

Modular Data Mining Prospect

Jessica Rogers Director of Economic Development 6/14/2021 PUB 21-116



Background

- Tenaska is a large, private energy company specializing in power plant development and operation and natural gas and electric power marketing.
- DME and Economic Development have been working with Tenaska and a data center client on the development of a high-density computing operation.
- The project has very large electric demand.
 - The project's electric demand will be larger than total DME annual electric demand at full build out.
- Proposed to be constructed on leased land at the Denton Energy Center.
 - Adequate transmission and substation capacity with minimal build out.
 - Requires zoning change from Public Facility (PF) to Light Industrial (LI) June 23rd P&Z consideration.



Project Site Plan



Modular Data Mining Campus

- Co-location services for high performance computing applications
 - Blockchain
 - Cryptocurrency mining
 - Artificial intelligence
 - Machine learning
 - DNA mapping



Project Development



- The project will be developed in 3 phases:
 - Phases 1 & 2 includes 19 acres south of the Denton Energy Center (Target COD – Sept. 2021)
 - Phase 3 includes 11 acres north of the Denton Energy Center (Target COD March 2022).
- Electric supply from the Jim Christal substation.
- Project will require negotiation of a Purchase Power Agreement due to large electric demand of project.
 - Project is not asking for an economic development agreement.
- DME negotiating land lease that will part of the proposed PPA.
 - Lease rate will be market based.
- Property currently zoned Public Facility.
 - Converted from Industrial when purchased by the City in 2017.
 - Zoning change will revert these parcels to Light Industrial classification.



Partnership Alignment

Customer Needs	Denton Value
Transmission level voltage 138 kV	City Owned Property Adjacent to DEC and 138 kV Transmission Ability to expand footprint and load
High reliability but able to curtail when system conditions call for it	Proven and nationally recognized reliable utility
Rates pursuant to PPA (confidential)	Competitive PPA
Access to advanced workforce, 20-25 highly skilled technicians with average wages and benefits around \$60,000	Access to existing talent pool and pipelines through NCTC, TWU, and UNT
Access to 100% Renewable Energy is extremely important	100% renewable community with access to renewable energy for facility
Desire to be good community and environmental partner	Seeking creative partnerships to further strategic goals



Direct Benefits to City of Denton

- Aligned with Denton's Economic Development Strategic Plan.
 - 2A.2: Attract New Investment.
 - 2C.2: Target Environmentally Conscious Businesses.
 - 2C.2.1: Identify business that are high electricity users, such as data centers.
- Full build-out of the project would more than double all of DME's current retail energy sales creating additional General Fund Revenue for the City at full build-out.
 - Franchise fee and ROI revenue increases from DME to the City.
- New Sales Tax Revenue for the City (from electric sales).
- New Property Tax Revenue for the City.
- Increase DME's system load profile potentially reducing overall cost to serve existing customers.



Potential Risk/Rewards

Commercial Risks

- Customer's credit will be crucial for project viability
 - PPA will provide sufficient collateral to mitigate.
- What is the lifecycle of the business plan, what happens when it's over
 - Other High Performance Computing options on the horizon
- Consumes a significant portion of available transmission capacity

Benefits to City

- Significant new retail electric revenues and associated increases to franchise and ROI fees to City
 - General fund relief
 - Potential electric rate relief
 - Potential source of Catalyst funding
- Utilizes surplus transmission capacity
 - Generates new revenues from prior investments



Timeline & Next Steps

- Project is pursuing a very aggressive schedule since it is a modular installation.
- Rezoning of the property is necessary since it is current PF.
- Project wants to begin permitting as soon as possible.
- Power Purchase Agreement negotiations are ongoing.
 - Staff will bring to City Council and PUB in late July or early August.
- Project wants to be online on or before December 2021.
 - With final phase online on or before March 2022.

Rezoning TimelineMay 18: Application DueMay 19: Public Notice of HearingJune 17: Community MeetingJune 23: Public Hearing, P&Z
ConsiderationTBD: City Council consideration of
zoning



Next Steps, cont.

- Zoning change of DEC property
- Negotiate comprehensive power purchase agreement
 - Purchase Power Costs
 - Land Lease Terms
 - Credit/Financial Security
 - Aid in Construction for facility interconnection
 - Operational requirements and flexibility
 - No economic growth rider incentive planned



Direction

- Provide 120-day exclusivity period on DEC site
- Continue to negotiate commercial terms with Tenaska
- Final PPA will be approved by City Council



Questions?

Jessica Rogers - Director of Economic Development Terry Naulty – Asst. General Manager DME Greg Kelly – President, Tenaska Energy Solutions Chris Hemschot – Tenaska Energy Solutions

