

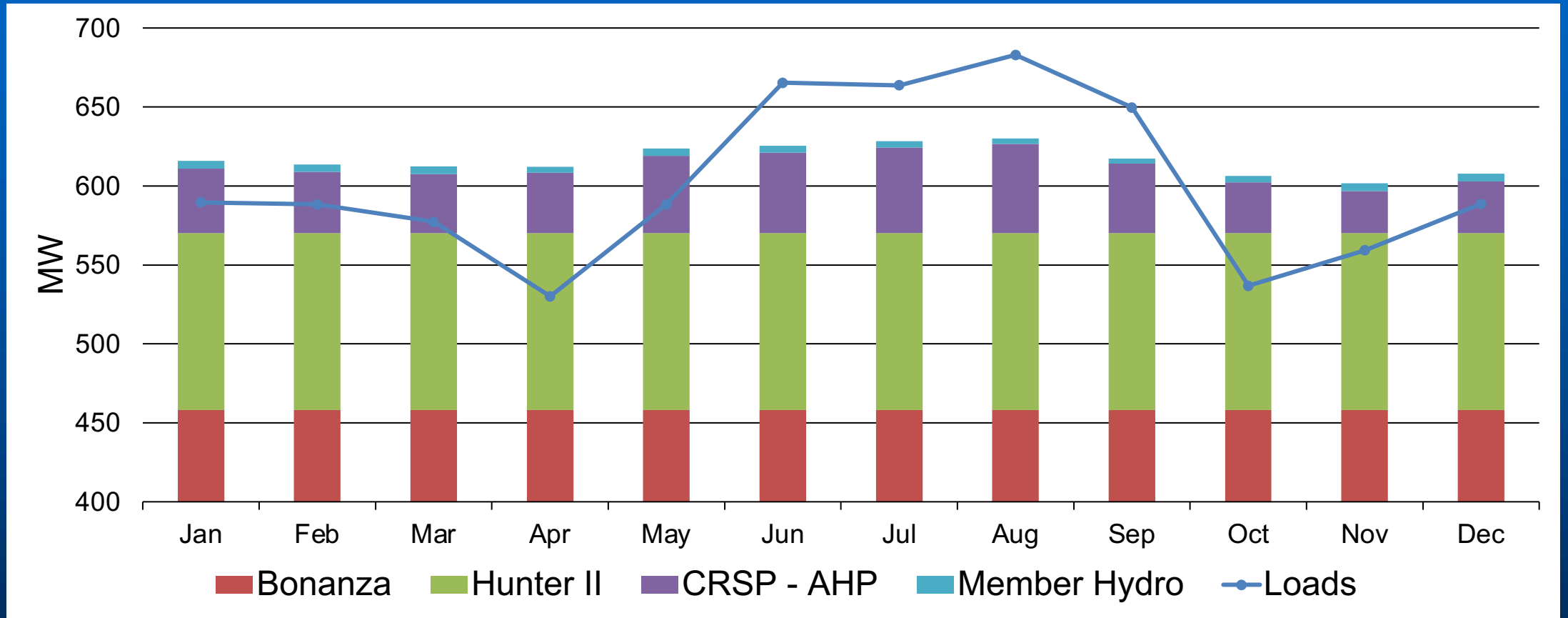
NEW GENERATION

DECEMBER 2021



DESERET POWER
ELECTRIC COOPERATIVE

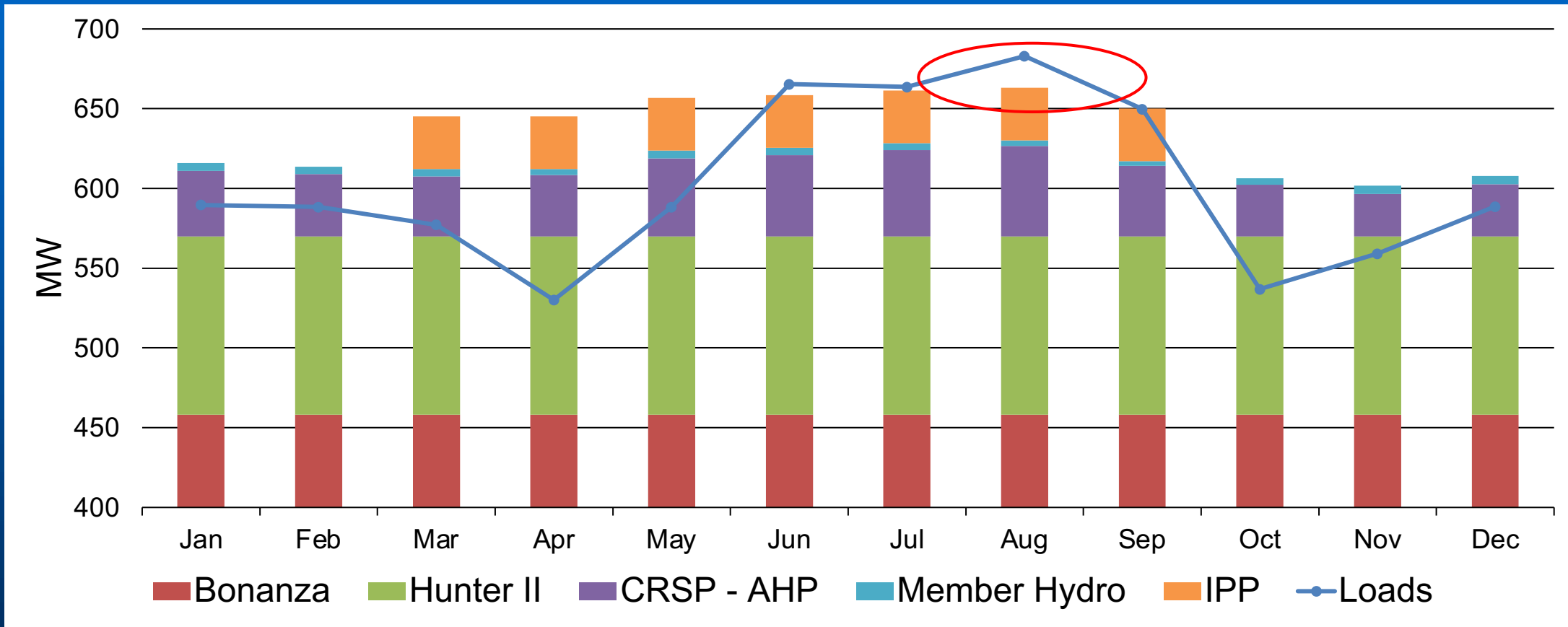
2022 – Loads and Resource Capacity



Note: "Loads" includes all supply obligations

2022 – Loads and Resource Capacity

With IPP Withdrawal



Note: "Loads" includes all supply obligations

Executive Summary

Conclusions

- **Summertime Expected Peak System Demand will exceed Expected Generation Capacity by Approx. 20 MW in Summer 2022**
- **Baseload Resource will Suffice to Satisfy Demand During Most Hours**
- **St. George Area is Best Option to Locate Gas Recip's in time for Summer 2022**
- **Cost of Solar (PV) Appears to be about 30% Above the 2022 Tier 2 Member Growth Rate**

ELECTRICITY PRICES PROJECTED TO BE SIGNIFICANTLY HIGHER DURING 2022

Palo Verde Day-Ahead On-peak and Off-peak Fixed Price Future (ICE)
Average of first five Trade Dates of September 2021 for Calendar Year 2022

Date	PVM On Peak	OVP (Off Peak)
1/1/22	65.88	61.03
2/1/22	58.74	52.79
3/1/22	42.57	39.47
4/1/22	39.83	36.08
5/1/22	39.78	35.33
6/1/22	86.8	47.65
7/1/22	208.77	68.57
8/1/22	200.66	69.86
9/1/22	126.61	55.71
10/1/22	53.44	46.59
11/1/22	41.42	41.22
12/1/22	43.1	42.55
Average Forward Price	2022 CY	\$ 68.90
Avg. Historical Price	2019-20	\$ 33.62
Avg. Historical Price	2020-21	\$ 47.10
Avg. Historical Price (2	2019-21	\$ 40.35

46% increase
Year-over-Year



GAS RECIPS

- **CAT-WHEELER TURN KEY PROJECT**
- **GOOD TRACK RECORD IN THE STATE ETC**
- **4 to 6 UNITS (2.5 MW each) with SCR (10-15 MW Total)**

