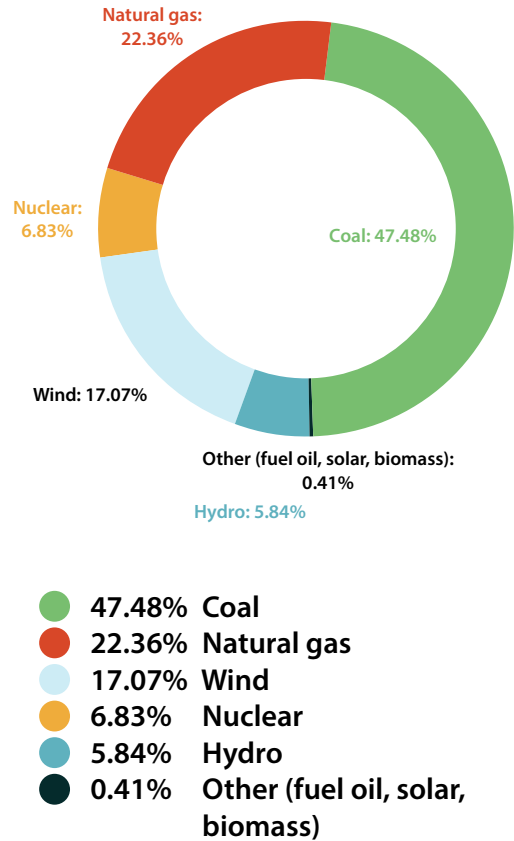
138 Projects to be constructed through 2021 with estimated construction costs of \$991.98 million



- \$859.5M Integrated transmission planning
- \$ 83.9M Transmission service
- \$ 41.3M High priority
- \$ 87.3M Generator interconnection

**Energy consumption by generation type (RTO): 266,442 GWh total**

These figures represent the total amount of energy consumed in the SPP region in 2016, categorized by fuel source.



30, 2016, SPP closed its Day-Ahead market at 9:30 a.m. and posted results at 2 p.m. Our Day-Ahead Reliability Unit Commitment (RUC) reoffer period began closing at 2:45 p.m. and now finishes closing by 5:15 p.m.

“The implementation of the new day ahead market timeline changes went very smoothly,” director of markets Philip Bruich said. “This is a major accomplishment toward better coordination and efficiencies between the electric and gas markets.”

**Macomber Map**

Knowing what is occurring in many places at one time — and being able to process that information quickly — is critical to the success of an electric grid operator.

SPP and the Electric Reliability Council of Texas (ERCOT) use a visualization tool in their control rooms called the Macomber Map to provide a geographical depiction of their systems. The Macomber Map was designed by SPP and ERCOT’s own in-house experts and helps their operations teams maintain grid awareness more efficiently and effectively than ever before. This software offers comprehensive and customizable views of power flows, constraints and numerous other inputs, available on command, in both their control room environments and training simulations.

An ERCOT team in 2007 completed initial development of the first Macomber Map, which upon its release was named for Gary Macomber, a human-factors engineer who originally envisioned the project and died unexpectedly before its completion. It has played an integral role in ERCOT operations ever since.

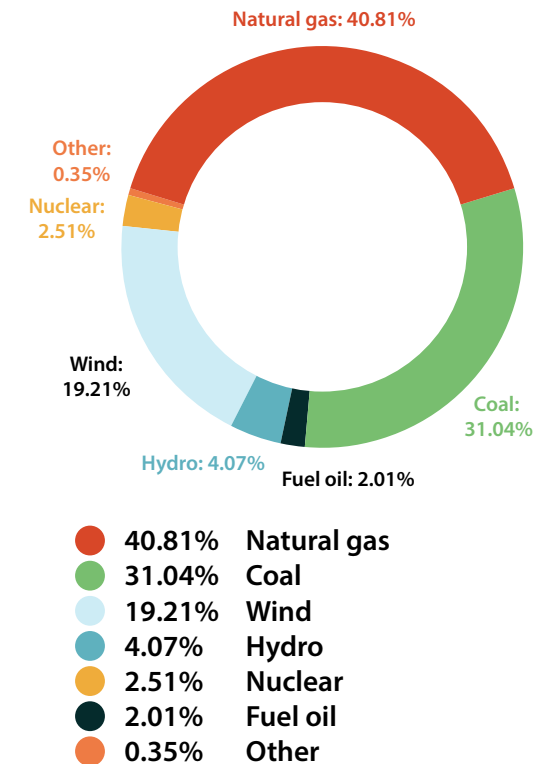
Mike Legatt, ERCOT’s principal human-factors engineer, was a key player in the initial project’s completion and continues to lead efforts to encourage its adoption by other users. SPP joined in the collaborative effort and has been using the Macomber Map in its operations since March 2016. For SPP, the Macomber Map has represented an evolutionary step forward in terms of both reliability and software development.

Cody Parker, SPP’s supervisor of operations support, supervised the team of engineers and programmers responsible for integrating the Macomber Map into SPP’s real-time operations toolset and developing some of the new features now available in Macomber Map 2.0. Working with Legatt to understand the tool’s architecture and with operations staff to understand how its users can and want to use the map, Parker’s team ensured the tool is quick, responsive and intuitive enough to help operators make timely and informed decisions when electric reliability is on the line.

SPP’s developers have tailored the Macomber Map to aggregate and analyze historical and real-time data from their energy management, markets, weather and other systems. In doing so, the tool enables operators to construct and assess “what-if” scenarios to better monitor and mitigate against the effects of congestion and potential outages on the bulk electric system.

**Generating capacity by fuel type: 83,945 MW total**

Generating capacity as of Dec. 31, 2016, is based on nameplate capacity of all resources in the SPP region.







Antoine Lucas, SPP director of Transmission Planning, spoke at the August 2016 Engineering Planning Summit.

the right thing,  
the right reason,  
the right way.

regulation and compliance

*“The audit report noted SPP’s controls in managing variable energy sources as ‘state of the art,’ and its integration of 24/7 IT and operator training programs ‘above and beyond the Standards and Requirements.’”*

SPP is committed to collaborating with its stakeholders by providing a proactive approach in meeting and exceeding compliance and regulatory obligations. In 2016, SPP successfully completed several audits and also named its first competitive transmission owner in compliance with FERC Order 1000. SPP also received a Private Rights of Action exemption from the CFTC and implemented Attachment Z2 of SPP’s tariff.

