SOUTHWESTERN PUBLIC SERVICE COMPANY
2023 NEW MEXICO INTEGRATED RESOURCE PLAN

1st Facilitated Stakeholder Meeting

May 16, 2023
WELCOME

Zoë Lees| Regional VP, Regulatory Policy
Xcel Energy

Serving eight states

3.7 million electricity customers
2.1 million natural gas customers

Nationally recognized leader:
• Wind energy
• Energy efficiency
• Carbon emissions reductions
• Innovative technology
• Storm restoration

Xcel Energy’s Mission Is Built for Sustainability

Providing customers with safe, clean, reliable energy services at a competitive price is core to our sustainability. We’re committed to delivering the essentials while driving positive change that supports the environment and the people and places we serve.

Reach Net Zero Responsibly
Achieve climate goals without compromising reliability or affordability

Value People
Cultivate a diverse, best-in-class workforce, champion safety, inclusion and equity for everyone

Strengthen Communities
Deliver exceptional service and partnership to help the places we serve thrive

Operate With Integrity
Live our values, govern with discipline and respect human rights
SPS New Mexico service territory

SPS serves approx. 125,000 customers in the following 16 towns in New Mexico:

- Artesia
- Clovis
- Eunice
- Hobbs
- Lake Arthur
- Malaga
- Portales
- Texico
- Carlsbad
- Dexter
- Hagerman
- Jal
- Loving
- Otis
- Roswell
- Tucumcari

Employees 1,711

Property Taxes Paid Franchise Fees Spending with local vendors
$62 million $22.3 million $744.7 million
Powering the New Mexico Economy

- $51 million spent with local suppliers
- 256 Xcel Energy jobs in 2021
- $34 million spent with diverse suppliers
- $10.7 million in property taxes

2021 Data
We Do It All

1. Electric generation
2. Bulk Transmission
3. Local Distribution
4. Customer Care
SPS Customers

Sales by Class

- Large C&I: 44%
- Wholesale: 23%
- Residential: 13%
- Small C&I: 18%
- Municipal: 2%

Jurisdictional Sales Split

- Wholesale: 23%
- Texas: 47%
- New Mexico: 31%

* SPS operates its production and transmission system as an integrated whole

Note: Data Represents Calendar 2022.
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New Mexico Customers

Sales by Class

- Large C&I, 60%
- Small C&I, 25%
- Residential, 14%
- Municipal, 2%

Note: Data Represents Calendar 2022.

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## NM IOU Comparison

<table>
<thead>
<tr>
<th>2021 Information</th>
<th>SPS</th>
<th>EPE</th>
<th>PNM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Sales Mix (2021)*</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Residential</td>
<td>15%</td>
<td>45%</td>
<td>36%</td>
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<tr>
<td>Commercial</td>
<td>27%</td>
<td>50%</td>
<td>41%</td>
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<tr>
<td>Industrial</td>
<td>59%</td>
<td>4%</td>
<td>23%</td>
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<tr>
<td>Production Peak (2021)**</td>
<td>4,018 MW</td>
<td>2,051 MW</td>
<td>1,968 MW</td>
</tr>
</tbody>
</table>

*Source – NMPRC Website
**Source - FERC Form 1
SPS IRP Overview

2021 IRP
- Nov 2022: Issued RFP
- Feb 2023: RFP Bids Received
- Apr – Oct 2023: Facilitated Stakeholder Process
- July 2024: Issue RFP