GAS LOCATION OPTIONS

Member Service Area	Locations Considered	Gas in Area	Pipeline Interconnection Cost	Gas Available Within 9 Months	Altitude Heat Rate Penalty	Transmission Cost Savings	Minimum Load Size Limitation <15 MW
DG&T	Bonanza	Yes	\$10-12M	No	Yes	Minimal	none
Moon Lake	Rangely	Yes	Minimal	Yes	Yes	Minimal	none
	Red Wash	Yes	\$3-4M	No	Yes	Minimal	none
	Raw Water	Yes		No	Yes	Minimal	none
	Upalco	Yes			Yes	Minimal	none
Dixie	Ft Pierce Industrial Park	Yes	Minimal	Yes	No, BUT summertime ambient temp. degradation	YES	none
Mt Wheeler	McGill	No Gas	N/A	No	n/a	Minimal	none
	Spring Valley	No Gas	N/A	No	n/a	Minimal	yes
Bridger Valley	MGR?	Yes		Unknown	Yes	YES	yes
	Granger	Yes	\$1.5-2.5M	No	Yes	YES	
Garkane	Kanab	No Gas	N/A	No	n/a	YES	yes
	Twin Cities	Yes	Minimal	No/Uncertain	Yes / Somewhat	YES	yes
	Sigurd			No/Uncertain	Yes	Minimal	yes



RANGELY LOCATION CHALLENGES

- **Land Acquisition Uncertain Given Timeline for Summer 2022**
- **Wintertime Construction/Less Populated Area Means Wheeler May Not Guarantee Completion Schedule**
- **Altitude Penalty on kW Output**

St. GEORGE SITE LOCATION

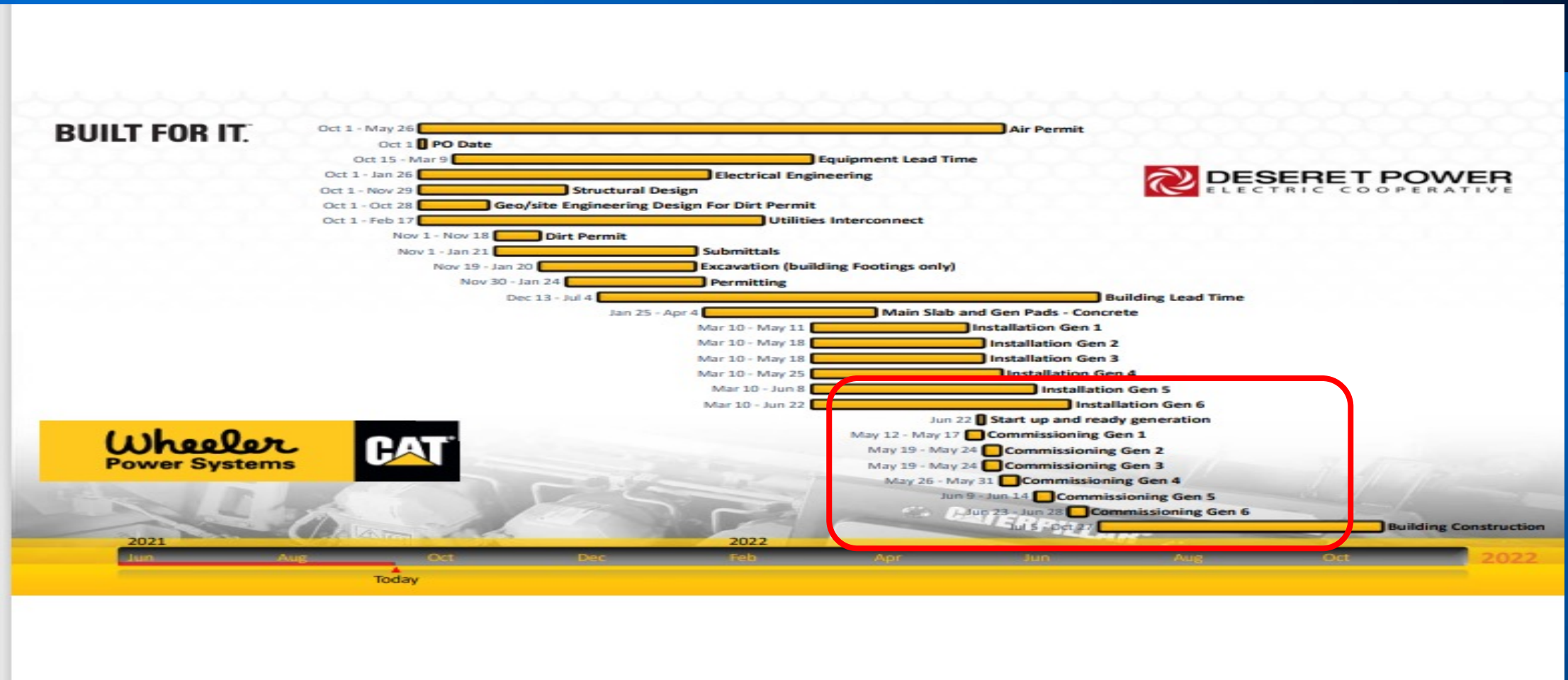


- Ft. Pierce Industrial Park
- Existing Gas on Site
- Minimal Interconnect
- Minimal Land/Site Prep Cost
- Adequate Local Load
- Transmission Co-Benefit
- High Confidence Permitting



