

# Potential Opportunities for a Locally Owned Municipal Utility



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Executive Manager



- **Introduction to Denton, Texas and DME**
- **Organizational Governance**
- **Current and Future Energy Portfolio**
- **Reliability**
- **Energy Efficiency**
- **Business Development**
- **Rate Trends**
- **Automated Metering Opportunities**
- **Benefits of MOUs**
- **Awards & Recognition**
- **Closing**

# **PRESENTATION TOPICS**



# Business Development Advantages to a Locally Owned Municipal Utility (MOU)



**INTRODUCTION TO  
DENTON, TEXAS**

**DENTON**  
MUNICIPAL  
ELECTRICITY



- **30 miles north of Dallas/Fort Worth**
- **113,000 population with projection of 203,000 by 2030**
- **Demographics**
  - **Caucasian - 73.8%**
  - **African American - 10.3%**
  - **American Indian/Alaska Native - 0.8%**
  - **Asian/Asian Pacific Islander - 4.2%**
  - **Two or more races - 3.2%**
  - **Hispanic/Latino - 21.2%**
- **Median household income = \$46,151 / \$52,759**
- **Median age = 31.2 years / 29 years**
- **Top 25 Fastest Growing Cities in the U.S.**
- **University of North Texas and Texas Woman's University**
  - **Combined population of more than 50,000**

**Denton, Texas**

**DENTON**  
MUNICIPAL  
ELECTRICITY



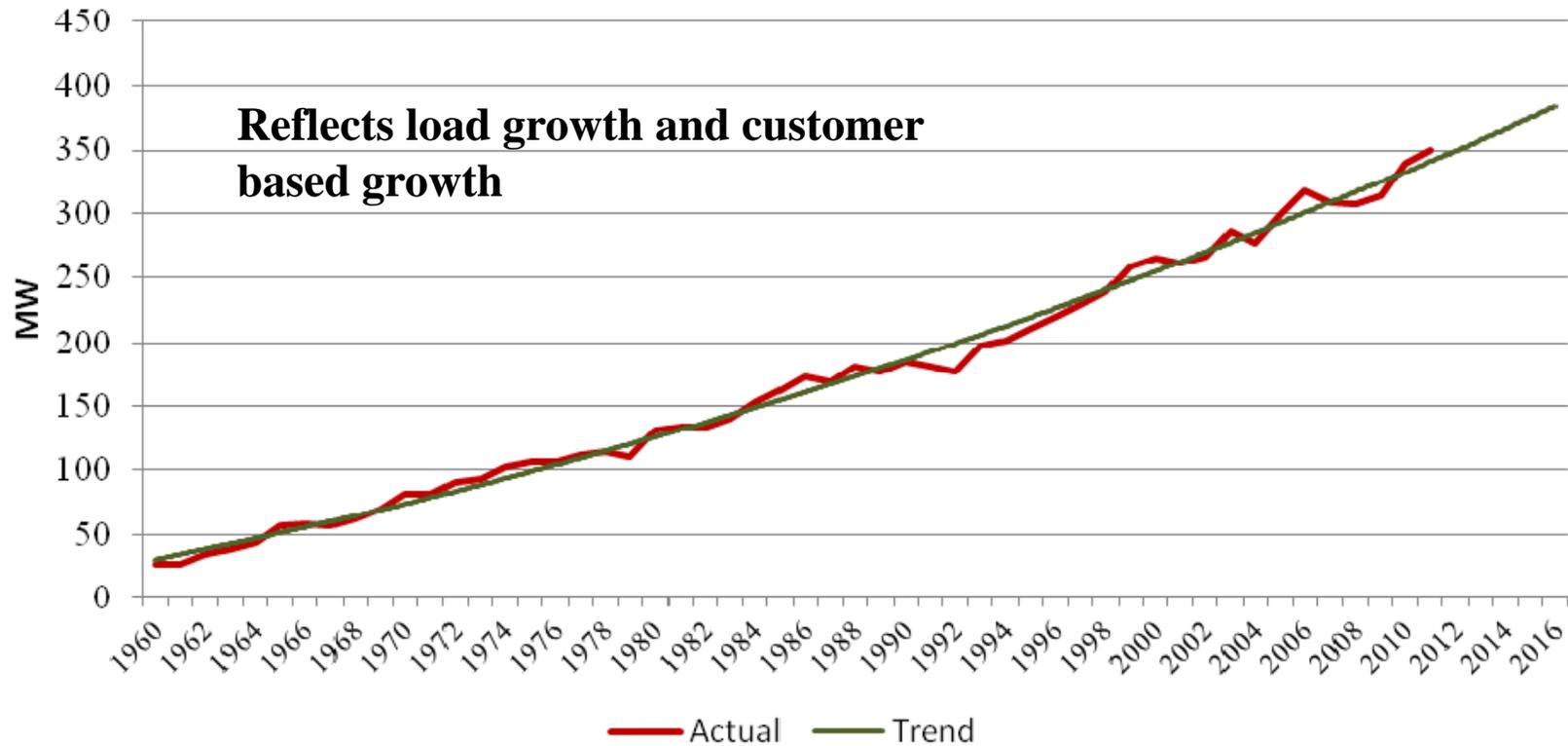
- **Municipally owned utility since 1905**
- **48,000+ customers**
  - **88% residential / 12% commercial / industrial**
  - **88% of revenue from commercial and industrial customers**
- **DME annual budget = \$159 million**
- **8.5% Franchise Fees/Allocations/Transfers**
- **Electric System Characteristics**
  - **4.6 Miles of 138,000 Volt transmission**
  - **18.5 Miles of 69,000 Volt distribution**
  - **55% of distribution voltage is underground**
  - **16 substations (growth: one every 5 years to 2 every year)**
- **143 DME employees, 50 Customer Service employees**
  - **Personnel devoted specifically to provide customer service to industrial, commercial, industrial and school (Key Accounts Mgmt) customers**

