



Data Center Prospect

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ID 21-1629



Project Description

- Tenaska and their customer proposes to build a data center on 31 acres of leased land at the Denton Energy Center
 - Tenaska Power Solutions, LLC is the developer of the project under contract with the eventual owner
 - Owner– established block chain infrastructure and hosting developer and owner with operations throughout North America
 - 100% net carbon neutral business model at all facilities

Community Benefits

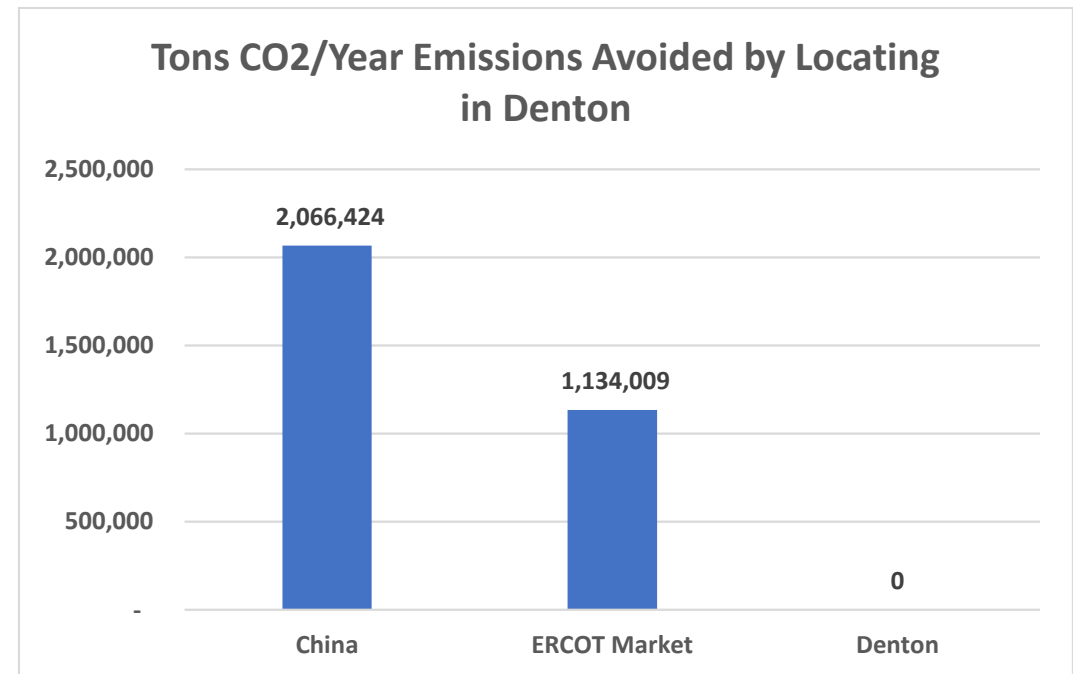
1. Environmental Benefits and Sustainability Impacts
2. Improvement of ERCOT Grid Reliability
3. Incremental General Fund Revenues
4. Electric Rate Stability

