

Welcome to SPS's 2021 IRP Public Advisory Meeting

For audio, please join by telephone:

Call in number: 1-866-672-3839 Passcode: 6877906

Please mute your phone when not speaking. Thank you.

Video Presentation Will Begin Shortly



2021 SPS New Mexico Integrated Resource Plan: 1st Public Advisory Kick-off Meeting

5/21/2020

Topics for Discussion

- Xcel Energy and SPS Overview
- Resource Planning Overview
- Factors that have impacted Resource Planning since the 2018 New Mexico IRP
- Factors that will likely influence Resource Planning in the action plan period
- SPS's new renewable wind facilities
- Future meeting topics
- Next meeting

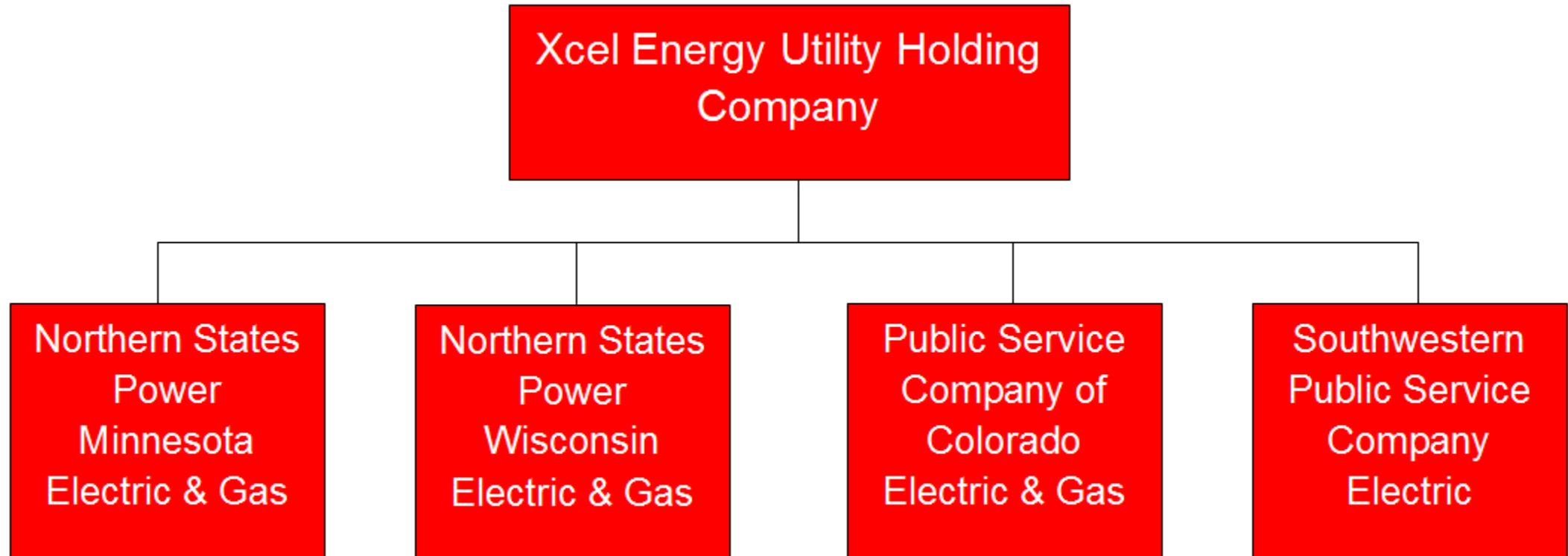


SPS OVERVIEW

Ben Elsey | Resource Planning Analyst

5/21/2020

Corporate Structure



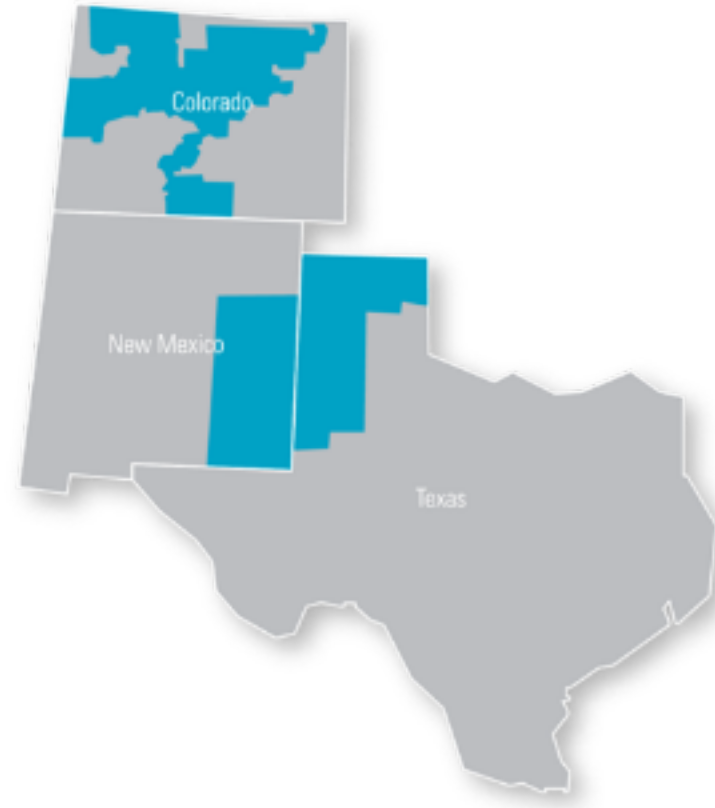
About Xcel Energy

Serving eight states

- 3.6 million electricity customers
- 2 million natural gas customers

Nationally recognized leader