2023 IRP
- Oct 16, 2023: File 2023 IRP

2024-2027 Resources
- Online

2028-2030 Resources
- Online
SPS 2023 IRP

New IRP Rule

Changing System Requirements

Generating Unit Retirements

2023 IRP
### SPS IRP Timeline

<table>
<thead>
<tr>
<th>Task</th>
<th>Start</th>
<th>End</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
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<tbody>
<tr>
<td><strong>Facilitated Stakeholder Process</strong></td>
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<tr>
<td>SPS Conducts Six-Month Facilitated Stakeholder Process</td>
<td>April 15, 2023</td>
<td>October 15, 2023</td>
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<td><strong>Integrated Resource Plan Filing &amp; Subsequent Processes</strong></td>
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<tr>
<td>SPS Pursues Agreement Among Stakeholders Regarding Modeling Inputs</td>
<td>April 15, 2023</td>
<td>September 13, 2023</td>
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<tr>
<td>SPS Files IRP</td>
<td>October 15, 2023</td>
<td>October 15, 2023</td>
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<tr>
<td>Deadline for Written Public Comments on IRP</td>
<td>October 15, 2023</td>
<td>November 14, 2023</td>
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<tr>
<td>Deadline for SPS’s Response to Written Comments</td>
<td>November 15, 2023</td>
<td>December 14, 2023</td>
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<tr>
<td>Deadline for NCPPIC Utility Division Staff’s Statement</td>
<td>October 15, 2023</td>
<td>January 13, 2024</td>
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<td>Deadline for Commission to Act on Filed IRP</td>
<td>October 15, 2023</td>
<td>February 12, 2024</td>
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<td><strong>Independent Monitor</strong></td>
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<td>Commission Appoints Independent Monitor</td>
<td>February 12, 2024</td>
<td>February 13, 2024</td>
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<tr>
<td>SPS Provides Parties with FPP Documents and Timelines</td>
<td>February 15, 2024</td>
<td>February 14, 2024</td>
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<td>Parties Submit Comments on FPP Documents and Timelines</td>
<td>February 16, 2024</td>
<td>March 8, 2024</td>
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<td>Independent Monitor Files Design Report</td>
<td>February 16, 2024</td>
<td>March 15, 2024</td>
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<tr>
<td>Comments Received on Independent Monitor’s Design Report</td>
<td>March 15, 2024</td>
<td>March 29, 2024</td>
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<td><strong>RFP Issuance</strong></td>
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<td>SPS Issues RFP</td>
<td>July 1, 2024</td>
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<tr>
<td>RFP Bid Deadline</td>
<td>July 1, 2024</td>
<td>September 29, 2024</td>
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<tr>
<td>Provide Independent Monitor with Evaluation of Bids</td>
<td>September 29, 2024</td>
<td>January 27, 2025</td>
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<td>Independent Monitor Files Final Report</td>
<td>January 27, 2025</td>
<td>February 26, 2025</td>
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<tr>
<td>SPS Conveys Results to Bidders and Awards Proposals</td>
<td>February 26, 2025</td>
<td>February 27, 2025</td>
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<td><strong>Generation CCN and PPA Pre-Approval Applications</strong></td>
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<tr>
<td>SPS Files CCN(s) and/or PPA Pre-Approval Applications</td>
<td>February 27, 2025</td>
<td>June 7, 2025</td>
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<tr>
<td>SPS Receives Commission Decision on CCN and PPA Pre-Approval Application</td>
<td>June 7, 2025</td>
<td>June 7, 2025</td>
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<td>SPS and Developers Procure Equipment and Materials</td>
<td>June 7, 2026</td>
<td>June 7, 2027</td>
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<td>New Generation Resources Online</td>
<td>June 7, 2027</td>
<td>June 6, 2028</td>
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</tbody>
</table>
RELIABILITY FIRST

Ben Elsey | Director, Resource Planning & Bidding
Chris Whiteside | Resource Planning Analyst
General Terms

• Megawatt (‘‘MW’’) – A unit of instantaneous power equal to one million watts, or one thousand kilowatts. Used as a measure of power station output.

• Megawatt-hour (‘‘MWh’’) – A megawatt hour equals 1,000 kilowatts of electricity generated per hour and is used to measure electric output (energy).

• Capacity – The maximum level of electric power output that a power plant can supply at a defined point of delivery.

• Capacity Accreditation – The amount of capacity a generation resource is allowed to apply to resource adequacy.

• Resource Adequacy – The ability of a utility’s accredited capacity resources (supply) to meet energy and system loads (demands) at all hours.

• Regional transmission organization (‘‘RTO’’) – An electric power transmission system operator (TSO) that coordinates, controls, and monitors a multi-state electric grid.
Southwest Power Pool Membership

SPS is a member of the Southwest Power Pool ("SPP").

SPP is a regional transmission organization ("RTO") approved by FERC that oversees the bulk electric grid and wholesale power market in the central United States, providing a portfolio of services, including reliability coordination, tariff administration, regional scheduling, and market operations.