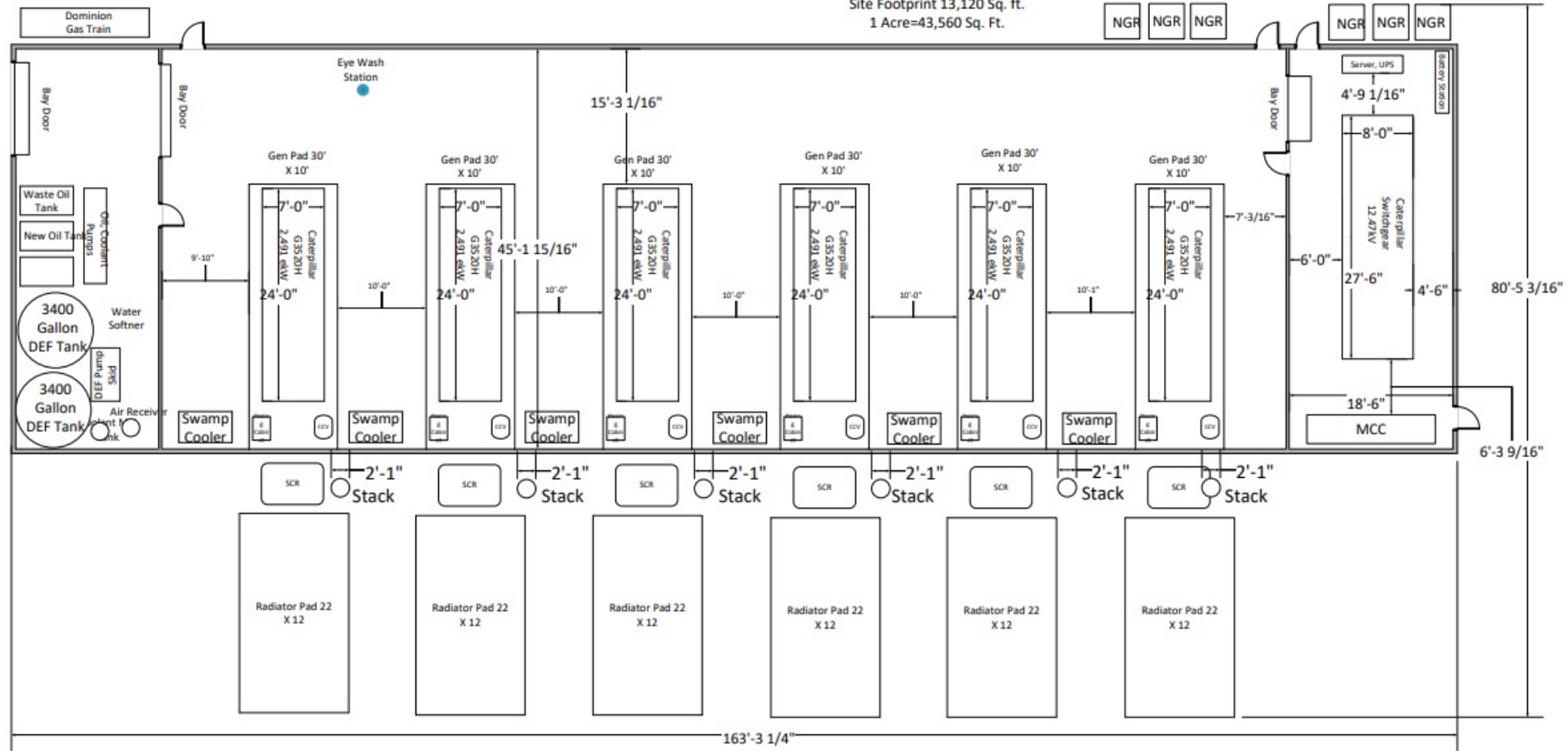
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SCHEDULE – ONLINE OPERATIONAL 6/1/22





Deseret Dixie Site Generation Facility
14.946 MW
Utilizing 6 Caterpillar G3520H 2491 eKW Gensets
Building single level 7,544 Sq. Ft
Site Footprint 13,120 Sq. Ft.
1 Acre=43,560 Sq. Ft.