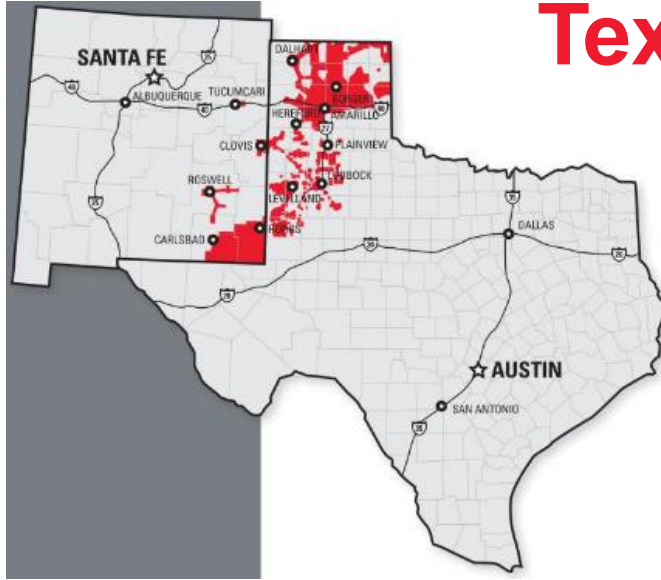
- Wind energy
- Energy efficiency
- Carbon emissions reductions
- Innovative technology



SPS Overview

- Southwestern Public Service Company (“SPS”) is a New Mexico corporation and wholly-owned electric utility subsidiary of Xcel Energy.
- SPS’s total company service territory encompasses a 52,000-square-mile area in eastern and southeastern New Mexico, the Texas Panhandle, and the Texas South Plains
- SPS’s primary business is generating, transmitting, distributing, and selling electric energy
- SPS has a long history of providing safe, reliable, value-added service to our customers

Texas and New Mexico Retail Customers



- Communities Served
 - 80 in Texas
 - 14 in New Mexico
- 99.9% electric reliability
- Bills below the national average

Texas



**271,059
Electric
Customers**

+

New Mexico



**123,161
Electric
Customers**

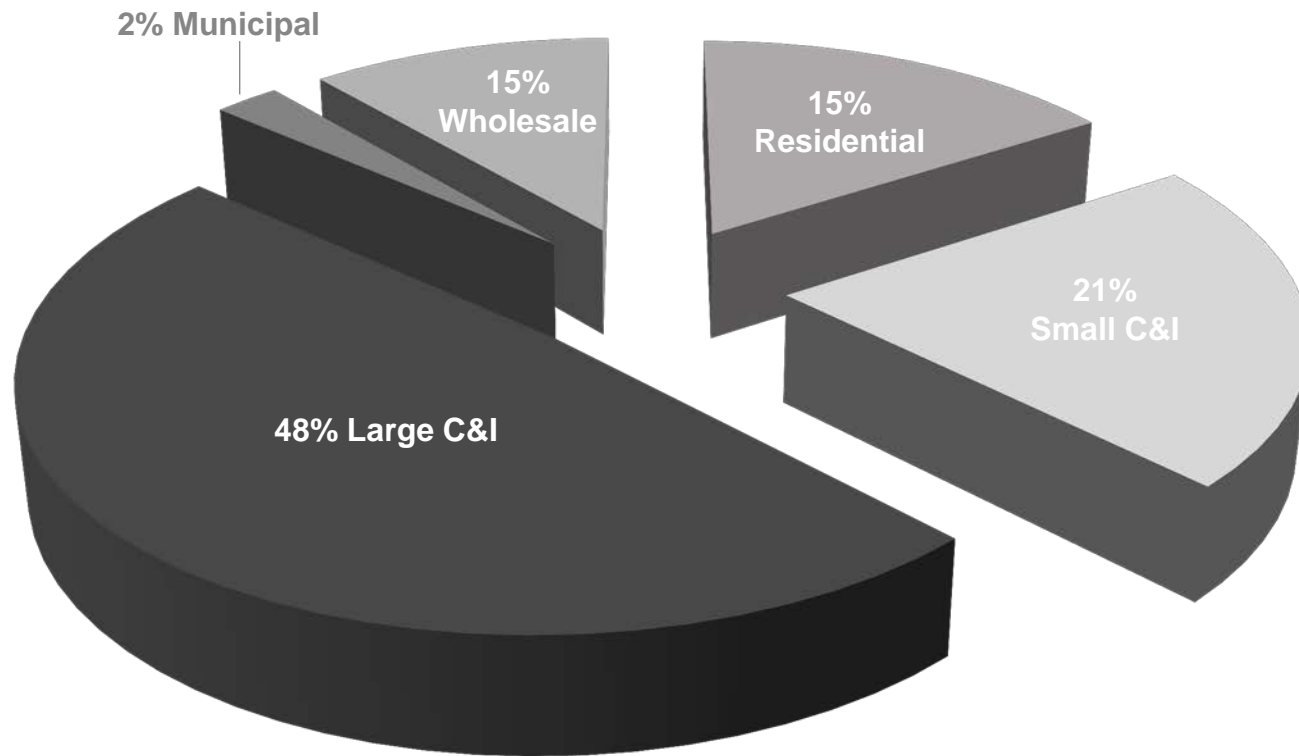
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Total

