



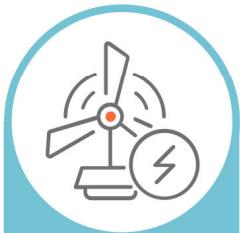
Mt Simon Station Energy Station Prime Movers

May 20, 2025



Power Supply Resource Plan | Renewable Energy. Reliable Capacity.

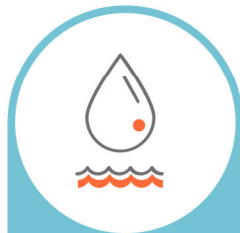
Renewable Energy



Wind
350 MW



Solar
50 MW



Hydro
3 MW

Reliable Capacity



Firm
Dispatchable
Generation



Battery
Storage
400 MWh



Demand
Response



Continued Conservation



Mt Simon Station | Prime Mover

Reciprocating Engines



Five (5) 9.4 MW = **47.0 MW**

•Advantages:

- Matches existing West Side Station
- High redundancy (5 units)
- Existing spare parts inventory

•Disadvantages:

- Larger footprint: building, balance of plant
- Requires post combustion emission controls
- Cost adder for dual fuel capability
- Currency & Tariff Risks

Gas Turbine Generators



Three (3) 15.4 MW = **46.4 MW**

•Advantages:

- More domestic content
- No post combustion emissions controls
- Smaller footprint, building, balance of plant
- Same units planned in Owatonna by SMMPA

•Disadvantages:

- Different than Westside and Cascade Creek units
- Lower redundancy (3 vs 5)



Firm Dispatchable Capacity | Prime Mover Selection

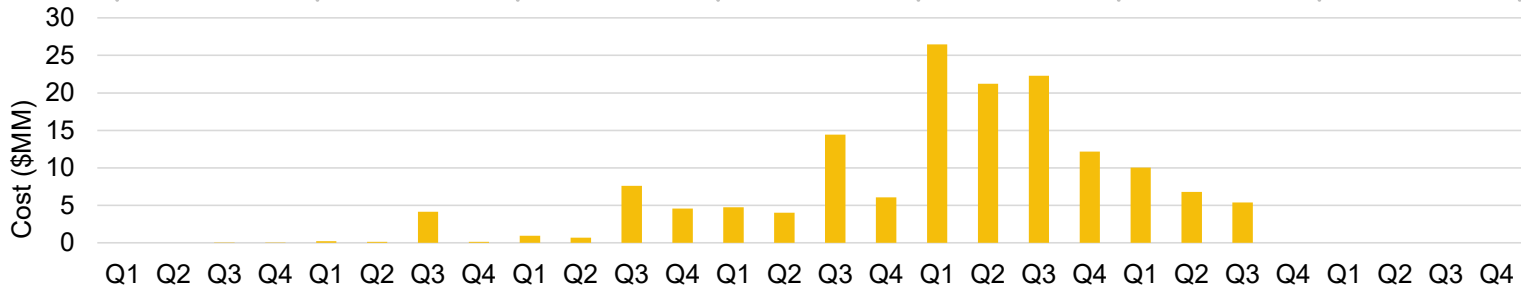
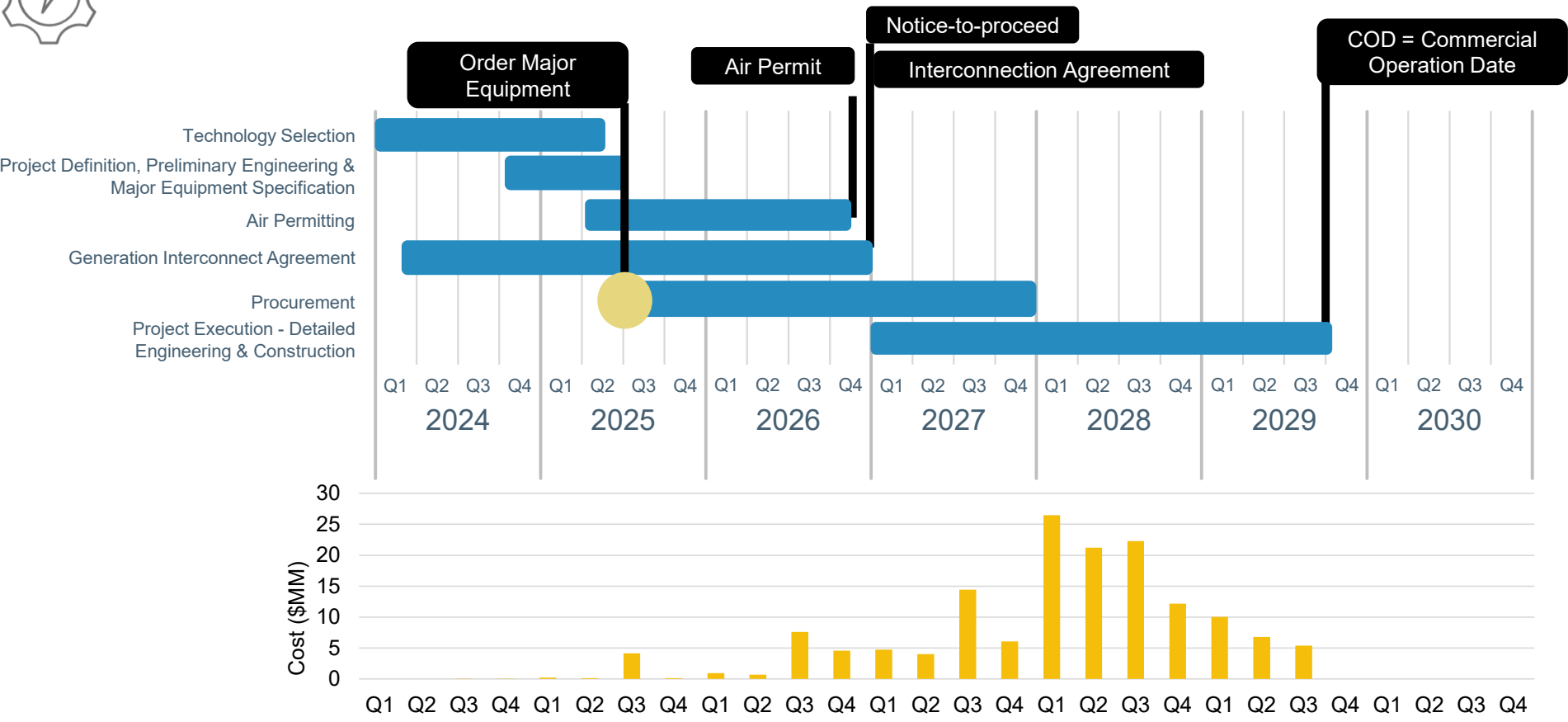
Prime Mover		3 x Titan 130	5 x 20V34DF
Heat Rate	Btu/kWhr	11,099	8,299
Plant Output	MW	46.4	46.9
Total Plant Cost	\$MM	166,261	179,660
Fixed O&M	\$/kW	2.88	6.42
Variable O&M	\$/kW	16.40	15.79
Capacity Factor	%	7%	12%

2030 Capacity Cost	\$/kW-mo	18.81	20.57
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Firm Dispatchable Resource - Mt Simon | Schedule



● - Major Decision Point: Aligns with equipment procurement, transmission results, and preliminary comments on air permit





Thank You