



RAC WORKING GROUP #3 POWER GENERATION & COSTS

PRESENTED BY:

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September 9, 2021

Informational

OBJECTIVES & TAKEAWAYS



- **PROVIDE MONTHLY POWER GENERATED AND COSTS FOR SPRUCE 1, SPRUCE 2, RIO NOGALES, & VON ROSENBERG PLANTS FOR FISCAL YEARS 2019, 2020, 2021, AND YTD FOR 2022**

AGENDA



- **PLANT STATISTICS**
- **BACKGROUND INFORMATION FOR DATA**
- **POWER GENERATED & COSTS BY PLANT LOCATION**

SPRUCE 1 & 2

PLANT STATISTICS



Plant Description		
	Unit 1	Unit 2
Location	12940 U.S Hwy 181 South 78223, Bexar County	
Market:	ERCOT	
Unit Rating (G/N):	587 MW / 560 MW	827 MW / 785 MW
Commercial Operation Date:	June 1, 1992	May 28, 2010
Site Area:	3,500 Acres	
Primary Fuel:	Powder River Basin (PRB)	
Fuel Delivery:	PRB Coal by Rail with Rotary Car Dumper	
Ignition/Warmup Fuel:	Natural Gas, 10% capability	Natural Gas, 10% capability



Coal Plants at Calaveras Power Station in southeast San Antonio.

RIO NOGALES

PLANT STATISTICS



Plant Description				
	CT1	CT2	CT3	ST
Location:	711 Rio Nogales Drive Seguin, TX 78155, Guadalupe County			
Market:	ERCOT			
Unit Rating (G/N):	160 MW / 158 MW	160 MW / 158 MW	160 MW / 158 MW	311 MW / 303 MW
Commercial Operation	June 1, 2002			
Site Area:	55 acres			
Primary Fuel:	Natural Gas			N/A
Fuel Delivery:	Natural Gas Pipeline			N/A
Ignition/Warmup Fuel:	Natural Gas, 100% capability			N/A



3X1 Combined Cycle Plant acquired by CPS Energy in 2012 in Seguin, TX.

VON ROSENBERG

PLANT STATISTICS



Plant Description			
	CT1	CT2	ST
Location:	15290 Streich Rd., Elmendorf, Bexar County Texas 78112		
Market:	ERCOT		
Unit Rating (G/N):	167 MW / 164 MW	167 MW / 164 MW	194 MW / 190 MW
Commercial Operation Date:	June 02, 2000		
Site Area:	3,800-acre site in Elmendorf, Texas		
Primary Fuel:	Natural Gas		N/A
Fuel Delivery:	Natural Gas Pipeline		N/A
Ignition/Warm-up Fuel:	Natural Gas, 100% capability		N/A



2X1 Combined Cycle Plant at Braunig Lake in southeast San Antonio.

COSTS

FUEL AND O&M



Costs identified as fuel and operating & maintenance (O&M) costs.

FUEL COSTS: <u>Coal & Natural Gas</u>	<ul style="list-style-type: none">• Includes commodity and costs for delivery & handling• Coal fuel cost is relatively stable month-to-month• Natural gas fuel cost varies month-to-month• Winter Storm Uri impacted natural gas fuel cost in FY2022
O&M COSTS: <u>Fixed & Variable</u>	<ul style="list-style-type: none">• Fixed costs do not vary with generation produced while variable do• Maintenance activities & improvement projects tend to increase O&M costs• Capital & associated borrowing costs is not included