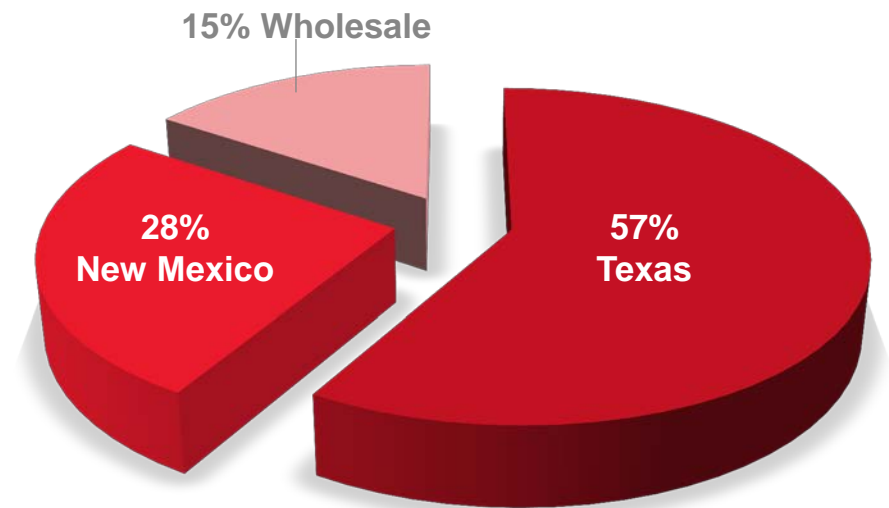
**394,220
Electric
Customers**

SPS Customers

Sales by Class



Jurisdictional Sales Split



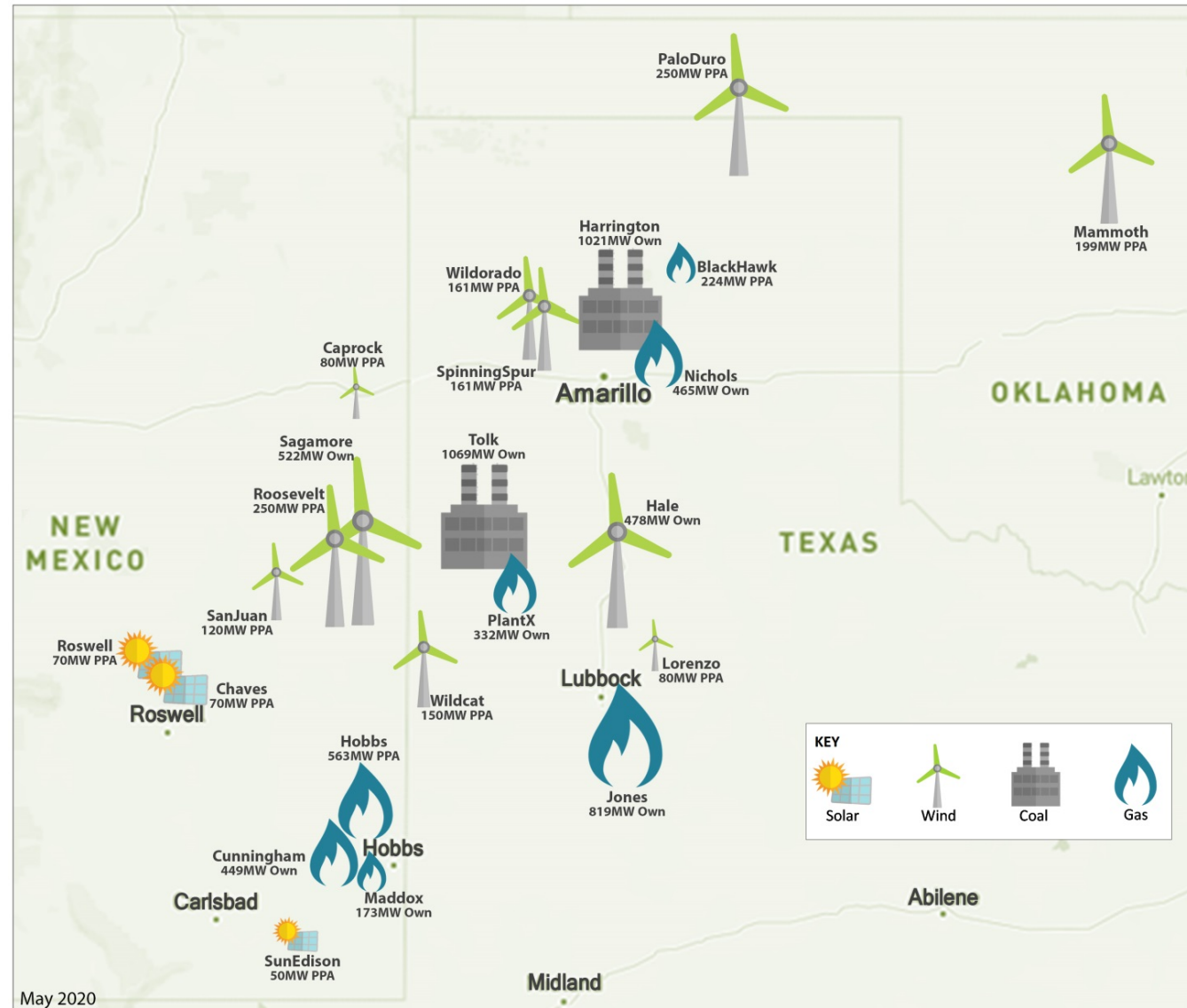
* SPS operates its production and transmission system as an integrated whole

Note: Data as represented is between February 1, 2019 through January 31, 2020

Resource Planning

- Determines the appropriate sources of electric supply to meet customer demand and energy requirements in a cost-effective and reliable fashion
- Compare existing firm generating resources, including owned generating capacity and firm purchased power, to its projected annual peak firm load obligation over the planning period
- Maintains capacity required to meet projected peak load and planning reserve obligations
- SPS is a member of the Southwest Power Pool (“SPP”), which requires each member to have a planning reserve margin of 12% of its peak demand forecast
- SPS’s firm load obligation is approximately 4,000 MW, and with the planning reserve margin the capacity need is approximately 4,500 MW