**WHO IS DME?**

**VENTION**  
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## DME Peak Loads and Trends 1960 to 2016



# DME SYSTEM GROWTH



# Organizational Governance

- **Our mantra: “local control, local control, local control”**
  - Let the city make the decisions that affect its customers
  - City leadership, staff and customers know what’s best for their town
- **Under direction of Public Utilities Board (PUB) and City Council**
  - PUB focused on utility detail and Council on policy
  - Recommended Board composition (experts, City, business, ETJ customers)
  - Expertise (risk management, finance, engineering, etc.)
- **TPPA Survey: 68% governed by City Councils and 32% by Boards**

**GOVERNANCE**

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## **DME's Energy Portfolio (1999 to early 2008):**

- **50% - Texas Municipal Power Agency (PRB Coal)**
- **50% - Full Requirements Services Contract (Natural Gas)**
  - **PPA procure incremental energy from the supplier**
  - **Provide “scheduling” services in the energy market**
  - **Currently outsourced with DIY in September 2014**

**PRIOR PORTFOLIO**



# Renewable Energy Additions (Since 4Q2008)

- **Denton Power, LLC (DTE)**
  - Landfill gas
  - Provides enough energy to power 1,600 homes
- **NextEra Energy Resources - May 2009**
  - Wolf Ridge Wind Facility in Muenster, Texas
  - Comprises 55%+ of DME's annual load and includes RECs
  - Backed by natural gas
  - Seamless integration with no reliability impacts
- **Addition of 20 – 30 MWs of solar (3Q2013)**
  - Demonstration projects throughout city
  - Solar farm

**CURRENT PORTFOLIO**



# Traditional Energy Resources

- **Texas Municipal Power Agency (PRB) – June 1975**
  - Existing power contract through 2018
- **NRG Power Marketing, LLC - May 2011**
  - Full Services Requirements PPA
  - Provides balance of energy needs not covered by existing resources