SPP also performs coordinated and transparent regional planning for more than 60,000 miles of high-voltage transmission facilities in the SPP footprint, is the balancing authority for the consolidated 14-state balancing area and operates the SPP Integrated Marketplace.
Reliability Overview

- Ensure sufficient resources to meet demand (load)
- Historical emphasis on planning for resources to meet peak demand (i.e., the single hour in a year when demand is highest)
- As the resource mix transitions towards more intermittent renewable resources a greater focus is needed on meeting demand in all hours (e.g., when the wind is not blowing, or the sun is not shining)
- Contingency resources above peak demand are required and set by the Southwest Power Pool
- A comparison of resources and load is often summarized in a ‘Loads and Resources Table’
<table>
<thead>
<tr>
<th>LINE NO.</th>
<th>DESCRIPTION</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>2030</th>
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<tbody>
<tr>
<td>1</td>
<td>TOTAL ACCREDITED CAPACITY (MW)</td>
<td>5,418</td>
<td>5,411</td>
<td>5,158</td>
<td>4,918</td>
<td>4,472</td>
<td>3,178</td>
<td>3,170</td>
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<tr>
<td>2</td>
<td>FIRM LOAD OBLIGATION</td>
<td>4,332</td>
<td>4,580</td>
<td>4,680</td>
<td>4,735</td>
<td>4,881</td>
<td>4,898</td>
<td>5,032</td>
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<tr>
<td>3</td>
<td>TOTAL PLANNING RESERVE MARGIN</td>
<td>650</td>
<td>687</td>
<td>702</td>
<td>710</td>
<td>732</td>
<td>735</td>
<td>755</td>
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<tr>
<td>4</td>
<td>CAPACITY NEED</td>
<td>4,982</td>
<td>5,267</td>
<td>5,383</td>
<td>5,446</td>
<td>5,613</td>
<td>5,633</td>
<td>5,787</td>
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<tr>
<td>5</td>
<td>RESOURCE POSITION (MW): LONG/(SHORT)</td>
<td>436</td>
<td>144</td>
<td>(224)</td>
<td>(527)</td>
<td>(1,141)</td>
<td>(2,455)</td>
<td>(2,618)</td>
</tr>
</tbody>
</table>

- Resource position (line 5) is decreasing due to a combination of decreasing total accredited capacity (line 1) and increasing load (line 2).
- Total planning reserve margin (line 3) is currently set at 15% but is increasingly volatile.
Load Duration Curve

2022 Annual
Load Duration Curve
## Existing Generation

### Capacity Overview by Resource Type

<table>
<thead>
<tr>
<th>Resource Type</th>
<th>Nameplate Capacity (MW)</th>
<th>Accredited Capacity (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>1,069</td>
<td>1,069</td>
</tr>
<tr>
<td>Coal to Gas</td>
<td>1,050</td>
<td>1,050</td>
</tr>
<tr>
<td>Gas – Steam</td>
<td>1,578</td>
<td>1,578</td>
</tr>
<tr>
<td>Gas – CT</td>
<td>828</td>
<td>828</td>
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<tr>
<td>Gas – CC</td>
<td>558</td>
<td>558</td>
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<tr>
<td>Wind</td>
<td>2,451</td>
<td>415</td>
</tr>
<tr>
<td>Solar</td>
<td>106</td>
<td>86</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7,650</strong></td>
<td><strong>5,584</strong></td>
</tr>
</tbody>
</table>

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Decreasing Accredited Capacity

- Aging and retiring gas steam fleet
- Retirement of Tolk coal plant
- Expiring wind and gas PPAs
- ‘Firm and dispatchable’ resources will be required to replace retiring gas and coal resources
- Multi-year process to procure and construct new generating resources includes obtaining a Generator Interconnection Agreement from the SPP
SPS's Changing Capacity Position

- SPP Planning Reserve Margin Increases
- Increased Load
- Generation Unit Retirements
Increasing Resource Adequacy Requirements

- The transition from traditional thermal resources to more intermittent resources requires additional consideration and evaluation (e.g., ensuring grid stability)

- Recent winter weather events (e.g., Winter Storm Uri) have identified other areas requiring consideration

- Increased Resource Adequacy Requirements to ensure system reliability are required
Increasing Load

- SPS service territory includes the rapidly expanding Permian Basin
- Push towards electrification of other industries and transportation to reduce carbon emissions
- Low rates attracting high energy ‘emerging’ customers (e.g., data centers, clean fuel producers, and cryptocurrency miners)
- Creates economic opportunities for New Mexico and/or reduces carbon emissions from other industries
Our Commitment

Leading the Clean Energy Transition

- 80% reduction in carbon emissions by 2030
- 100% reduction of carbon emission by 2050

A “just transition” of our workforce and communities

- Do not anticipate layoffs
- We anticipate new jobs and opportunities

We will build upon our long and successful history of transition

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Foundation for the Future

- Fleet transition components in current SPS rate case
- Ratemaking considerations for new generation technologies like battery storage
- Cost recovery of new generation resources