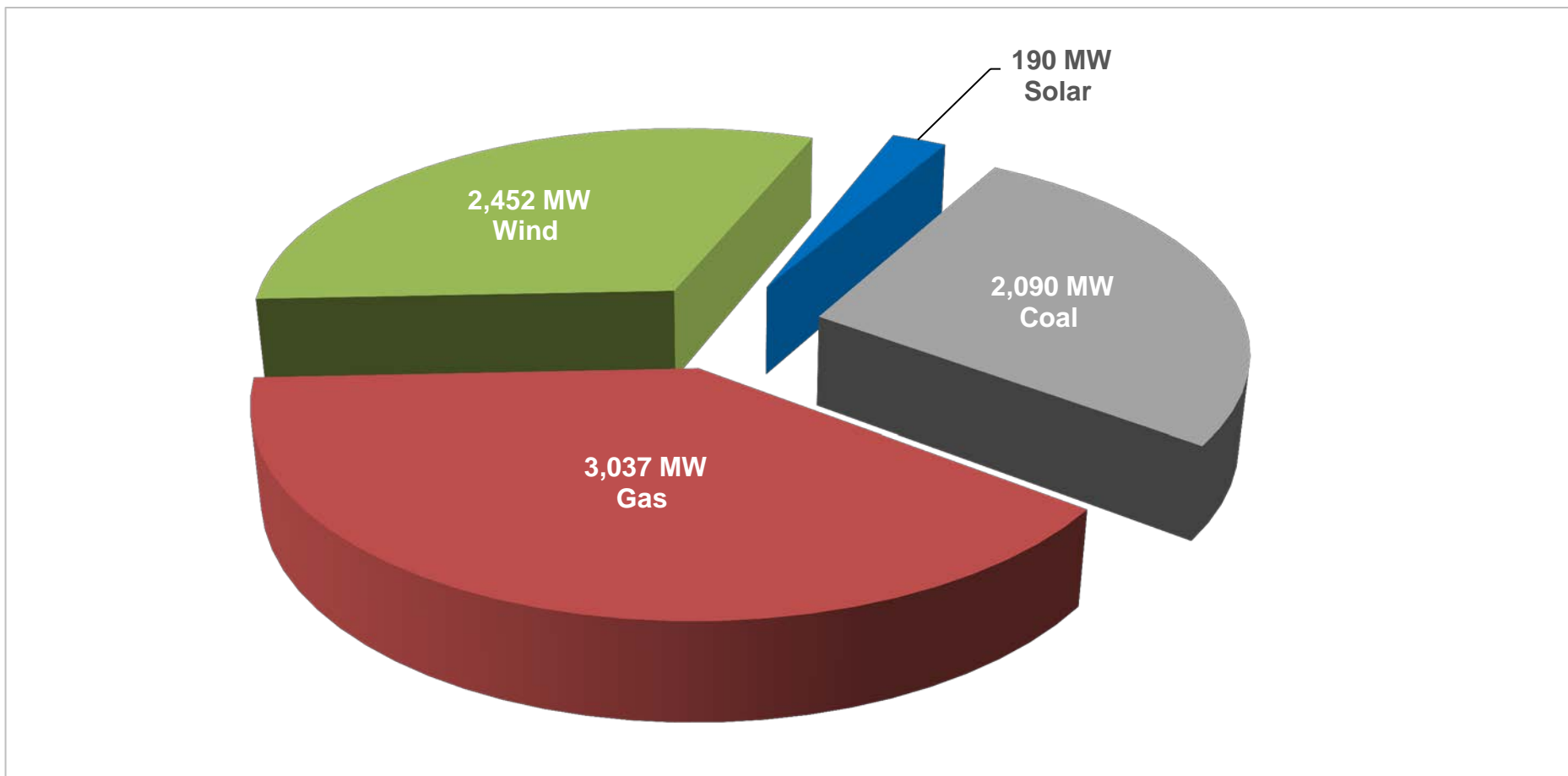
Generation Resource Map



Current SPS Loads and Resources Table

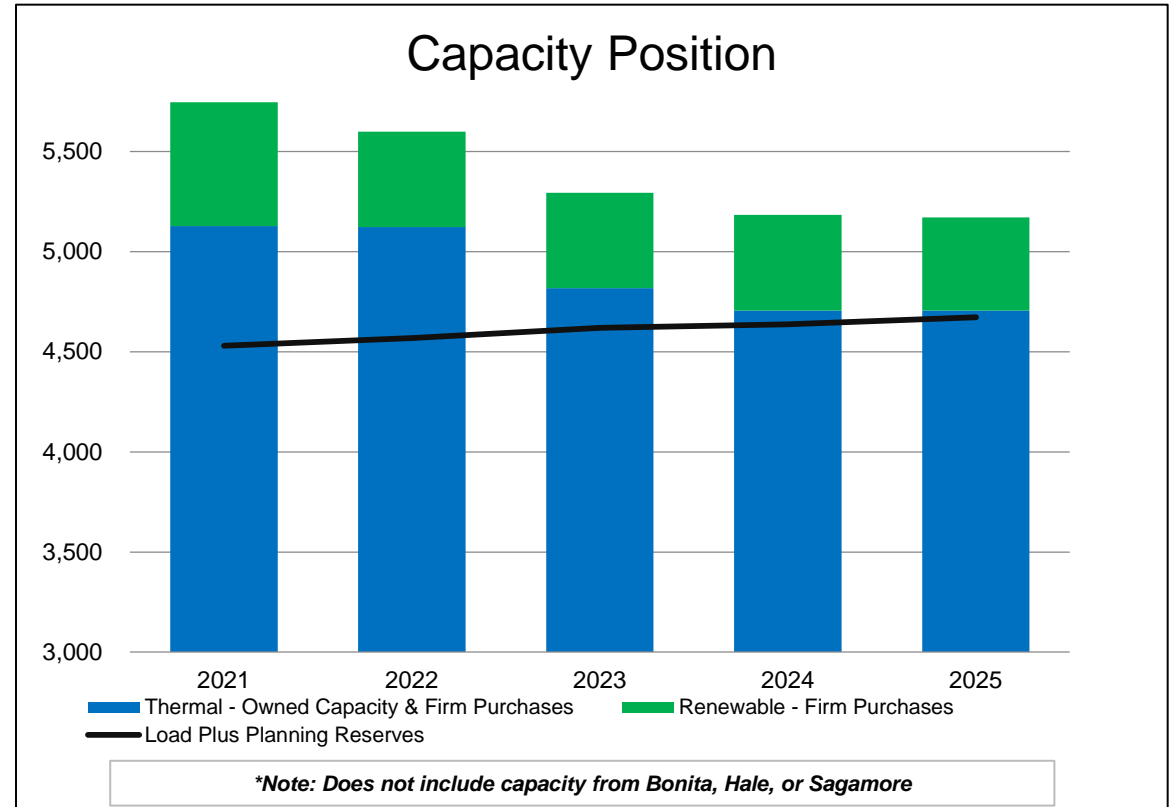
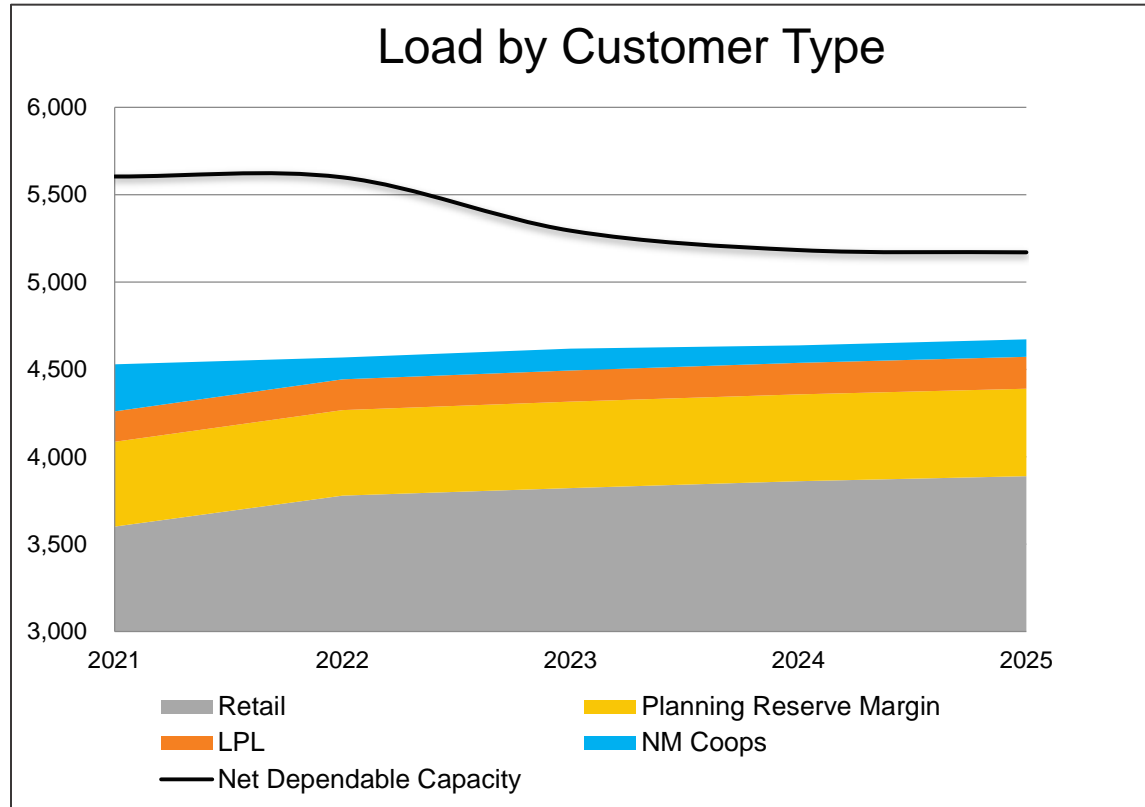
SPS Load and Resources	2020	2021	2022	2023	2024	2025
EXISTING RESOURCES						
TOTAL ACCREDITED CAPACITY (MW)	5,605	5,605	5,600	5,295	5,184	5,171
LOAD						
FIRM LOAD OBLIGATION	4,014	4,057	4,112	4,177	4,214	4,265
RESERVES						
TOTAL PLANNING RESERVE MARGIN	482	487	493	501	506	512
CAPACITY NEED	4,496	4,544	4,606	4,679	4,720	4,777
CAPACITY POSITION	1,109	1,061	994	616	688	618
TOTAL SALES / (PURCHASES) (MW)	531	0	0	0	0	0
POSITION						
RESOURCE POSITION (MW): LONG/(SHORT)	578	1,061	994	616	688	618