## First Competitive Transmission Project

In April 2016, SPP’s board of directors named the transmission owner of SPP’s first-ever competitively bid transmission project.

In response to FERC Order 1000, SPP formed an industry expert panel (IEP) to review, rank and score proposals for competitive transmission projects in compliance with FERC’s requirement to remove federal rights of first refusal for certain transmission projects approved for construction by the SPP board of directors. This process balances our company’s values of collaboration, efficiency and transparency alongside the expectations of confidentiality and equity set by FERC Order 1000.

After scoring 11 competitive proposals, the board of directors considered the IEP’s recommendations and ultimately designated one transmission owner responsible for construction of the “Walkemeyer” project: an estimated 22.6-mile, 115 kV line from Walkemeyer to North Liberal in western Kansas.

## Audit Success

2016 was a very successful audit year for SPP. FERC conducted an audit of SPP’s compliance with

Attachment AE of the Integrated Marketplace Open Access Transmission Tariff, FERC Order 719 (Market Monitoring), FERC Uniform Accounting System and FERC Form 1. While auditors found no evidence of RTO influence on the MMU’s independence, they did make 17 recommendations to strengthen and enhance MMU separation and independence. SPP agreed to make the necessary changes to reflect these recommendations.


FERC also audited SPP’s compliance with Order 693, which pertains to SPP’s role as planning authority, reliability coordinator, balancing authority and transmission provider. Although there were three open enforcement action items due to self-report prior to the audit, the audit team noted no findings or areas of concern. The audit report noted SPP’s controls in managing variable energy sources as “state of the art,” and its integration of 24/7 IT and operator training programs “above and beyond the Standards and Requirements.”

SPP earned its seventh unqualified SOC1 Type II audit opinion. This is significant because it demonstrates the dedication of SPP staff to maintain a high level of quality, ability to balance multiple complex projects and the capability of staff members to adapt as the scope of the audit continues to grow in complexity.

## Commodity Futures Trading Commission

After years of working with Congress, member companies, trade associations and various other organizations, SPP received a Private Rights of Action exemption from the CFTC in 2016, in a decision that also clarified the exemption for other U.S. ISO/RTOs.



A photograph of Arkansas Governor Asa Hutchinson, an older man with grey hair wearing a dark suit and blue tie, standing at a wooden podium on a stage. He is holding a microphone in his right hand and gesturing with his left hand. He is addressing a group of people seated in the audience. The audience members are mostly men, some wearing blue polo shirts. The room has a wood-paneled wall and a large orange abstract painting. A laptop and a microphone are on the podium.

Arkansas Gov. Asa Hutchinson addressed SPP employees at the July 2016 all-staff meeting, while on site for a briefing.

In 2013, SPP filed for an analogous exemption with the CFTC on the same basis as the exemptions they had previously granted other ISO/RTOs. SPP had not needed this exemption until the implementation of its Integrated Marketplace. The CFTC issued a draft order on the SPP request that introduced the preservation of Private Rights of Action under Commodity Exchange Act (CEA) Section 22 in the SPP order in 2015. The preamble language noted that the CFTC never intended to exempt the other ISO/RTOs from Private Rights of Action and removal of this exemption for all seven ISO/RTOs was under consideration.

The IRC and numerous other parties filed comments in response to this issue raised in the SPP draft order preamble language — all opposed the preservation of Private Rights of Action in ISO/RTO 4(c) exemptions.

The SPP government affairs and regulatory departments led a coordinated effort between the IRC, SPP member companies and electric industry trade associations (American Public Power Association, Edison Electric Institute, Electric Power Supply Association and National Rural Electric Cooperative Association) to convince the CFTC that its proposed action could negatively impact markets, reduce reliability and increase electricity costs for consumers and businesses.

Because of these efforts, the CFTC did not pursue its proposed order and instead granted SPP's exemptions, including the Private Rights of Action exemption, on Oct. 18, 2016. Additionally, the CFTC concurrently issued an amendment to the other ISO/RTOs exempting transactions covered under that order from Private Rights of Action under CEA Section 22.



Had the CFTC prevailed and adopted this proposed order, the effects could have been far reaching. ISO/RTOs and their market participants could have been subject to civil lawsuits in any U.S. District Court and potentially had part of its markets regulated by the CFTC rather than FERC. Opening market rules to judicial interpretation could have resulted in inconsistent determinations across the country, impacting electricity markets, SPP and our member companies and market participants.

## Attachment Z2

This year marked the completion of the implementation of Attachment Z2 of SPP's tariff.

SPP has an obligation, under Attachment Z2, to calculate and collect credits owed to specific entities for the use of transmission facilities. This obligation began in 2008. November 2016 was the first billing of Z2 credits, and it included the prior eight years' worth of Z2 crediting plus the first current month of September 2016. To implement this multiyear billing, SPP developed processes and software in compliance with the tariff's requirements.

Even with the success of this year's implementation, the work continues. SPP and its members formed a task force to consider refining and possibly revising the process.



(Top) The Z2 project team.

(Bottom) The Z2 team provided training on the system in June 2016.



# today ... and in the future.

people and culture

As our members provide power to their regions, we empower our members through the work of our diverse staff, who are regularly encouraged to strive for continuous improvement and find ways to give back to their communities. In doing so, we provide further value to our members and the people they serve. SPP also seeks new talent and encourages education of the young, because they will be the ones to help our members in the future.

## A Focus on STEM

SPP employees strive to be good corporate citizens who invest in our community both inside and outside of the workplace. In 2016, SPP focused not only on adding value to nonprofits and charities, but staff members also devoted time to mentoring and shaping the young minds of the future.

“We must increase the college-student pipeline in science, technology, engineering and mathematics (STEM) by focusing our attention on attitudes toward these subjects earlier in a student’s education,” Nick Brown wrote in an essay for Engage, a publication of the Arkansas Community Foundation.

In February 2016, we hosted more than 100 high-school students from across Arkansas to demonstrate the value of STEM in our work. Representatives from SPP’s engineering, IT and operations departments explained to students enrolled in a statewide Essentials of Computer Programming course how algorithms and other programming tools help us monitor the grid, collect and analyze data from 94 member companies and ensure the reliable supply of electricity to nearly 18 million people in our footprint.

*“SPP employees strive to be good corporate citizens who invest in our community both inside and outside of the workplace.”*

*“SPP’s investment in STEM education provides an opportunity to encourage students to explore STEM studies.”*

Employees including Yasser Bahbaz, Ed Briggler, Sara Cowell, Renee McMillen, Mike Ross, Ryan Schoppe, Peter Tucker and Eric Wyles participated in a question-and-answer panel after the presentations.