**CURRENT PORTFOLIO**



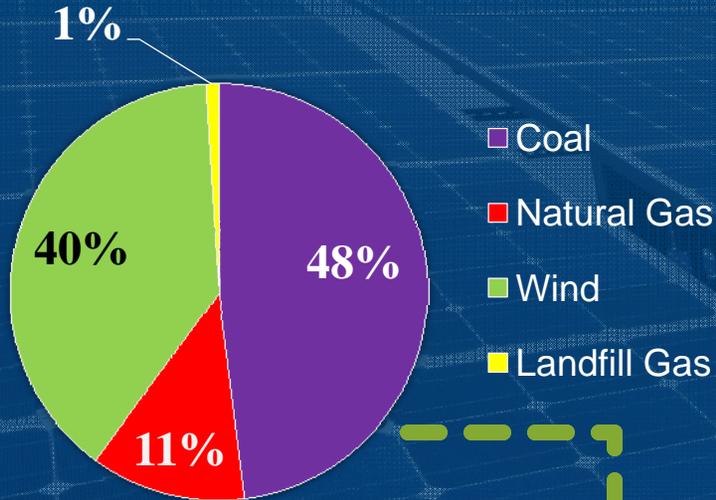
# Renewable Energy Avoidance

- Annual equivalent to removing:
  - 113,917 vehicles off the road or
  - CO2 from 61.3 million gallons of gasoline or
  - CO2 from 1.3 million barrels of oil

**ENVIRONMENTAL IMPACT**

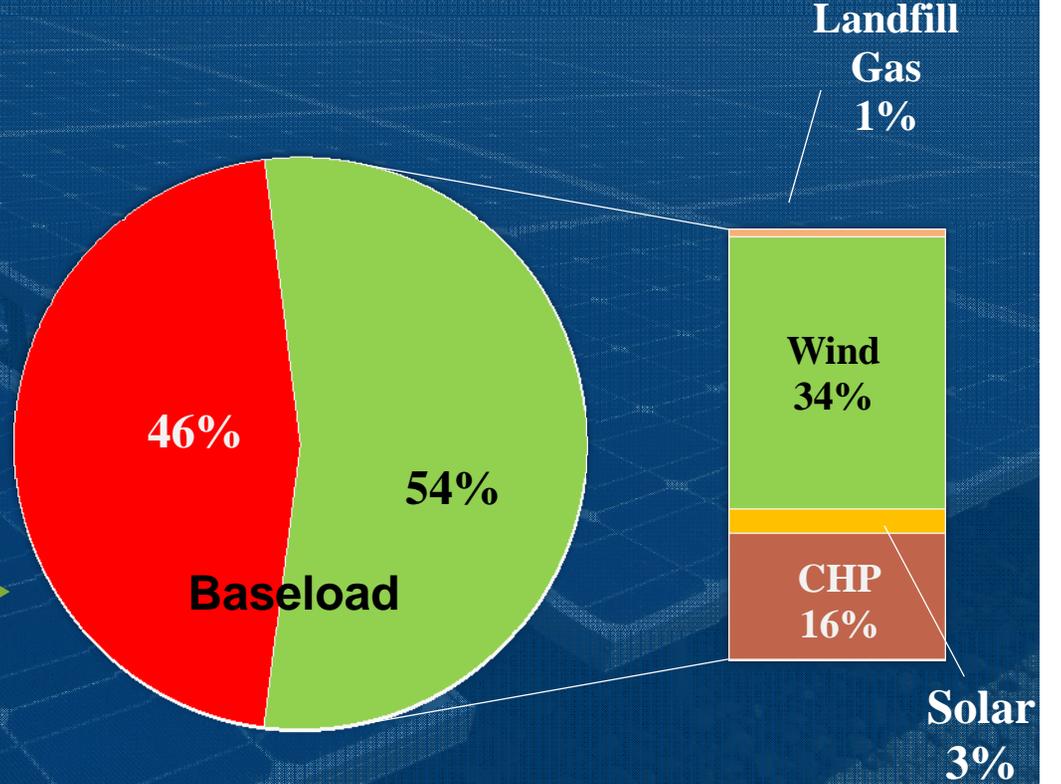


2009



- Coal
- Natural Gas
- Wind
- Landfill Gas

2018 Estimated Projection



Note: Majority are fixed priced

FUTURE ENERGY



	SAIFI	SAIDI	CAIDI	ASAI
Nat'l Ave.	.88	68.98	86.75	.9990
DME	.94	54	57	.9999

**SAIFI = total # of customer interruptions ÷ total # of customers served**

**SAIDI = sum of all customer interruption durations ÷ total # of customers served**

**CAIDI = sum of all customer interruption durations ÷ total # of customer interruptions**

**CAIDI = SAIDI ÷ SAIFI**

**ASAI = Average Service Availability Index (“1” is perfect)**

**DME recently underwent NERC audit for reliability and passed with no violations or open items**

**RELIABILITY**

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# American Public Power Association RP3 Award