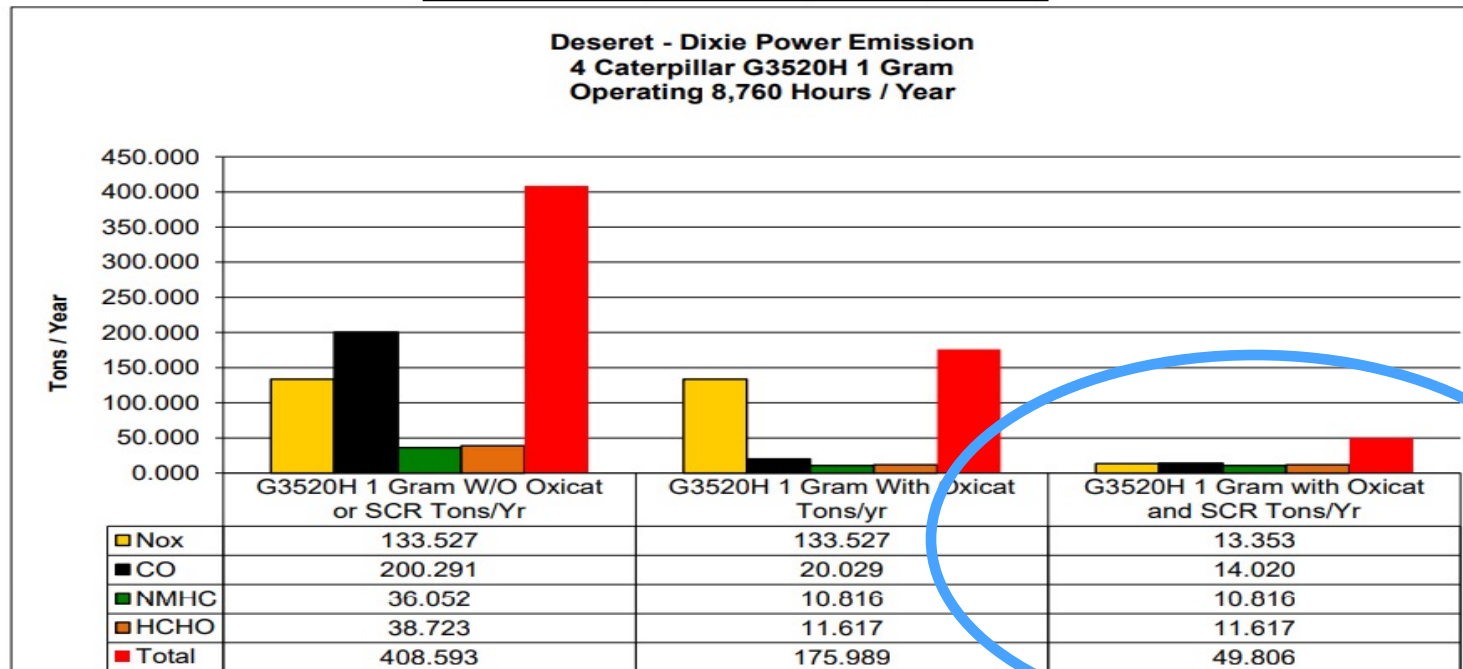
Required 1 acres to a max of 2 acres



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LOW EMITTING – FAST TRACK PERMITTING

	G3520H 1 Gram W/O Oxicat or SCR Tons/Yr	G3520H 1 Gram With Oxicat Tons/yr	G3520H 1 Gram with Oxicat and SCR Tons/Yr
Nox	133.527	133.527	13.353
CO	200.291	20.029	14.020
NMHC	36.052	10.816	10.816
HCHO	38.723	11.617	11.617
Total	408.593	175.989	49.806



CONSTRUCTION/CAPITAL COST

BUDGETARY 15 MW	DIXIE
TOTAL CAPITAL 15 MW (6-2.5 mw UNITS)	
ENGINES AND ANCILLARY	\$16,772,102.41
BUILDING	\$2,700,000.00
TRANSMISSION INTER-TIE	\$500,000.00
LAND PURCHASE	\$0.00
GAS INTER-TIE	\$150,000.00
AIR PERMIT	\$25,000.00
SITE PREP	\$250,000.00
SUB TOTAL	\$20,397,102.41
EXTENDED 5 YR WARRANTY-10,000 HRS	\$400,000.00
TOTAL	\$20,797,102.41