“I believe getting students interested in STEM fields from a young age is absolutely vital to the long-term success of our nation as it allows us to steadily push the boundaries for what is possible,” engineer II Ryan Schoppe said. “By engaging those still in school, we can help inform them of a potentially rewarding career path that allows them to make the world a better place.”

SPP’s investment in STEM education provides an opportunity to encourage students to explore STEM studies. With the technical nature of what we do, it’s important for us to get involved with local students who are interested in engineering and IT and encourage them to find jobs in their home state.

Additionally, through the Million Women Mentors program, employees donated their time to encouraging young girls in Little Rock public schools to pursue STEM-related education programs and careers. This mentorship was beneficial to both the mentors and mentees by providing students examples of successful females in STEM careers and opening their eyes to education and careers they may not have thought possible.

In an effort to invest further in STEM, SPP employees added the Museum of Discovery as a new recipient to employee-supported charities in 2016. SPP has been a longtime corporate supporter of the museum and its passion for science, technology and math. Employees donated money and volunteered their time at the museum’s Discovering Excellence in Arkansas and Tinkerfest events.

In February 2016, SPP employees shared their STEM expertise with Arkansas high school students enrolled in the statewide Essentials of Computer Programming course.





## staff growth

### Staff

580 at the end of 2016

### Turnover rate

5.25 percent

## Staff Development

SPP recognizes its workforce as people first and employees second. We trust and value them as self-motivated contributors, teachers and mentors. And we strive to challenge, engage and reward them with continued investments in their careers, education and workplace.

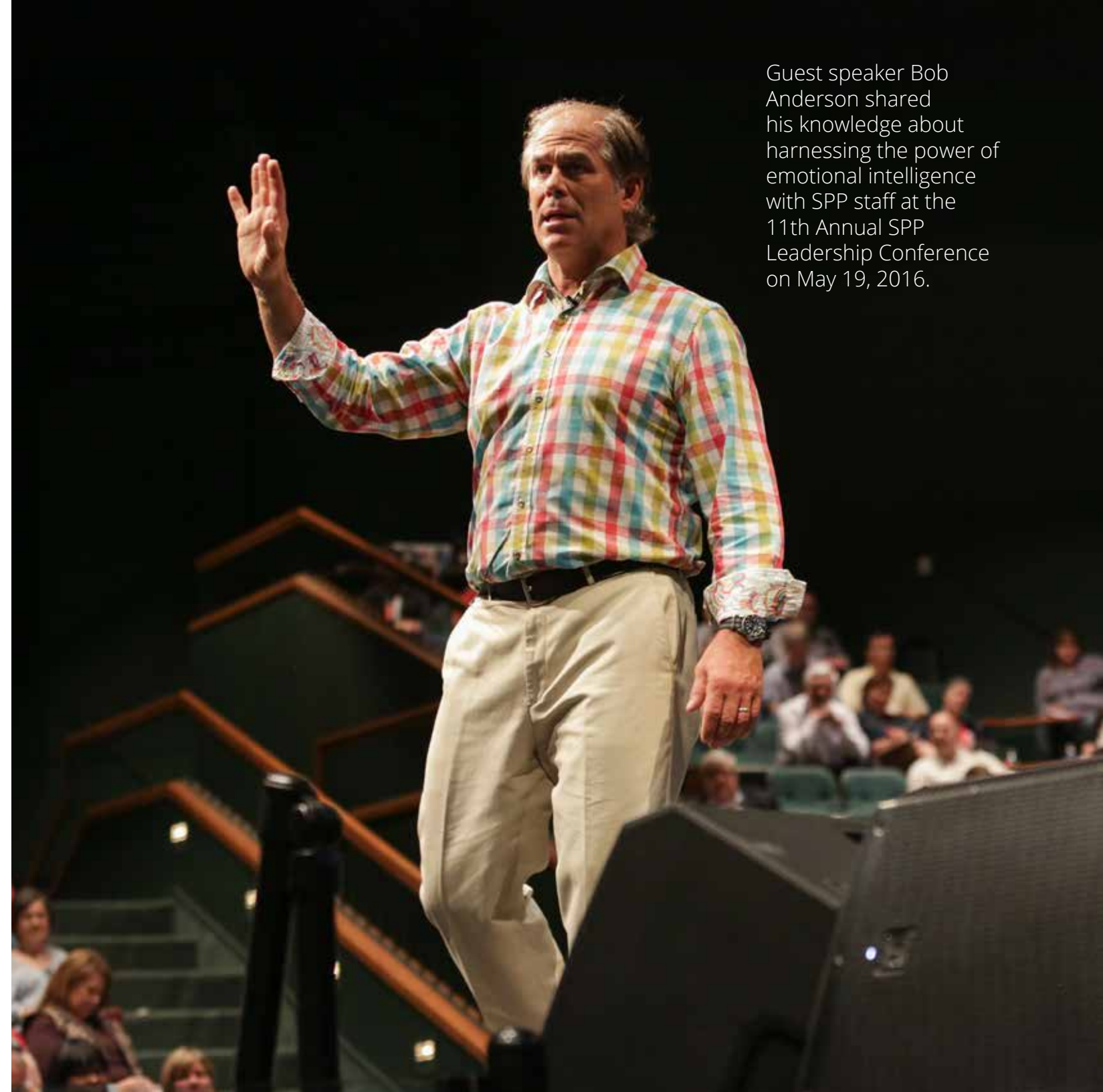
Two platforms designed to hone employees' leadership skills are the annual Leadership Conference and the Leadership Academy (formerly known as the Leadership Training Program).

The 2016 Leadership Conference — intended as a day of learning for every employee in the company — addressed the topic of emotional intelligence.

"Despite the very technical nature of our company, business for us is a human art, and our collective success is largely due to the quality of our relationships with our members, customers and regulators," Brown said. "Now and then, I get a comment about our Leadership Conference questioning the logic of pulling you away from your jobs for such an endeavor. To that I respond — if you're too busy to learn, you won't be busy for very long. Please enjoy this daylong learning opportunity in support of our culture driver — continuous improvement."

Twenty-seven employees graduated from our Leadership Academy in its 11th year. Participants in the eight-week series learn about leading oneself and others through group projects, reading assignments and public-speaking exercises. Since its inception in 2006, 324 employees have completed the program.