Capacity Mix



** The above chart represents the maximum output of each facility*

Action Plan - SPS Loads and Resources



QUESTIONS AND DISCUSSION



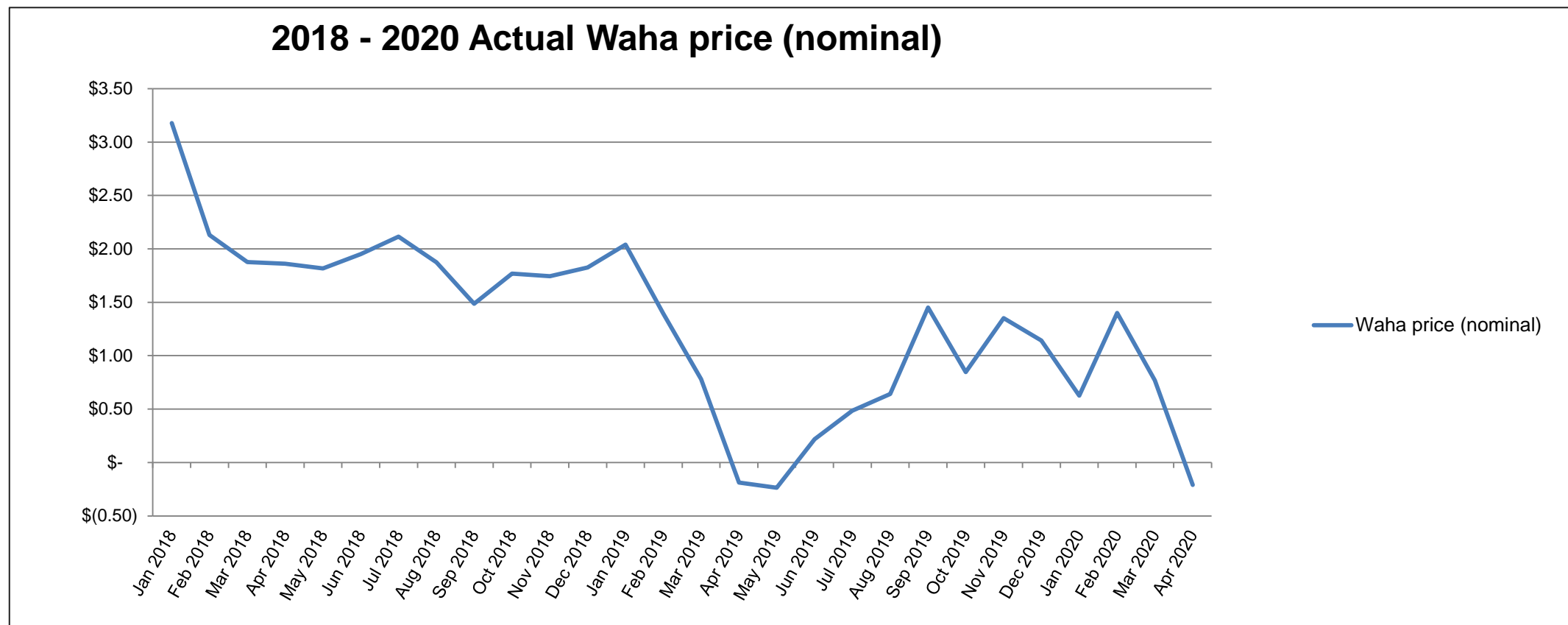


Factors Impacting Resource Planning Since the 2018 NM IRP

Recent Impacts

- Depressed gas prices
- Increased load growth in southeast New Mexico
- New renewable resources

Gas Prices from 2018 - 2020



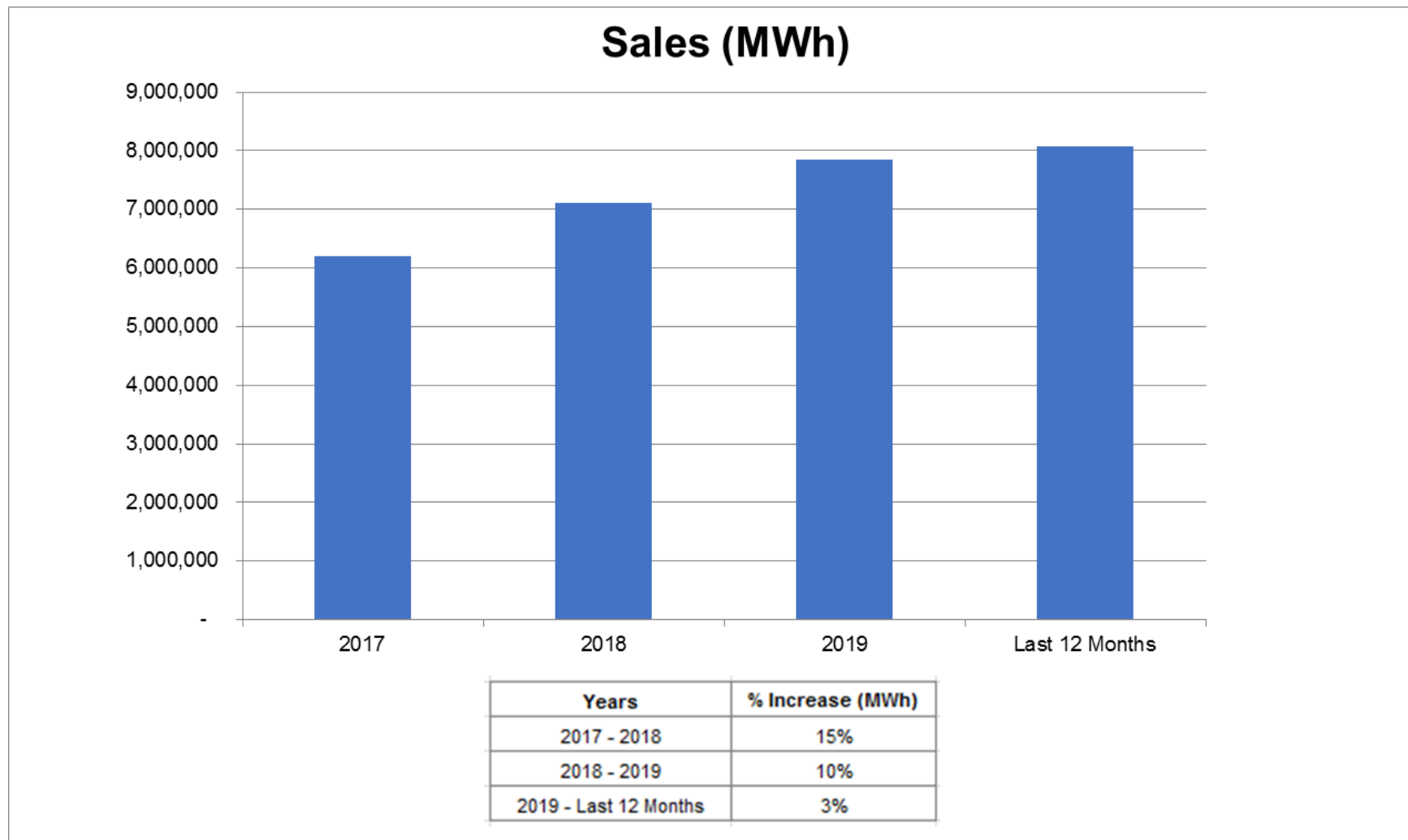
SPS's Aging Generation Fleet

- SPS has approximately 1,231 MW of natural gas-fired generation that is between 50 – 67 years old
- Plant X1 and Plant X2
 - Gas-fired steam turbines located in Lamb County, TX
 - Commercial operation date (“COD”) of 1952 and 1953 respectively
- Cunningham 1
 - Gas-fired steam turbine located in Lea County, NM
 - COD of 1957
- These natural gas fired-units were originally scheduled to retire in 2019 & 2020 but have been kept online due to anomalously low natural gas prices in SPS's service area

