

# SOUTHWESTERN PUBLIC SERVICE COMPANY 2023 NEW MEXICO INTEGRATED RESOURCE PLAN

1<sup>st</sup> In-Person Facilitated Stakeholder Meeting June 13 – 14, 2023 – Roswell, New Mexico



# **GAS FORECAST**

#### **Natural Gas Forecast**

(1) <u>Natural Gas Price Forecast</u> – The price of natural gas is an important variable. SPS uses a combination of market prices and fundamental price forecasts, based on multiple highly respected, industry leading sources, to calculate monthly delivered gas prices. As the foundation of the gas price forecast, Henry Hub natural gas prices are developed using a blend of market information (New York Mercantile Exchange ("NYMEX") futures prices) and long-term fundamentally-based forecasts from Wood Mackenzie, IHS Energy, and S&P Global. The forecast is fully market-based for the first few years, then transitions into blending the four sources to develop a composite forecast. The Henry Hub forecast is adjusted for regional basis differentials and specific delivery costs for each generating unit to develop final model inputs. The current weightings for each component at various time intervals of the forecast period are shown in Table BRE-RR-2:

#### Table BRE-RR-2: Natural Gas Forecast Weightings

Current Year + 2 Years100.0%0.0%0.0%0.0%Thereafter25.0%25.0%25.0%25.0%	Months	NYMEX	IHS Energy	S&P Global Global	Wood MacKenzie
Thereafter      25.0%      25.0%      25.0%	Year + 2	100.0%	0.0%	0.0%	0.0%
	Thereafter	25.0%	25.0%	25.0%	25.0%

### **Natural Gas Forecast**



#### **Gas Prices:**

We are down to 3 sources as a result of the S&P Global and IHS Markit merger

Period	NYMEX	S&P/IHS	Wood Mackenzie
Balance of the year + 2 years	100%	0%	0%
Years 3 and Beyond	25%	37.5%	37.5%

#### **Market Price Forecasts**

(3) <u>Market Electricity Prices</u> – In addition to resources that exist within SPS's service territory, SPS has access to a regional market located outside its service territory. That is, SPS is a member of the Southwest Power Pool, which operates as a consolidated balancing authority and dispatches all available generation resources within its boundaries. This consolidated dispatch allows SPS access to energy resources outside of SPS's service territory for purchases, as well as the opportunity to sell from its generating sources to other market participants.

Since the company's Fall 2022 forecast, SPS uses a simple average of the long-term market price forecasts provided by Wood Mackenzie, S&P Global, and IHS Markit as the basis for prices for assumed purchases from the Southwest Power Pool South Hub.

Prior to Fall 2022, SPS used a simple average of long-term on-peak and off-peak implied heat rate forecasts provided by Wood Mackenzie, S&P Global, and IHS Markit as the basis for prices for assumed purchases from the Southwest Power Pool South Hub. The implied heat rates, denominated in million British thermal units/megawatt-hour, were then multiplied by SPS's long-term natural gas price forecast to convert the implied heat rate values into energy prices. This process was repeated for all months, distinguishing between on and off-peak prices, through the end of the modeling period.

### **Monthly Market Prices**



# **Monthly Market Prices**



# **Current Base Outlook**



	Average Annual Growth				
	<u>Retail x/NL</u>	<u>Retail</u>	<u>Financial</u>		
2023-2028	0.7%	2.6%	1.9%		
2028-2038	0.6%	0.5%	0.5%		

- Represents the 50<sup>th</sup> percentile, or Financial forecast
- New Load impacts range from 120-525 MW
- Near-term growth in line with recent trends, longer-term slowdown

## **New Load Assumptions**

- Only include highly probable loads (probability >80 percent)
- Probability of requests connecting declines over time
  Example Year 1: 80 percent phases down to Year 6+: 50 percent
- Assume 60 percent load factor for oil and gas loads, 95 percent for data centers and other large loads
- 50 percent of oil and gas demand is coincident with system peak, 95 percent for data centers and other large loads
- By 2030: 1,300 MW of high probability load identified, 525 MW of peak impact included
- Excludes 5,000+ MW of data center and other high load factor requests

# **Current High Outlook**



Average Annual Growth				
<u>Financial</u>		<u>Planning</u>		
2023-2028	1.9%	3.4%		
2028-2038	0.5%	1.1%		

- Planning forecast represents the 85<sup>th</sup> percentile
- Forecast differences range from 80-760 MW
- Considered a proxy for more of the high probability load connecting
- Does not include 5,000+ MW of additional requests