VARIABLE FUEL & OPERATING COST

	G3520H	8883 HR	HHV				
GAS PRICE	\$3.00	\$3.50	\$4.00	\$4.50	\$5.00	\$5.50	\$6.00
ITEM:							
FUEL	\$26.65	\$31.09	\$35.53	\$39.97	\$44.42	\$48.86	\$53.30
FUEL TRANSPORT \$0.90/DTH	\$7.99	\$7.99	\$7.99	\$7.99	\$7.99	\$7.99	\$7.99
MAINTENANCE CONTRACT ^{1,2}	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00
SCR UREA	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00
TOTAL OPERATING/MWH	\$51.64	\$56.09	\$60.53	\$64.97	\$69.41	\$73.85	\$78.29



Proforma PROJECT COSTS/SAVINGS 2022 – \$4.70 Gas

(Initial 7Months from Startup)

Based on Palo Verde Day
Ahead On-Peak and Off-Peak
Prices for CY2022

First 5 Trading Days of September 2021

	Net	Self-Supply	
	Operating	Spinning	Transmission
	Revenue	Reserves	Savings
Jun	\$ 108,389	\$ 45,883	\$ 14,043
Jul	\$ 762,858	\$ 51,920	\$ 14,043
Aug	\$ 776,589	\$ 47,090	\$ 14,043
Sep	\$ 319,194	\$ 48,298	\$ 14,043
Oct	\$ (8,436)	\$ 105,584	\$ 14,043
Nov	\$ (15,648)	\$ 102,113	\$ 14,043
Dec	\$ (14,640)	\$ 105,584	\$ 14,043
	\$ 1,928,306	\$ 506,471	\$ 98,303
	Total Net Operating Revenue (2022)		\$ 2,533,080
	less: 25yr Debt Service (7-mo @3.5%)		\$ (782,189)
	Taxes & Insurance (part year)		\$ (206,900)
	net cashflow		\$ 1,543,990



Proforma PROJECT COSTS/SAVINGS 2022 – \$6.00 Gas

(Initial 7 Months from Startup)

Based on Palo Verde Day
Ahead On-Peak and Off-Peak
Prices for CY2022

First 5 Trading Days of September 2021

	Net Operating Revenue	Self-Supply Spinning Reserves	Transmission Savings
Jun	\$ 47,736	\$ 45,883	\$ 14,043
Jul	\$ 704,538	\$ 51,920	\$ 14,043
Aug	\$ 713,604	\$ 47,090	\$ 14,043
Sep	\$ 260,874	\$ 48,298	\$ 14,043
Oct	\$ (14,916)	\$ 105,584	\$ 14,043
Nov	\$ (22,128)	\$ 102,113	\$ 14,043
Dec	\$ (21,120)	\$ 105,584	\$ 14,043
	\$ 1,668,588	\$ 506,471	\$ 98,303
	Total Net Operating Revenue (2022)		\$ 2,273,361
	less: 25yr Debt Service (7-mo @3.5%)		\$ (782,189)
	Taxes & Insurance (part year)		\$ (206,900)
	net cashflow		\$ 1,284,272



Proforma PROJECT COSTS/SAVINGS 2022 -- \$4.70 Gas

(Initial 7 Months from Startup)

LOW ELECTRICITY/LOW GAS CASE

Based on Modeled Electricity Prices Equal to 50% of Palo Verde Day Ahead On-Peak and Off-Peak Prices for CY2022

First 5 Trading Days of September 2021

	Net Operating Revenue	Self-Supply Spinning Reserves	Transmission Savings
Jun	\$ (14,460)	\$ 101,962	\$ 14,043
Jul	\$ 199,179	\$ 51,920	\$ 14,043
Aug	\$ 191,465	\$ 47,090	\$ 14,043
Sep	\$ (2,517)	\$ 101,962	\$ 14,043
Oct	\$ (24,468)	\$ 105,584	\$ 14,043
Nov	\$ (28,074)	\$ 102,113	\$ 14,043
Dec	\$ (27,570)	\$ 105,584	\$ 14,043
	\$ 293,555	\$ 616,214	\$ 98,303
	Total Net Operating Revenue (2022)		\$ 1,008,071
	less: 25yr Debt Service (7-mo @3.5%)		\$ (782,189)
	Taxes & Insurance (part year)		\$ (206,900)
	net cashflow		\$ 18,982



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