Also among SPP's suite of employee-engagement initiatives is the Organizational Improvement Group



Guest speaker Bob Anderson shared his knowledge about harnessing the power of emotional intelligence with SPP staff at the 11th Annual SPP Leadership Conference on May 19, 2016.

## milestone anniversaries

**Steve Mason**  
Lead Operator  
40 years with SPP

**Terry Oxandale**  
Shift Supervisor  
35 years with SPP

**Jimmy Womack**  
Manager, Operations  
Analysis and Performance  
Support  
30 years with SPP

(OIG). The OIG is a group of employees who are committed to the continuous improvement of SPP's processes and practices and reinforcement of our corporate culture. This group seeks out innovative ideas for beneficial changes to SPP, and they serve as a conduit through which employees can communicate their recommendations to management.

In 2016, the OIG implemented two projects — the SPP Little Free Library and Bring Your Kids to Work Day.

SPP's Little Free Library allows staff to trade books and serves as a reminder to read for pleasure and not just for work.

In 2016, SPP participated for the first time in National Take our Daughters and Sons to Work Day. Children learned what SPP does on a basic level, participated in engaging activities that taught about transmission and heard from IT professionals about their role in the electric utility industry.

### Honors and Awards

Brown leads by example, investing in the community personally and professionally, and his generosity has not gone unnoticed. In April 2016, Brown was nominated by the University of Arkansas at Little Rock's College of Business to receive the Beta Gamma Sigma International Honor Society's 2016 Business Achievement award. In May 2016, Brown also received an award from the Arkansas Foodbank during their Empty Bowls event for leadership in hunger-relief efforts in the state.

"Anyone who has worked with me for very long has heard me share my belief that every one of us who is capable has a responsibility to live outside ourselves — to produce more than we consume and give more

than we take," Brown said. "It's why I so enjoy leading an organization that exists to serve our members and various stakeholders throughout our region, and it's exceedingly rewarding to see our staff embrace that philosophy and employ it with such great success. It's equally rewarding to work alongside a staff so passionate about community involvement."

SPP honors its highest-performing employees with several award and recognition programs.

The John Marschewski Leadership Award is given each year to the employee who carries on the former SPP president's legacy of the ideals paramount to SPP's success: hard work, a positive and encouraging attitude and the understanding that relationships and attitude are crucial in achieving personal and organizational goals.

John Luallen, a lead settlement analyst, was awarded the Marschewski Award for his leadership skills, professionalism and collaborative spirit.

Ricky Finkbeiner, a senior engineer, was a finalist for the Marschewski Award. Finkbeiner was recognized for his relationship-building efforts by bridging the gap among operations, engineering, planning and upper management.

Jennifer Morrison, manager of service management, also was a finalist for the Marschewski Award. Morrison was distinguished for her leadership, direction and exemplary positive attitude while also handling an increased workload regarding CIP initiatives.

President's Awards are presented annually to peer-nominated employees who embody SPP's core values,

## retirements

**David Lee**  
Lead Market Monitor  
10 years at SPP

**John Mills**  
Manager, Modeling  
13 years at SPP

**Scott Noble**  
Director, Business Process  
Improvement  
6 years at SPP

**Gary Snow**  
Senior Customer Relations  
Representative  
10 years at SPP



At the 75th Anniversary Holiday Dinner in December 2016, Nick Brown presented lead settlement analyst John Luallen with the John Marschewski Leadership Award.



maintain a positive attitude, provide excellent service and generally go above and beyond the call of duty.

President's Awards were given to Gay Anthony, Adam Bell, Michael Daly, David Daniels, Rob Gieringer, Chris Haley, Jonathan Hayes, Charles Locke, Kaye McCarty, Susan Polk, Tim Van Prooyen, Katherine Rogers, Arthur Sabb, Caitlin Shank, Tara Smith, Peter Tucker and Derek Welker.

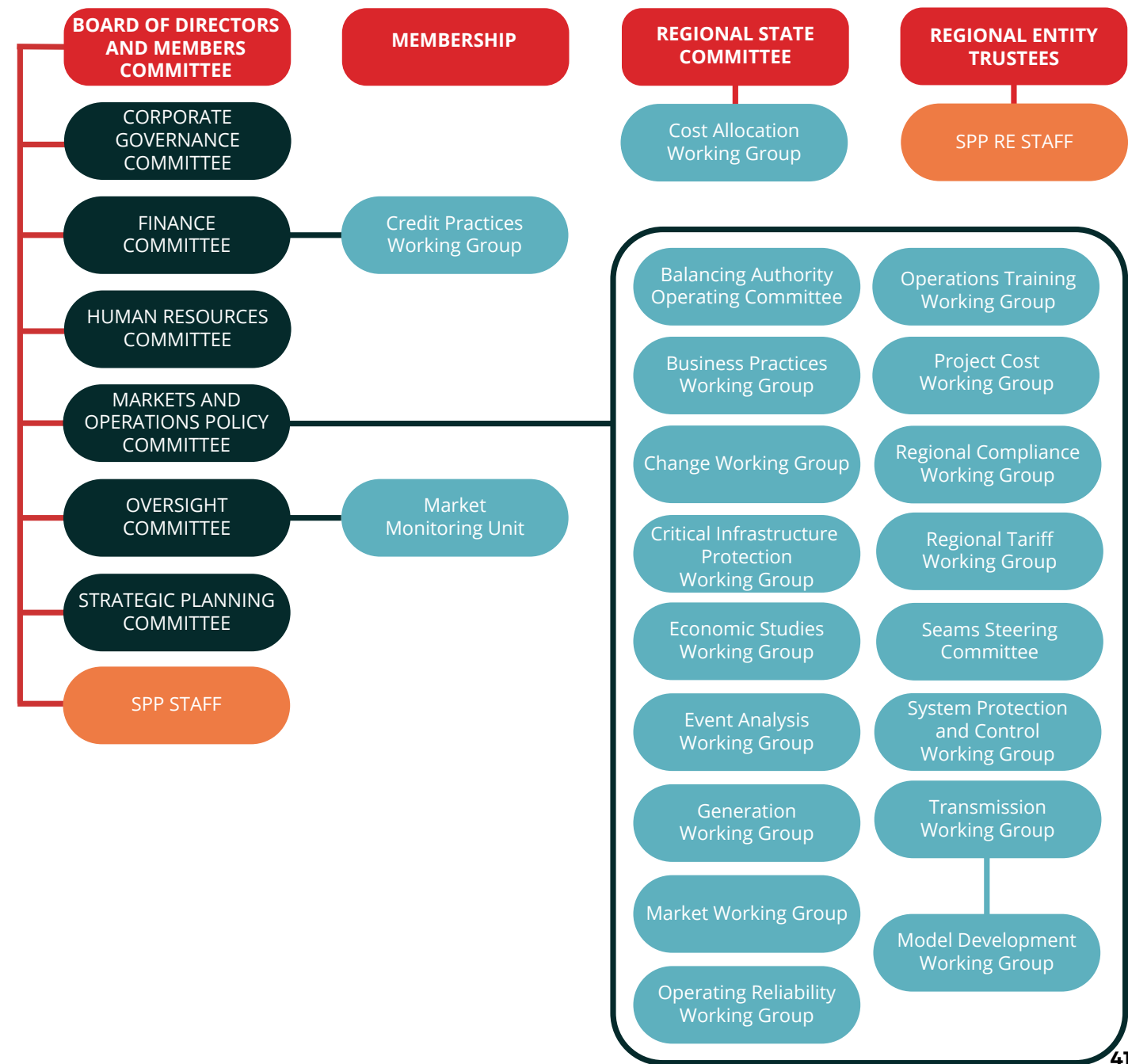
The Stacy Duckett Community Service Award recognizes an employee who supports volunteerism and community involvement and was named in honor of the late Stacy Duckett, former vice president of compliance at SPP. The award recognizes employees who work quietly behind the scenes, giving their own personal time and resources to support the community and maintaining a positive attitude and dedication to his/her job and to SPP.

