

Enchanted Rock – Tech Update
Behind the Meter Power Solutions Applied to Gas Compression
Gas Electric Partnership Conference
February 7, 2019

Summary of Enchanted Rock



Texas market leader in reliability microgrids since 2010

- ERock designs, builds, operates and finances ultra-clean resiliency microgrids to provide reliability as a service
 - Commissioned over 350
 MW of DG/microgrids
 - Largest behind-the-meter distributed generation fleet in Texas
 - Gap Fill Prime
 - Backup
 - UPS



Historical Asset Development – Gas Compression



Plant Operations



Gas Fired Compression

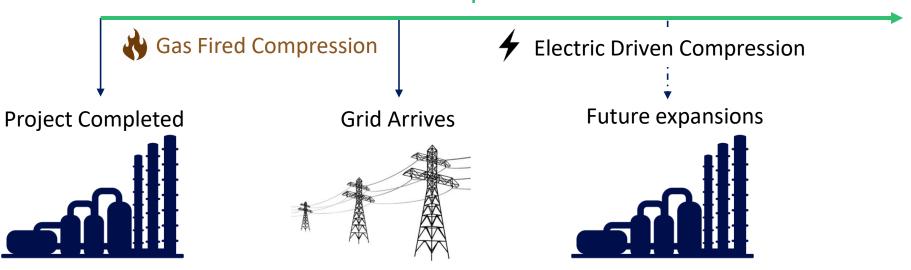
Gas Processing Plant Project Completed



Current Asset Development – Gas Compression



Plant Operations



Gas Fired vs. Electric Driven Compression



GAS FIRED

- Fuel is readily available
- Equipment lease options
- Rapid deployment
- Expensive CAPEX
- Expensive OPEX
- Emissions

ELECTRIC

- Lower CAPEX
- Lower OPEX
- No emissions
- Faster lead time
- Grid delay
- Grid reliability

LONG TERM, THE GRID IS YOUR FRIEND

Enchanted Rock Asset DevelopmentGas Compression



Plant Operations

Electric Driven Compression Prime Power Microgrid

Electric Driven Compression + Reliability Microgrid







Behind-the-Meter Applications for Oil & Gas





PRODUCTION

- Central Gathering Facilities (CGF)
- Central Tank Batteries (CTB)
- Central Transfer Facilities (CTF)
- Centralized Artificial Lift



MIDSTREAM

- CGF
- Gas processing
- Cryogenic plants
- Compression stations



TRANSMISSION

- Terminal
- Storage
- Pump Stations

24/7 Microgrid NOC



The <u>Only</u> Integrated 24/7 Microgrid NOC in Texas

Real Time Operations

- Analyze real-time ERCOT market
- Monitor and dispatch of DG
- Work closely with customers and TDSP's during outages
- Secondary NOC at off-site location
- Operate and maintain:
 - 293 MW at 126 sites across TX
 - Additional 66 MW under construction



Level 3 QSE (Qualified Scheduling Entity) Services

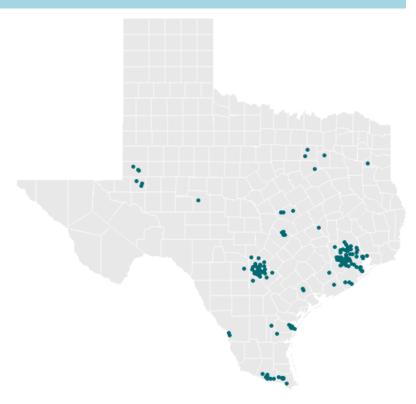
- ERCOT wholesale day ahead and real time markets
- Coordinate with REP's on settlements and energy billing

Responsive Field Service



- Field Maintenance and Operations
- Standardized, modular design
- Service technicians on call 24/7
- Remote monitoring of all assets
- Veteran friendly employer

55 MW in Permian Basin

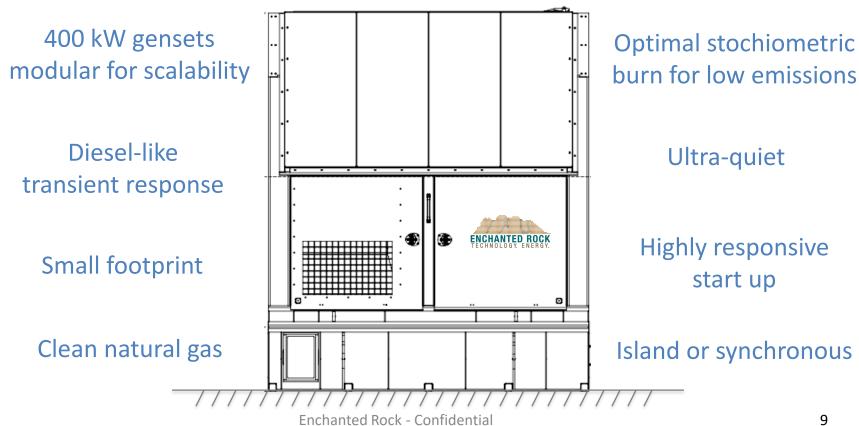


Distributed Generation Asset

Proprietary Genset Design



Exclusive supply chain allows maximum flexibility and scaling



Low Emissions and TCEQ Permitting



Virtual Dual Drive performance strategy at no additional cost

- Emissions <u>not</u> aggregated with host facility's air permit based on TCEQ's determination
- Ultra-low emissions
 - NOX < 0.14 lb/Mwh-e
 - Engines NSPS JJJJ Certified
 - TCEQ EGU Standard Permit



2018 Award Winner

Summary



Power challenges will continue in the Permian Basin

There is an immediate need for higher reliability and gap fill power to maximize throughput

Enchanted Rock's behind-the-meter microgrids deliver gap fill,
UPS and backup power solutions at minimal cost



Various Medium Voltage Installations

Typical 30 MW System









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