Climate Change Implications of Proposed Project

- Siting project in Denton supports carbon emission reductions on a global basis

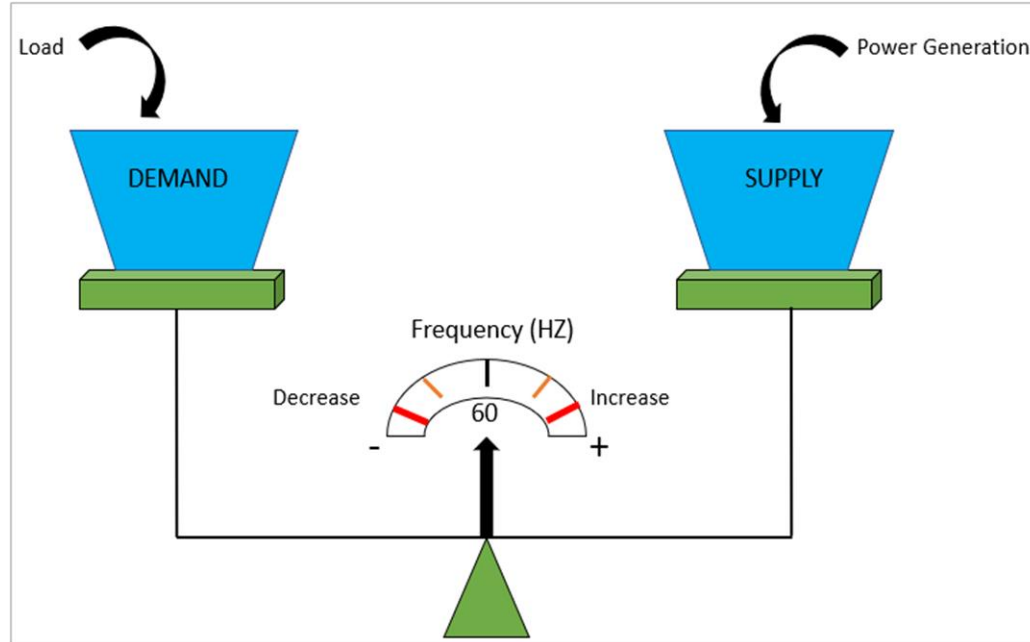
Generation Mix

	ERCOT Annual Generation Mix (2020)	China Annual Generation Mix (2018)	Denton Annual Generation Mix (2021)
Oil	0.0%	0.2%	n/a
Nat Gas	45.5%	3.1%	n/a
Renewables	22.8%	8.9%	100%
COAL	17.9%	67.0%	n/a
Nuclear	10.9%	4.1%	n/a
Hydro/Other	2.9%	17.0%	n/a



ERCOT Grid Reliability – Adequate Resources and Reserves

- ERCOT's main function is to maintain electric frequency (i.e. Reliability)



ERCOT Ancillary Services

1. Responsive Reserve Service
2. Regulation Up
3. Regulation Down
4. Non-spinning Reserves

These Reliability Products are essential to operating the ERCOT Transmission Grid and are purchased from market participants (load and generation) daily.

How Does Data Center Increase Reliability?

- Electric demand is fully interruptible
 - During high price periods or scarcity of generation events or higher than forecasted load, Data Center will shut down.
- Data Center will sell Ancillary Service to ERCOT every day
 - Additional and significant source of Project revenues from sales of Ancillary Services
- As a demand side resource, the data center adds grid reliability immediately
 - No need to build additional dispatchable generation
 - Demand is “dispatchable”
- ERCOT is procuring more Ancillary Services as a result of Winter Storm Uri
 - Additional sources of Ancillary Services increases supply and thus mitigates price increases

Incremental General Fund Revenues

- DME transfer to the City General Fund Annually includes:
 - Franchise Fee – 5% of electric gross revenues
 - 80% to Street Improvement Fund/20% to General Fund
 - Return on Investment – 3.5% of gross revenues
 - equivalent to dividends to DME's single shareholder 100% stays in general fund
- Sales tax from the sale of electricity
- Property tax from the improvements

How Much Could the General Fund Benefit?

- At full build out in FY 2023, annual range of projected incremental general fund revenues is **\$9 to \$11 million**
 - Franchise Fees - \$4 to \$4.5 million per year (80% to Streets)
 - ROI and Taxes – \$5 - \$6.5 million per year
 - Incremental General Fund Revenue Available – **\$5.8 to \$7.4 million per year** ⁽¹⁾
- Without approval by City Council these additional funds **are not** available
 - Use of incremental funds is purely discretionary by City Council
 - Funds could be directed to a dedicated (new) fund for the Council’s sustainability goals by ordinance

(1) Excludes 80% of Franchise Fees which are assumed to go to Street Fund

Sustainability Funding Examples

- **Climate Adaptation/Resilience**
 - Climate Mitigation Plan: Dallas plan equivalent saves 2.48 million MTCO₂e through 2030
 - Support EV adoption: 30% gasoline passenger adoption by 2030 saves 450,000 MTCO₂e
- **Environmental Improvement**
 - Acquire Green Space
 - Current Tree canopy sequesters approx. 1 MTCO₂e/acre/yr
 - Air Quality Monitoring Project
- **Social/Equity**
 - Low Income Weatherization: 845lbsCO₂e/home/year

Electric Rate Stabilization

- DME faces new revenue requirements
 - Winter Storm Uri debt cost – \$140 million
- Data Center projected DME net income contribution \$8 to \$9 million annually
 - Debt cost of winter storm Uri - \$5.9 - \$6.3 million per year
- Without these project incremental net income contributions, DME will recommend a 3% rate increase in our FY 2022 budget to begin immediately (effective October 1, 2021)

Direction, Timeline & Next Steps

- Council Direction
 - Any additional information needed to support approval of Project?
 - Approach to gaining consensus on use of incremental General Funds?
- August 17 City Council Meeting
 - Closed session to review confidential PPA provisions
 - Zoning Hearing and action (Public Facility to Light Industrial)
 - Individual Consideration of PPA
 - Individual Consideration of Lease Agreement
- Permitting applications immediately upon approval of PPA, Lease and Zoning
 - Clearing and grading in September
 - Commercial Operation of Phase I in December

Questions?

Terry Naulty – Asst. General Manager DME

Katherine Barnett – Sustainability Manager

Cassey Ogden – Director of Finance