POWER GENERATION OVERVIEW

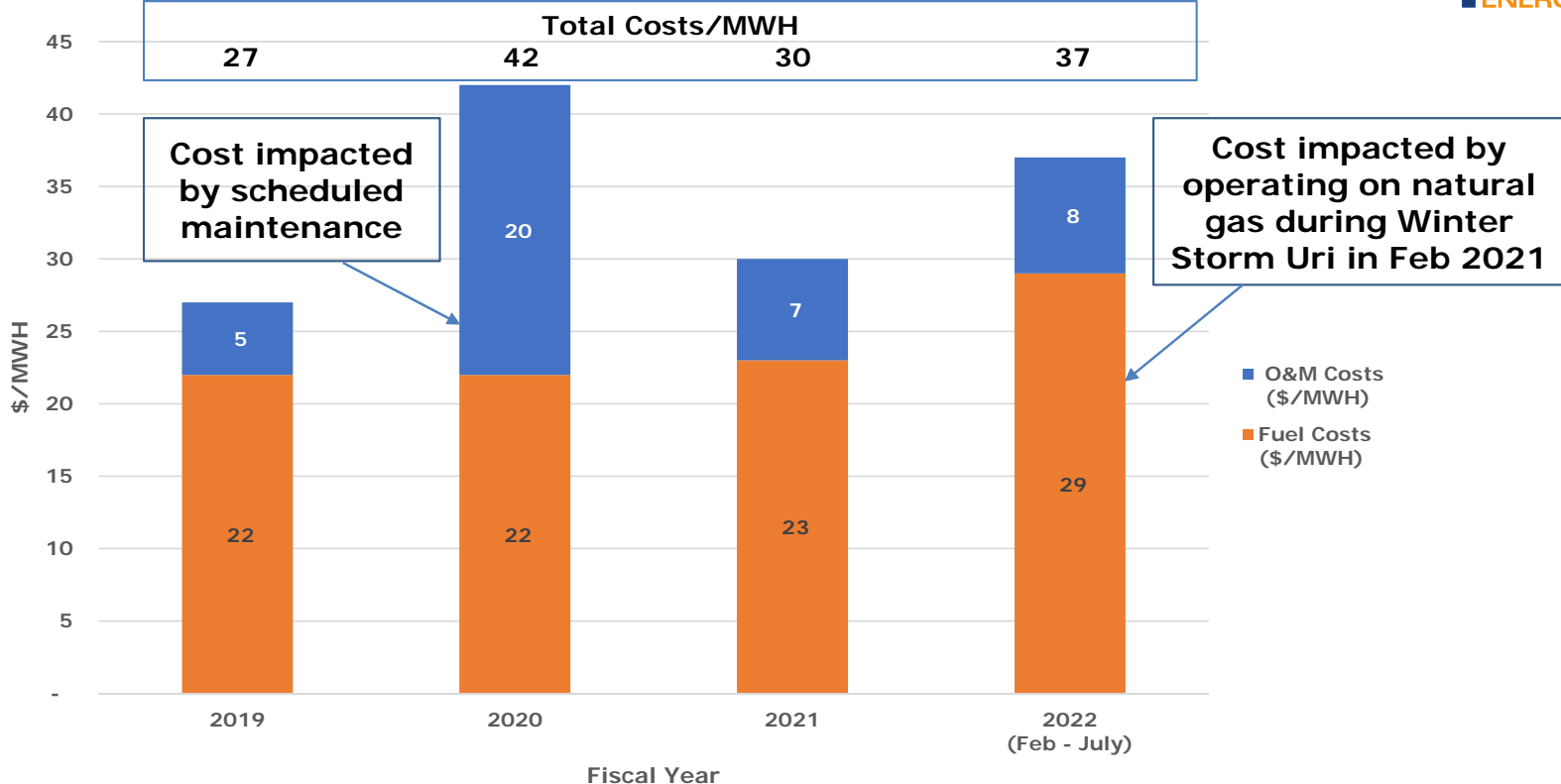


Fiscal Year	SPRUCE 1 (560MW Net)			SPRUCE 2 (785MW Net)			RIO NOGALES (777MW Net)			VON ROSENBERG (518MW Net)		
	Net Gen (MWH)	Fuel Costs (\$/MWH)	O&M Costs (\$/MWH)	Net Gen (MWH)	Fuel Costs (\$/MWH)	O&M Costs (\$/MWH)	Net Gen (MWH)	Fuel Costs (\$/MWH)	O&M Costs (\$/MWH)	Net Gen (MWH)	Fuel Costs (\$/MWH)	O&M Costs (\$/MWH)
2019	3,136,330	22	5	3,903,002	21	7	3,335,353	23	5	3,445,397	19	3
2020	1,863,506	22	20	4,508,998	21	4	4,134,069	18	5	3,389,594	13	4
2021	2,417,657	23	7	3,393,794	21	8	4,120,541	16	5	2,938,041	17	7
2022 (Feb - July)	1,322,993	29	8	2,447,486	18	3	2,171,024	25	4	1,510,499	28	4

Net generation varies year over year with market conditions & planned maintenance activities.