Jennifer Broyles, accountant II, was named the Duckett Award winner for her work with CareLink and recruiting 45 co-workers to volunteer to fill a Meals on Wheels route in west Little Rock.

# helping our members work together.

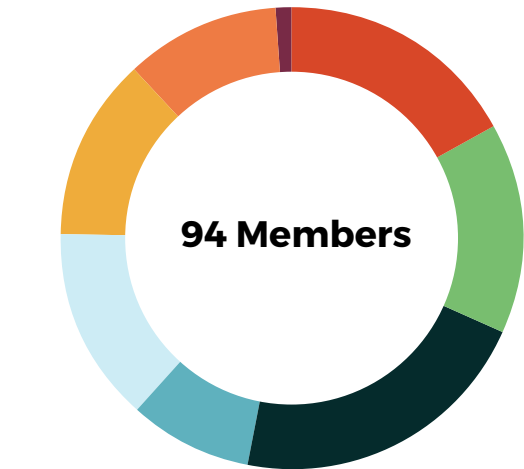
corporate governance

## Organizational Structure



## Our Members

SPP membership is voluntary and open to any electric utility, federal power marketing agency, transmission service provider and any entity engaged in the business of producing, selling and/or purchasing electric energy for resale. Members enjoy voting privileges and decision-making rights as participants in select organizational groups.



### Cooperatives

- Arkansas Electric Cooperative Corporation \*
- Basin Electric Power Cooperative @ ^
- Central Power Electric Cooperative, Inc. \* ^
- Corn Belt Power Cooperative \* ^
- East River Electric Power Cooperative, Inc. \* ^
- East Texas Electric Cooperative, Inc. \* ^
- Golden Spread Electric Cooperative, Inc. \*
- Kansas Electric Power Cooperative, Inc. \*
- Lea County Electric Cooperative, Inc. \* ^
- Mid-Kansas Electric Company, LLC @ ^
- Midwest Energy, Inc. @ ^
- Mountrail-Williams Electric Cooperative \*
- Northeast Texas Electric Cooperative, Inc. \*
- Northwest Iowa Power Cooperative \* ^
- Rayburn Country Electric Cooperative \*
- Sunflower Electric Power Corporation @ ^
- Tex-La Electric Cooperative of Texas, Inc. \* ^
- Tri-County Electric Cooperative, Inc. \*
- Tri-State Generation and Transmission Association, Inc. \* ^
- Western Farmers Electric Cooperative @ ^

### Federal Agencies

- Western Area Power Administration — Upper Great Plains Region @ ^

### Independent Power Producers

- Acciona Wind Energy USA, LLC \*
- Calpine Energy Services, L.P. \*
- Cielo Wind Services, Inc. \*
- CPV Renewable Energy Company, LLC \*
- Dogwood Energy, LLC \*
- EDP Renewables North America LLC \*
- Enel Green Power North America, Inc. \*
- Entergy Asset Management \*
- Exelon Generation Company, LLC \*
- Flat Ridge 2 Wind Energy, LLC \*
- Midwest Gen, LLC \*
- NextEra Energy Resources, LLC \*
- Tenaska Power Services Co. \*

### Independent Transmission Companies

- Duke-American Transmission Company, LLC \*
- Grain Belt Express Clean Line LLC \*
- Hunt Transmission Services, LLC \*
- ITC Great Plains, LLC \* ^
- NextEra Energy Transmission, LLC \*
- Plains and Eastern Clean Line LLC \*
- Prairie Wind Transmission, LLC \* ^
- South Central MCN, LLC \*
- Transource Energy, LLC \*Transource Missouri, LLC \* ^

### Investor-owned

- American Electric Power
  - AEP Oklahoma Transmission Company, Inc. \* ^
  - AEP Southwestern Transmission Company, Inc. \* ^
  - Public Service Company of Oklahoma @ ^
  - Southwestern Electric Power Company @ ^
- Cleco Power, LLC \*
- The Empire District Electric Company @ ^
- Entergy Services, Inc. \*
- Kansas City Power & Light Company @ ^
  - KCP&L Greater Missouri Operations Company @ ^
- NorthWestern Energy \* ^
- OGE Transmission, LLC \*
- Oklahoma Gas and Electric Company @ ^
- Westar Energy, Inc. @ ^
  - Kansas Gas and Electric Company @ ^
- Xcel Energy
  - Southwestern Public Service Company @ ^
  - Xcel Energy Southwest Transmission Company, LLC \*

### Marketers

- Boston Energy Trading and Marketing, LLC \*
- Cargill Power Markets LLC \*
- DTE Energy Trading, Inc. \*
- Duke Energy Transmission Holding Company, LLC \*
- Dynegy Power Marketing, Inc. \*
- El Paso Marketing Company, LLC \*
- Luminant Energy Company, LLC \*
- Noble Americas Gas & Power Corp \*
- NRG Power Marketing, LLC \*
- Shell Energy North America (US), L.P. \*
- Williams Power Company, Inc. \*
- XO Energy SW, LP \*