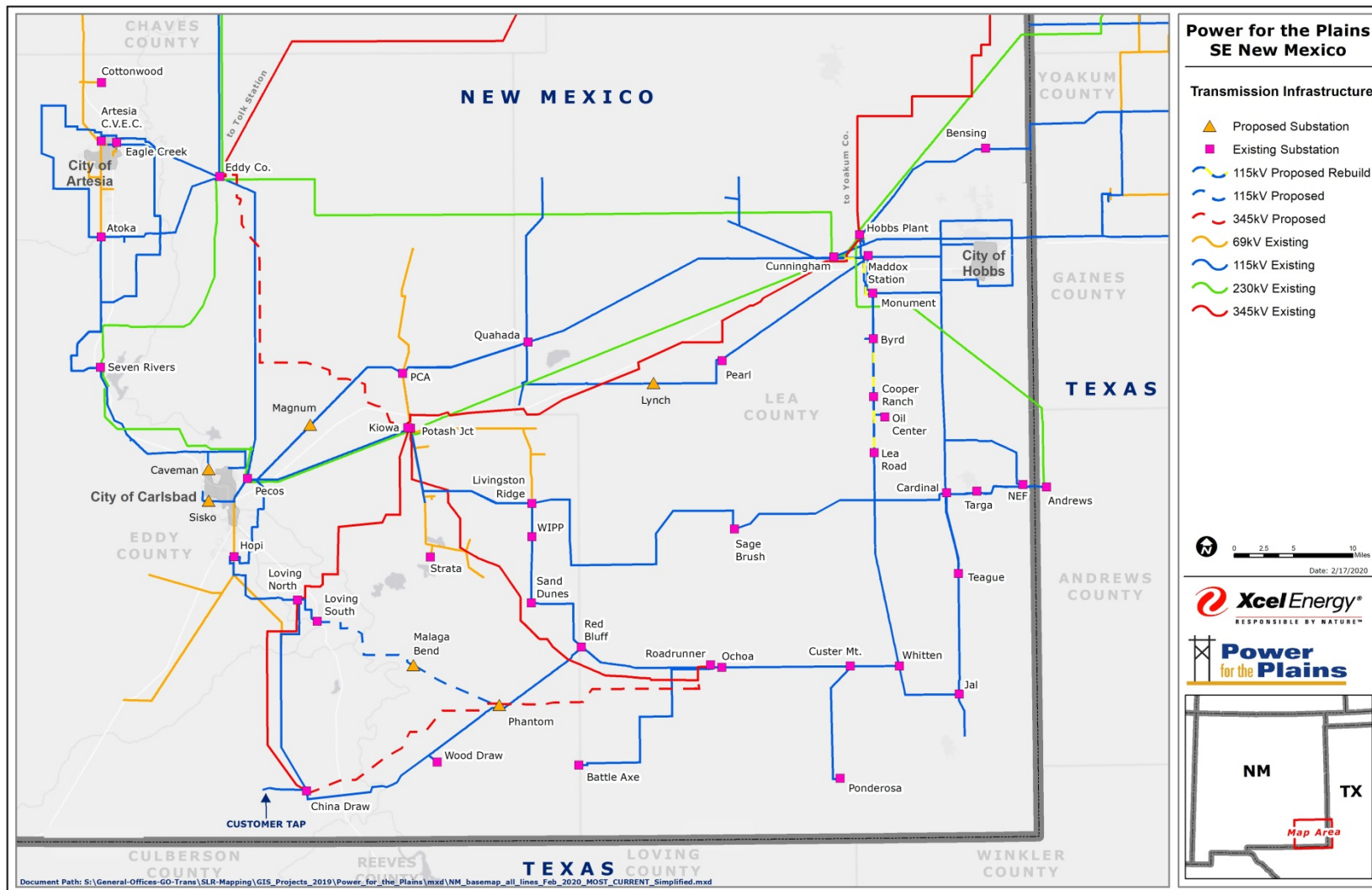
SPS's New Wind Facilities

- Hale Wind (Owned) – Hale County, TX
 - 478 MW COD of 6/2019
 - Approximately \$700 million dollars of investment
- Sagamore Wind (Owned) – Roosevelt County, NM
 - 522 MW planned COD of 12/2020
 - Approximately \$900 million dollars of investment
- Lorenzo and Wildcat Purchased Power Agreements (“PPA”) – Crosby & Cochran County, TX
 - Formally known as Bonita I & II
 - Wildcat 150 MW COD of 12/2018 – Crosby County, TX
 - Lorenzo 80 MW COD of 12/2018 – Cochran County, TX
- SPS acquired the three wind facilities to provide economic energy and lower customer bills

Oil & Gas Growth in Southeast New Mexico



Transmission Projects – Southeast New Mexico



Completed Transmission Projects SE NM

2015 - 2019

- 520 miles of new transmission line
- 500 miles of new distribution line
- SPS has built enough new transmission line that it could almost span diagonally across the entire state of NM
- SPS has invested approximately \$626 million dollars on transmission infrastructure

Planned Transmission Projects SE NM

2020 – 2021

- 115 kV – 21 miles
- 345 kV – 180 miles
- SPS is planning to invest an additional \$170 million on transmission infrastructure
- SPS expects to continue to invest significant capital in its service area in NM as the electrical loads continue to grow

2019 – 2020 Completed Transmission Projects in SE NM

- NEF to Targa 115 kV rebuild (In-Service Date (“ISD”): March 2019)
- Potash Junction – Livingston Ridge 115 kV rebuild (ISD: April 2019)
- Hobbs Plant – Yoakum 345 kV (ISD: May 2019)
- China Draw – Customer Tap 115 kV (ISD: May 2019)
- Roadrunner Distribution Substation addition (ISD: August 2019)
- Eddy Co 230 kV double breaker double bus (ISD: November 2019)
- North Loving – Loving South 115 kV (ISD: December 2019)
- New Loving South Substation (ISD: December 2019)
- Cunningham – Monument Tap 115 kV rebuild (ISD: December 2019)
- Red Bluff to Phantom 115 kV rebuild (ISD: March 2020)