SPRUCE 1

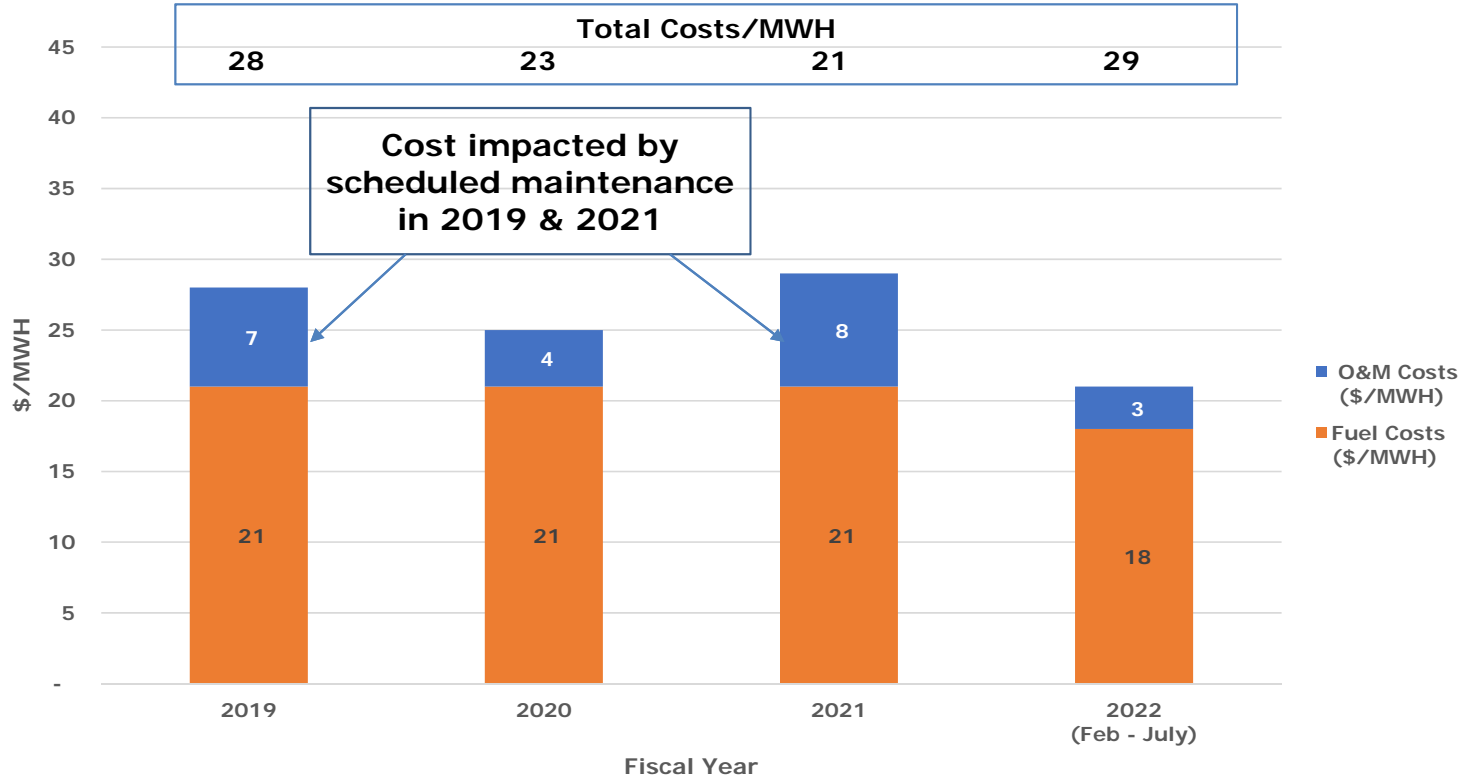
FUEL & O&M COSTS



Price per MWH driven by scheduled maintenance in 2020 & natural gas fuel costs in 2022.