### Municipals

- Board of Public Utilities of Kansas City, Kansas \*
- City of Coffeyville \* ^
- City of Independence, Missouri \* ^
- City Utilities of Springfield \* ^
- Clarksdale Public Utilities Commission \*
- Harlan Municipal Utilities \* ^
- Kansas Municipal Energy Agency \*
- Kansas Power Pool (KPP) \* ^
- Lafayette Utilities System \*
- Lincoln Electric System \* ^
- Missouri River Energy Services \* ^
- Municipal Energy Agency of Nebraska \*
- Oklahoma Municipal Power Authority \* ^
- Public Service Commission of Yazoo City \*

### State Agencies

- The Central Nebraska Public Power & Irrigation District \* ^
- Grand River Dam Authority @ ^
- Heartland Consumers Power District \* ^
- Louisiana Energy and Power Authority \*
- Missouri Joint Municipal EUC \*
- Nebraska Public Power District @ ^
- Northeast Nebraska Public Power District \*
- Omaha Public Power District @ ^

### SPP Contract Participants

- Southwestern Power Administration # ^

# Control area within SPP

^ Transmission owner

\* Transmission-using member

@ Transmission-owning member



## RE metrics

Audits/spot checks	23
Compliance exceptions/ find/fix/track	72
Inherent risk assessments	99
Internal control evaluations	5
Mitigation activities	87
Staff org group participation	35
Reliability assessments	3
Registration changes	19
System events	28
Videos produced	18
Violations received	174
Workshop attendance	719

## Regional Entity

In 2016, a new set of NERC CIP standards became effective that addressed cyber and physical security of the bulk electric system. SPP RE and its registered entities committed significant time and resources into preparing for implementation of these standards. The SPP RE CIP team made numerous site visits to help registered entities prepare. About 25 companies participated in this targeted outreach. The SPP RE region has had a successful transition to the new CIP requirements.

SPP RE continued implementing oversight processes that focus on a company's risk to the bulk electric system (BES). This risk-based approach to compliance is the future of the NERC Compliance Monitoring and Enforcement Program. SPP RE staff developed Inherent Risk Assessments (IRA) for its registered entities. IRAs help establish a company's monitoring interval, scope and monitoring method.

To ensure the SPP RE trustees' continuing independence, SPP RE management and trustees worked with the SPP Corporate Governance Committee to change the procedures by which trustees are nominated/elected and added one new trustee position. John Meyer resigned from the trustees, and two new trustees were elected: Steve Whitley, former CEO of the New York Independent System Operator, and Mark Maher, former CEO of the Western Electricity Coordinating Council.

To keep registered entities up to date on activities related to BES reliability, SPP RE will monitor changes at FERC due to the new federal administration and new initiatives at NERC. Staff is planning to enhance its successful outreach program by adding new methods of communication during 2017.

## Regional Entity Trustees

The Regional Entity trustees operate separately from SPP's board of directors and have autonomy over decisions related to the SPP Regional Entity, including fund allocation of their budget. The four independent trustees also provide oversight of SPP RE decisions on regional standards, compliance enforcement and penalties.



**John Meyer**  
Chairman  
January-  
March 2016



**Dave Christiano**  
Chairman,  
March 2016-  
present



**Gerry Burrows**  
Elected June  
2007



**Mark Maher**  
Elected  
August 2016



**Steve Whitley**  
Elected  
August 2016



### **Ron Ciesiel, General Manager, SPP Regional Entity**

Ron Ciesiel reports directly to four independent SPP RE trustees. Ciesiel leads a group of engineers, compliance specialists and attorneys with the overall responsibility for compliance monitoring and enforcement, critical infrastructure protection activities and event analysis for the SPP RE footprint. He joined SPP in 1998 and was appointed general manager in 2012.

## Regional State Committee



**Patrick Lyons**  
President  
New Mexico  
Public  
Regulation  
Commission



**Stephen Stoll**  
Vice  
President  
Missouri  
Public  
Service  
Commission



**Shari Feist Albrecht**  
Secretary/  
Treasurer  
Kansas  
Corporation  
Commission



**Dana Murphy**  
Oklahoma  
Corporation  
Commission



**Lamar Davis**  
Arkansas  
Public  
Service  
Commission  
(Through  
November  
2016)



**Kristie Fiegen**  
South  
Dakota  
Public  
Utilities  
Commission



**Dennis Grennan**  
Nebraska  
Power  
Review  
Board  
(April 2016-  
present)



**Donna Nelson**  
Public Utility  
Commission  
of Texas



**Libby Jacobs**  
Iowa Utilities  
Board



**Brian Kalk**  
North  
Dakota  
Public  
Service  
Commission



**Steve Lichter**  
Nebraska  
Power  
Review  
Board  
(Through  
March 2016)



**Kim O'Guinn**  
Arkansas  
Public  
Service  
Commission  
(December  
2016-  
present)

## regulation

The SPP Regional State Committee (RSC) provides collective state-regulatory agency input on matters of regional importance related to the development and operation of the bulk electric transmission system.

The RSC is composed of state utility regulatory commissioners from agencies in Arkansas, Iowa, Kansas, Missouri, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota and Texas.



## Board of Directors



**James E. Eckelberger**  
Chairman of the Board  
Elected 2000  
Member, Strategic Planning Committee, Corporate Governance Committee



**Harry I. Skilton**  
Vice Chairman of the Board  
Elected 2000  
Chairman, Finance Committee  
Member, Strategic Planning Committee



**T. Graham Edwards**  
Elected 2016  
Member, Export Pricing Task Force



**Larry Altenbaumer**  
Elected 2005  
Member, Finance Committee, Oversight Committee



**Phyllis Bernard**  
Elected 2003  
Member, Oversight Committee, Strategic Planning Committee



**Joshua W. Martin III**  
Elected 2003  
Chairman, Oversight Committee  
Member, Human Resources Committee



**Julian Brix**  
Elected 2008  
Chairman, Human Resources Committee  
Member, Liaison to Markets and Operations Policy Committee



**Nick Brown**  
Elected 2004  
Chairman, Corporate Governance Committee



**Bruce A. Scherr**  
Elected 2016

## expansion

The members of SPP elected Graham Edwards of Isle of Palms, S.C., and Bruce Scherr of Palm Beach Gardens, Fla., to the company's board of directors during a January 2016 meeting in Oklahoma City.