2020 - 2021 Planned Transmission Projects in SE NM

- TUCO – Yoakum 345 kV (ISD: June 2020)
- Medanos Distribution Substation (ISD: October 2020)
- Eddy County – Kiowa 345 kV (ISD: November 2020)
- Loving South – Malaga Bend - Phantom 115 kV (ISD: November 2020)
- Malaga Bend Distribution Substation (ISD: November 2020)
- Phantom 115kV Substation (ISD: November 2020)
- China Draw – Phantom – Roadrunner 345 kV (ISD: November 2021)

Power for the Plains: Transmission Expansion Plan for Texas and southeast New Mexico



For Details Visit: www.powerfortheplains.com/

QUESTIONS & DISCUSSION

Future Impacts on Resource Planning

- Area near Harrington Station is being monitored for NAAQS compliance and will be designated as either meeting the standard or nonattainment
- Ongoing Tolk Station depleting groundwater and end-of-year 2032 retirement
- SPS's aging generation fleet
- SPP Interconnect queue
- Energy Storage / Emerging Technologies

QUESTIONS & DISCUSSION





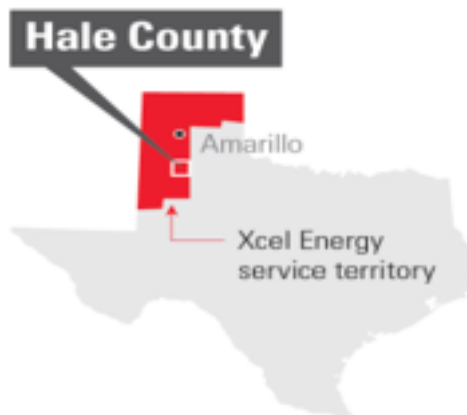
Hale and Sagamore Wind Facilities

Brian Hudson | Energy Supply Project Manager

5/21/2020

Hale Wind Project

Location:	Hale County, Texas
Size:	478 MWs (~170,000 homes)
Turbines:	Vestas 80m HH V110 / 80m HH V116 / 94m HH V116
Boundary:	~65,000 acres
Generator T-Line:	~14 miles
Start Construction:	June 2018
COD:	June 2019
Interconnection:	TUCO Substation
Capacity Factor:	~54.0%



Hale: 478 MW

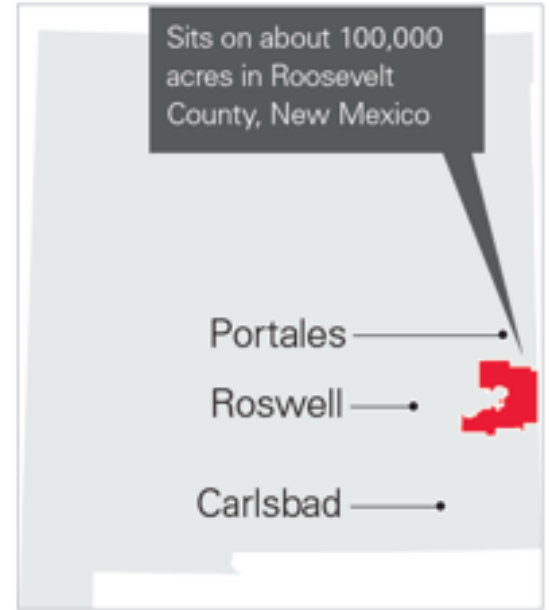


Commercial
operation by:



Sagamore Wind Project

Location: Roosevelt County, New Mexico
Size: 522 MWs
Turbines: 240 (Vestas 80m HH V110 / Vestas 80m HH V120)
Boundary: ~100,000 acres
Generation T-Line: ~14 miles
Start Construction: November 2019
Completion: December 2020
Interconnection: Crossroads Substation
Capacity Factor: ~53.0%



\$131.5 million
in state and local benefits
over life of project*



240
turbines



522
megawatts



98%
of footprint
remains in
agricultural use



\$43 million
in gross receipts tax*



Wind Turbine Construction - Foundations



- One foundation – 350 yards of concrete
- Hale (239 turbines) – 85,000 yards
- Sagamore (240 turbines) – 86,000 yards
- Enough concrete at Hale and Sagamore to build a sidewalk from Amarillo, TX to Los Angeles, CA

Wind Turbine Construction - Electrical



- Hale – 3 million feet of underground conductor. 1 million feet of ground wire. 1 million feet of fiber optic cable.
- Sagamore – 3 million feet of underground conductor. 1 million feet of ground wire. 1 million feet of fiber optic cable.
- Hale/Sagamore have enough underground cable to stretch from Mexico to Canada borders.

Wind Turbine Construction - Turbines



- Hale – 478 MW. 239 turbines. 2,078 individual truck loads of components. 499 feet tall.
- Sagamore – 522 MW. 240 turbines. 1,920 individual truck loads of components. 470 feet tall.
- Hale/Sagamore can power 350,000 homes.



QUESTIONS & DISCUSSION



Topics for Future Meetings

- Environmental Updates
- Sales and Load Forecasting
- Gas & Power Markets
- Coal Supply
- Demand-side Management and Energy Efficiency
- Energy Storage

NM IRP Details

- Web Page -

https://www.xcelenergy.com/company/rates_and_regulations/resource_plans/2022_new_mexico_integrated_resource_plan

** Note: In the upper-left hand corner of the webpage there is a drop-down, select “New Mexico”. For the Service Area, click on New Mexico. At the bottom of the page click on the Public Advisory Meeting tab, then click on the date for the first public meeting*

- Resource Planning Contacts –

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- Regulatory Contacts –

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- Mario Contreras | Rate Case Manager | Mario.A.Contreras@xcelenergy.com

Next Meeting

Date: August 20, 2020

Time: 10:00 AM Mountain Time

Location: Webinar

Note: The 1st Technical Conference will be held shortly after the final order for the Tolk Analysis pursuant to the Stipulation in Case No. 19-00170-UT