SPRUCE 2

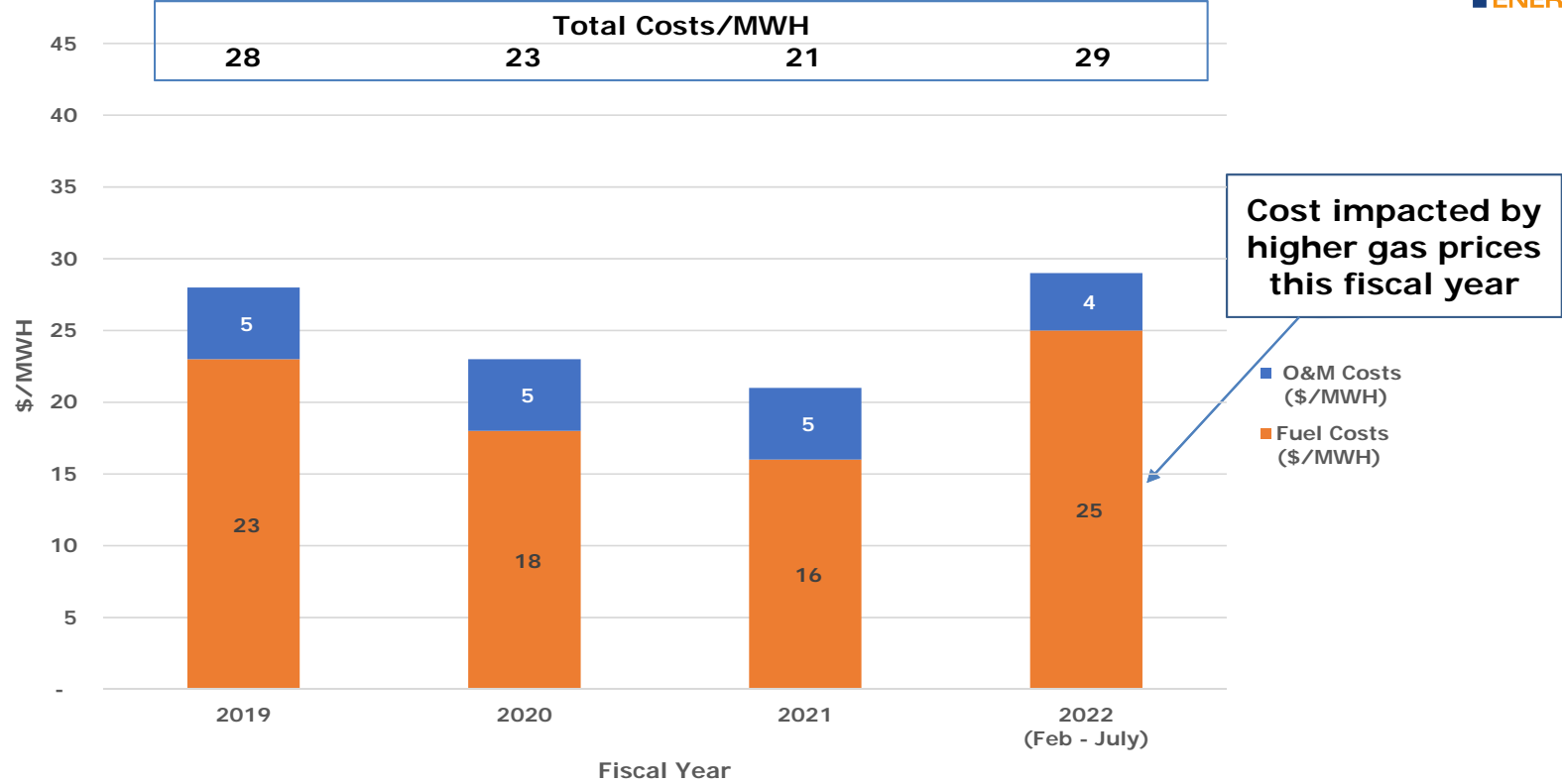
FUEL & O&M COSTS



Price per MWH driven by scheduled maintenance in 2019 & 2021.