The appointments expanded the SPP's board of directors to nine members. The Federal Energy Regulatory Commission in August 2015 approved SPP's request to revise its bylaws to expand its seven-member board of directors by up to three additional seats.

"On behalf of our board, I am very pleased to welcome Graham and Bruce," said Nick Brown, president and CEO of SPP. "Graham has a distinguished career in public power and considerable knowledge of our industry from his service on the board and as the chief executive of the Midcontinent Independent System Operator (MISO). Bruce expertly served for more than a decade on the board of the North American Electric Reliability Corporation (NERC) and has extensive compliance and critical infrastructure protection experience."



## Members Committee

### **Kristy Ashley**

Exelon

Director of Market Development  
(Through March 2016)

### **Jason Atwood**

Northeast Texas Electric Cooperative  
Vice President, Engineering and Operations

### **Phil Crissup**

Oklahoma Gas and Electric  
Vice President, Utility Technical Support

### **Jon Hansen**

Omaha Public Power District  
Vice President

### **Robert Harris**

Western Area Power Administration,  
Upper Great Plains  
UGP region: Senior Vice President;  
UGP Regional Manager

### **Kelly Harrison**

Westar Energy  
Vice President, Transmission

### **Scott Heidtbrink**

Kansas City Power and Light Company  
Executive Vice President and Chief Operating  
Officer (January 2016-February 2017)

### **Duane Highley**

Arkansas Electric Cooperative Corp. and  
Arkansas Electric Cooperatives, Inc.  
President, Chief Executive Officer  
and Chief Affordability Officer

### **David Hudson**

Xcel Energy — Southwestern  
Public Service Company  
President

### **Robert Janssen**

Dogwood Energy  
Vice President

### **Thomas Kent**

Nebraska Public Power District  
Vice President and Chief Operating Officer

### **Jeff Knottek**

City Utilities of Springfield, Mo.  
Vice President and Chief Operating Officer

### **Brett Leopold**

ITC Holding Corp.  
Vice President  
ITC Great Plains  
President

### **Stuart Lowry**

Sunflower Electric Power Corporation  
President and Chief Executive Officer

### **David Osburn**

Oklahoma Municipal Power Authority  
General Manager

### **Mike Risan**

Basin Electric Power Cooperative  
Senior Vice President of Transmission

### **Kevin Smith**

Tenaska Power Services  
President

### **Stuart Solomon**

Public Service Company of Oklahoma  
President and Chief Operating Officer

### **Mark Tourangeau**

NextEra Energy Resources  
Vice President, Business Management, South  
Region (February 2016-February 2017)

### **Kelly Walters**

Empire District Electric Company  
Vice President and Chief  
Operating Officer, Electric

### **Michael Wise**

Golden Spread Electric Cooperative  
Senior Vice President, Commercial  
Operations and Transmission

## Markets and Operations Policy Committee

<b>Noman Williams</b> <i>Chairman</i> South Central MCN	<b>Bill Dowling</b> Midwest Energy, Inc.	<b>Eric Hixson</b> Central Nebraska Public Power and Irrigation District	<b>Lloyd Linke</b> Western Area Power Administration	<b>Gregory Pakela</b> DTE Energy Trading, Inc.	<b>Gregory Thurnher</b> Shell Energy North America
<b>Paul Malone</b> <i>Vice Chairman</i> Nebraska Public Power District	<b>Todd Eagleston</b> Flat Ridge 2 Wind Energy, LLC	<b>Larry Holloway</b> Kansas Power Pool	<b>Chris Lyons</b> Exelon Generation Company, LLC	<b>Harshikesh Panchal</b> XO Energy	<b>Steven Ver Mulm</b> Northwest Iowa Power Cooperative
<b>Carl Monroe</b> <i>Staff Secretary</i> Southwest Power Pool	<b>Jim Edwards</b> East River Electric Power Cooperative, Inc.	<b>Gary Hurse</b> Lea County Electric Cooperative, Inc.	<b>Gregory McAuley</b> Oklahoma Gas and Electric	<b>Robert Priest</b> Clarksdale Public Utilities Commission	<b>Troy Via</b> Omaha Public Power District
<b>Jason Atwood</b> Northeast Texas Electric Cooperative, Inc.	<b>Les Evans</b> Kansas Electric Power Cooperative, Inc.	<b>Lloyd Jackson</b> Westar Energy, Inc.	<b>Rick McCord</b> American Electric Power	<b>Aaron Pupa</b> LS Power	<b>Melie Vincent</b> Oklahoma Municipal Power Authority
<b>Bill Bojourquez</b> Hunt Transmission Services, LLC.	<b>Dennis Florum</b> Lincoln Electric System	<b>Robert Janssen</b> Dogwood Energy, LLC	<b>Paul McCoy</b> Trans-Elect Development Company LLC	<b>David Raatz</b> Basin Electric Power Cooperative	<b>Jennifer Vosburg</b> NRG Louisiana Generating LLC
<b>Kevin Bornhoft</b> Corn Belt Power Cooperative	<b>Todd Fridley</b> Transource Energy, LLC	<b>Brian Johnson</b> American Electric Power	<b>Mark McCulla</b> Entergy Services, Inc.	<b>Carroll Reddick</b> Western Farmers Electric Cooperative	<b>Marguerite Wagner</b> ITC Holdings Corporation
<b>Cheryl Bredenbeck</b> Xcel Energy	<b>Wayne Galli</b> Plains and Eastern Clean Line LLC	<b>Paul Johnson</b> American Electric Power	<b>Mark McGrail</b> Enel Green Power North America LLC	<b>Eddy Reece</b> Rayburn County Electric Cooperative	<b>Robert Walker</b> Cargill Power Markets LLC
<b>Julian Brix</b> SPP board of directors	<b>Brian Gedrich</b> NextEra Energy Transmission, LLC	<b>Lucy Johnston</b> Luminant Energy Company, LLC	<b>Courtney Mehan</b> Tenaska Power Services Co.	<b>Andrew Rosenlieb</b> Entergy Asset Management	<b>Bruce Walkup</b> Arkansas Electric Cooperative Corporation
<b>Tim Brown</b> Grand River Dam Authority	<b>Chris Giles</b> Tri-County Electric Cooperative, Inc.	<b>Jeff Knottek</b> City Utilities of Springfield, Mo.	<b>Thomas Meland</b> Central Power Electric Cooperative, Inc.	<b>Richard Ross</b> American Electric Power	<b>Kenneth Weber</b> Harlan Municipal Utilities
<b>Ray Brush</b> NorthWestern Energy	<b>Adam Graff</b> Heartland Consumers Power District	<b>Brett Kruse</b> Calpine Corporation	<b>Ken Meringolo</b> CPV Renewable Energy Company, LLC	<b>Thomas Saitta</b> Kansas Municipal Energy Agency	<b>Jimmy Wever</b> Public Service Commission of Yazoo City, Miss.
<b>Denise Buffington</b> Kansas City Power and Light Company	<b>Bill Grant</b> Southwestern Public Service Company	<b>Daniel Kuehn</b> Cielo Wind Services, Inc.	<b>Fred Meyer</b> The Empire District Electric Company	<b>Mike Shook</b> City of Coffeyville	<b>Aundrea Williams</b> NextEra Energy Resources, LLC
<b>Tom Burke</b> Golden Spread Electric Cooperative, Inc.	<b>Mike Grimes</b> EDP Renewables North America LLC	<b>Paul Lampe</b> City of Independence, Mo.	<b>Mike Mushrush</b> Oklahoma Municipal Power Authority	<b>Mark Shults</b> Northeast Nebraska Public Power District	<b>Terry Wolf</b> Missouri River Energy Services
<b>Robert Burner</b> Duke Energy	<b>John Grotzinger</b> Missouri Joint Municipal EUC	<b>Joe Lang</b> Omaha Public Power District	<b>Jerry Ohmes</b> Kansas City Board of Public Utilities	<b>Tim Sutherland</b> Municipal Energy Agency of Nebraska	<b>Mary Ann Zehr</b> Tri-State Generation and Transmission Association, Inc.
<b>Gregory Coco</b> Cleco Power, LLC	<b>Edd Hargett</b> East Texas Electric Cooperative, Inc.	<b>Jake Langthorn</b> Oklahoma Gas and Electric	<b>John Olsen</b> Westar Energy, Inc.	<b>Al Tamimi</b> Sunflower Electric Power Corporation	
<b>Burton Crawford</b> Kansas City Power and Light Company	<b>Dale Haugen</b> Mountrail-Williams Electric Cooperative	<b>David Lazos</b> El Paso Energy Marketing Company	<b>David Osburn</b> Oklahoma Municipal Power Authority	<b>Ryan Thomas</b> East Texas Electric Cooperative, Inc.	

