

City of Denton

City Hall 215 E. McKinney Street Denton, Texas www.cityofdenton.com

AGENDA INFORMATION SHEET

DEPARTMENT: Denton Municipal Electric

GM: Antonio Puente, Jr.

DATE: May 19, 2025

SUBJECT

Receive a report, hold a discussion, and give staff direction regarding updates to the Denton Renewable Resource Plan.

BACKGROUND

On February 6, 2018, the City Council approved the Denton Renewable Resource Plan (DRRP) through Resolution No. 18-085. The intent of this plan was "to meet the future needs of its electric customers with 100% renewable energy" and it rescinded the previous plan (the "Renewable Denton Plan"), which was approved by Resolution No. R2016-014.

In 2017, the City hired Enterprise Risk Consulting ("ERC") to both review the Renewable Denton Plan and develop a new plan with a 100% renewable energy goal. ERC developed the DRRP, which would allow the City to meet the goal of as early as either 2020 or 2024. To achieve the goal by 2020 ("Gradual Adoption Path), this path called for the purchase of short-term (1-4 years) renewable resources along with a variety of renewable resource that was scheduled to expire in December 2023. To achieve the goal by 2024 ("Early Adoption Path"), this path called for the City to accelerate the acquisition of wind PPAs, recognized that there may be excess power supply over the next few years, and the City would need to manage fixed-cost risk (the risk of market prices falling) while have excess power. Additionally, the Early Adoption Plan also recognized the possibility of including the Whitetail resource to accelerate meeting the goal by 2020. In this latter option, this called for recognition of 30 MWs of Renewable Energy Credits (RECs) that were provided through the PPA with no corresponding energy. ERC stated that this "could cause an audit risk as to the validity of its renewable status." And, in a final version addendum to the plan, the City's Public Utilities Board and City Council opted to not consider the Whitetail resource as a renewable resource, which only applied to the 30 MWs of RECs with no corresponding energy.

On January 28, 2020, the City Council approved Resolution No. 20-249, which allowed the City to recognize all the RECs associated with the Whitetail resources and reversed the prior directive from 2018. In a letter from ERC dated December 13, 2019, they acknowledge that the Whitetail resource RECs could be considered renewable energy. The basis for this treatment is rooted in the State of Texas' Renewable Energy Credit (REC) Trading Program, which defines a REC as "one MWh of renewable energy that is physically metered and verified in Texas" and is either a new facility, a small producer facility, or a repowered facility. A facility is defined as solar, wind, geothermal, hydroelectric, wave/tidal or biomass.

Based on this latest direction from the City Council, the City reached its 100% renewable energy goal in calendar year 2021 when it counted 262,800 MWhs of RECs from the Whitetail resource. This continued for calendar years 2022 and 2023 along with additional RECs purchased in the wholesale market. Finally, in calendar year 2024, the first year without the Whitetail resource, the City purchased 400,530 MWhs of RECs to meet its goal. Below is a table reflecting this history:

Calendar Year	Load Served (MWh)	Renewable Energy (MWh)	RECs w/o Energy (MWh)	Total Renewable (MWh)	Renewable %
2021	1,593,440	1,343,789	262,800	1,606,589	101%
2022	1,750,135	1,396,335	353,800	1,750,135	100%
2023	1,749,737	1,480,144	269,593	1,749,737	100%
2024	1,776,322	1,375,792	400,530	1,776,322	100%

In terms of cost, the City had already paid for the 30 MW of Whitetail resource RECs in the negotiated PPA price so there was no additional cost for counting these RECs. If replacement renewable energy would have been required, then the City estimated an additional \$5.1 million in cost would have been needed for the remaining 3 years of the contract. For calendar year 2024, the purchase of RECs in the wholesale market averaged \$1.50 or approximately \$600,000. The replacement renewable energy would have cost in excess of \$2.5 million. Staff would note that since the accounting of the renewable goal is after the close of the calendar year and replacement renewable energy would have been purchased during the year, a gap between the load served and the renewable energy would have still be likely and therefore necessitating the purchase of RECs in the wholesale market or alternatively, reported that the goal was not met.

Finally, regulatory and market changes continue to pose challenges in achieving the 100% renewable goal. These changes include State legislation that could require the firming of renewable resources, place caps on new generation entrants into the market, and place dispatchable energy requirements on load serving entities like DME. The changes may not only limit the availability of renewable energy but could also mean higher energy prices in the future if there is not sufficient supply to meet demand. At the Federal level, tax credits which have historically been large incentives to the development of renewal energy may be up for termination and tariffs on critical components and equipment may further pose challenges to already strained supply chains. Impacts to Federal Agencies like the Department of Energy and Environmental Protection Agency may also create additional challenges to new renewable energy developments.

In conclusion, staff has prepared a presentation in which we propose the creation of a City Renewable Energy Policy to address the changing regulatory and market environment while maintaining a 100% renewable energy goal, and the development of an Integrated Resource Plan to address the ongoing generation needs of the utility to meet our stated mission to provide sustainable, safe, reliable and affordable electric power to our community.

EXHIBITS

- 1. Agenda Information Sheet
- 2. Resolution No. 18-085
- 3. Resolution No. 20-249
- 4. Guide to Making Claims About Your Solar Power Use
- 5. Letter from Energy Risk Consulting
- 6. Presentation

Respectfully submitted: Antonio Puente, Jr. 940-349-8487 DME General Manager