RIO NOGALES

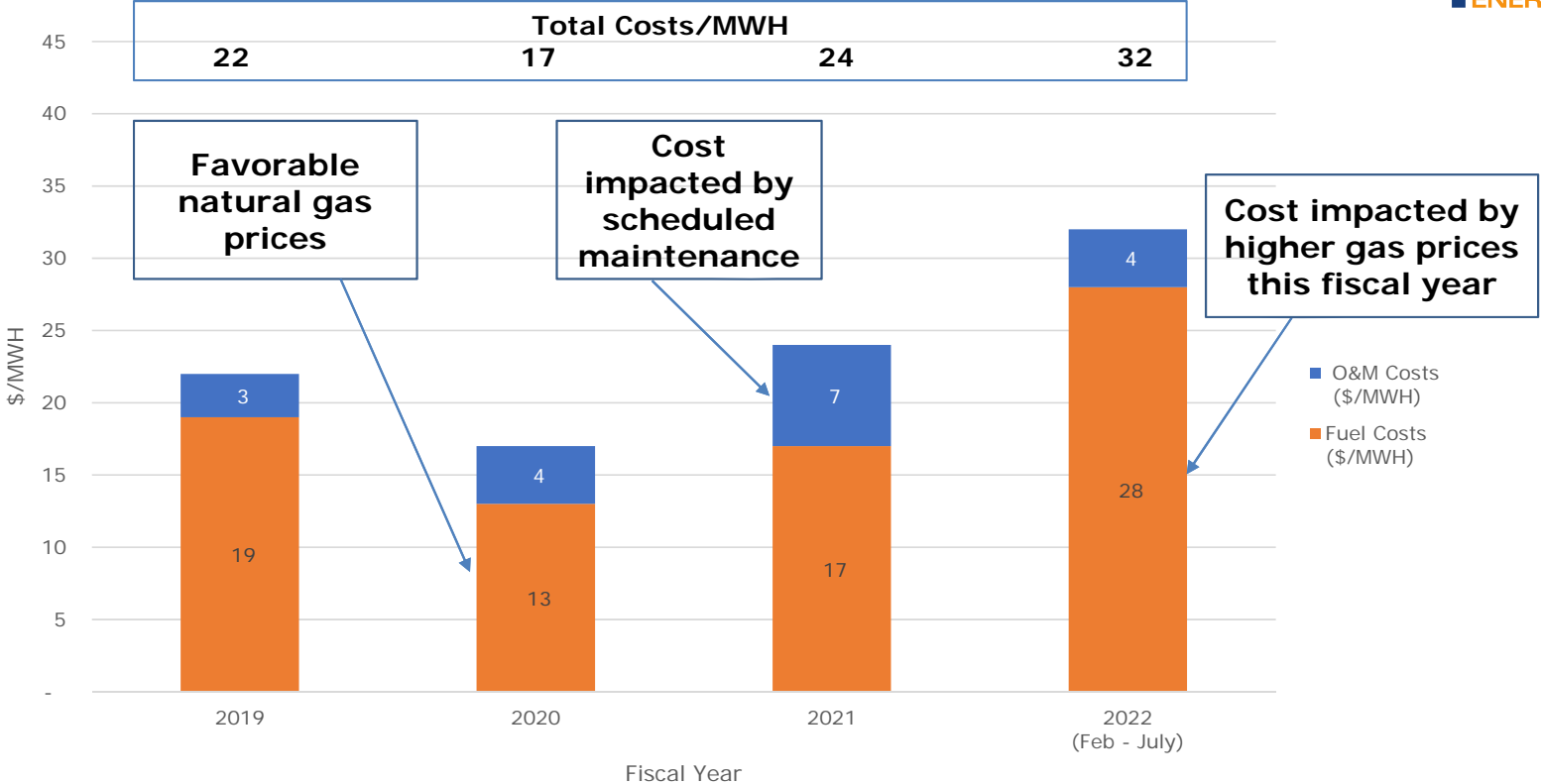
FUEL & O&M COSTS



Price per MWH driven by natural gas fuel costs in all years.

VON ROSENBERG

FUEL & O&M COSTS



Price per MWH driven by natural gas fuel costs in all years & scheduled maintenance in 2021.

SUPPORTING INFORMATION



- PROVIDED IN SEPARATE DATA SHEET



Thank You