## Officers



**Nick Brown**

President and CEO  
Elected in 2003



**Carl Monroe**

Executive Vice  
President and Chief  
Operating Officer  
Elected in 2004



**Lanny Nickell**

Vice President,  
Engineering  
Elected in 2008



**Bruce Rew**

Vice President,  
Operations  
Elected in 2009



**Paul Suskie**

Executive Vice President,  
Regulatory Policy,  
General Counsel and  
Corporate Secretary  
Elected in 2011



**Tom Dunn**

Senior Vice President,  
Finance, and Chief  
Financial Officer  
Elected in 2004



**Malinda See**

Vice President,  
Corporate Services  
Elected in 2015



**Barbara Sugg**

Vice President,  
Information Technology  
and Chief Security  
Officer (February 2016)  
Elected in 2010



**Mike Ross**

Senior Vice President,  
Government Affairs  
and Public Relations  
Elected in 2013



**Michael Desselle**

Vice President, Process  
Integrity, and Chief  
Compliance and  
Administrative Officer  
Elected in 2006



# financials and metrics.

Revenues fell 1 percent in 2016 due to a budgeted reduction in the administrative fee rate to 37 cents per megawatt hours (from 39 cents/MWh charged in 2015), coupled with lower than expected transmission demand. The demand shortfall was largely influenced by mild weather during the billable period and by the growth in distributed generation, smart meter use and more efficient electricity usage.

SPP's capital expenditure spending was flat compared to 2015 but well below budgeted levels. Several initiatives were delayed as SPP focused resources on the compliance and security efforts discussed earlier. SPP did receive the final funding from its 2014 note issuance which is now expected to satisfy capital expenditure funding requirements through 2017.

Cash operating expenses increased by \$14.7 million from 2015 levels due to the following:

- Significant investment in staffing and resources to address both SPP's compliance with CIP standards required by NERC and, more importantly, to stay ahead of evolving risks related to cybersecurity. This commitment to a proactive and resilient strategy in addressing cyber incidents will benefit SPP's stakeholders by strengthening SPP's ability to ensure its systems and services are available and accurate.
- Regulatory assessments increased nearly \$5 million as SPP's pro rata share of FERC's assessment increased following the addition of the Integrated System in late 2015.

SPP reported a net loss of \$37.3 million for the year ending Dec. 31, 2016. Similar to prior years, the loss booked in 2016 is largely the result of the depreciation expense associated with SPP's Integrated Marketplace assets that were placed into service in early 2014 and will be fully depreciated in early 2017. Depreciation expense is not recovered in SPP's administrative fee rate. Instead, SPP recovers the costs associated with retiring the principal balance on the debt used to fund the asset.

Administrative fee  
**37 cents/MWh**

Budget (operating)  
**\$217.1 million**

## fitch ratings

Fitch Ratings once again affirmed SPP's credit ratings in August 2016. The ratings agency confirmed SPP's long-term issuer default rating of "A," which is consistent with prior years. The rating indicates expectations of low-default risk and enables SPP to access lower cost capital-debt markets.

## Balance Sheet and Statement of Income

### Balance Sheet

	<u>2016</u>	<u>2015</u>
<b>Assets</b>		
Cash	\$ 75,715	\$ 42,003
Other Current Assets	296,957	245,128
Fixed Assets	92,690	136,480
Other Assets	15,463	14,411
Total Assets	<u>\$ 480,825</u>	<u>\$ 438,022</u>
<b>Liabilities &amp; Members' Equity</b>		
Customer Deposits	\$ 223,964	\$ 196,918
Other Current Liabilities	149,591	103,963
Long-Term Debt	238,906	231,290
Other Long-Term Liabilities	35,044	35,267
Members' Equity	(166,680)	(129,416)
Total Liabilities & Equity	<u>\$ 480,825</u>	<u>\$ 438,022</u>

### Statement of Income

Total Revenue	\$ 176,595	\$ 178,733
Salary and Benefits	90,186	84,043
Depreciation and Amortization	58,025	59,190
Other Expenses	65,648	77,970
Net Loss	<u>\$ (37,264)</u>	<u>\$ (42,470)</u>

\*All figures are in thousands

## 2016 Select Corporate Metrics