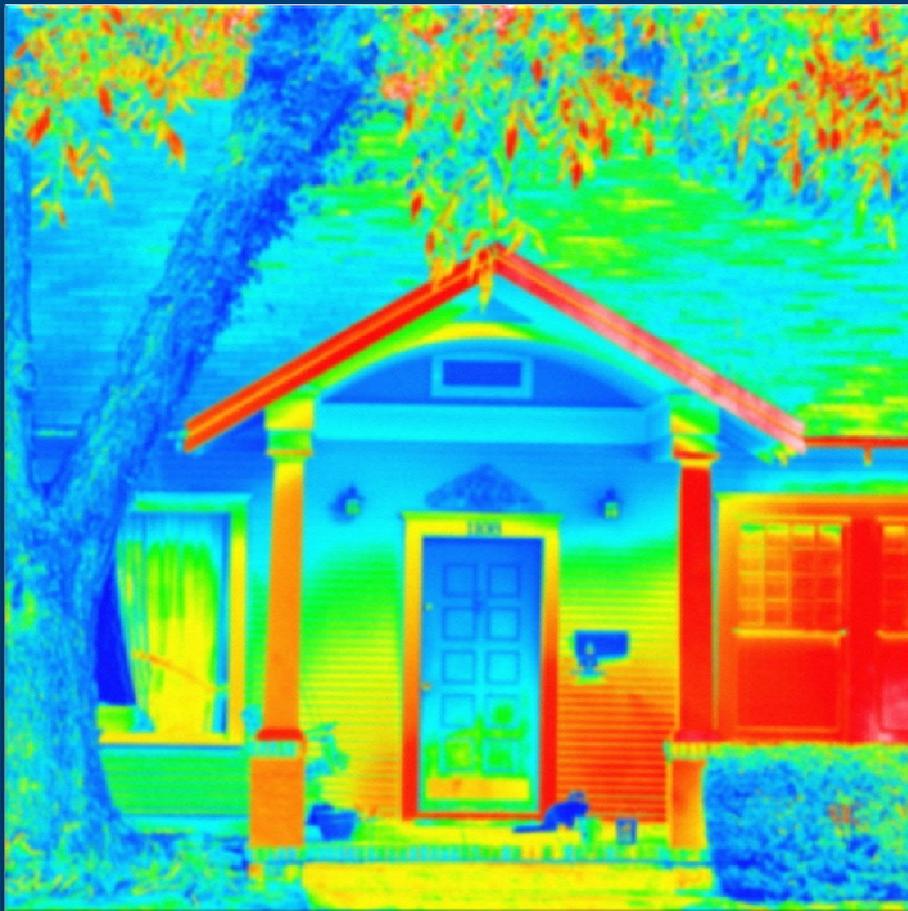
- Recognizes the top 3% of utilities that demonstrate high proficiency in four areas: reliability, safety, work force development and system improvement. Criteria within each of the four RP3 areas are based upon sound business practices and recognized industry best practices. The RP3 Program shines a light on your utility for the excellent service it provides to your customers.
- DME has received the RP3 award three consecutive times since deploying renewable resources

**RELIABILITY**



# GreenSense Program

- Largest solar installation rebate in Texas (up to \$15,000 per installation) – 4 year payback (5 kW @ \$25 to \$40K cost with 30% federal energy efficiency credit)
- Free thermal imaging audits and CFL bulb exchange
- More than \$350,000 in rebates annually
- Average rebate = \$742



**ENERGY EFFICIENCY**

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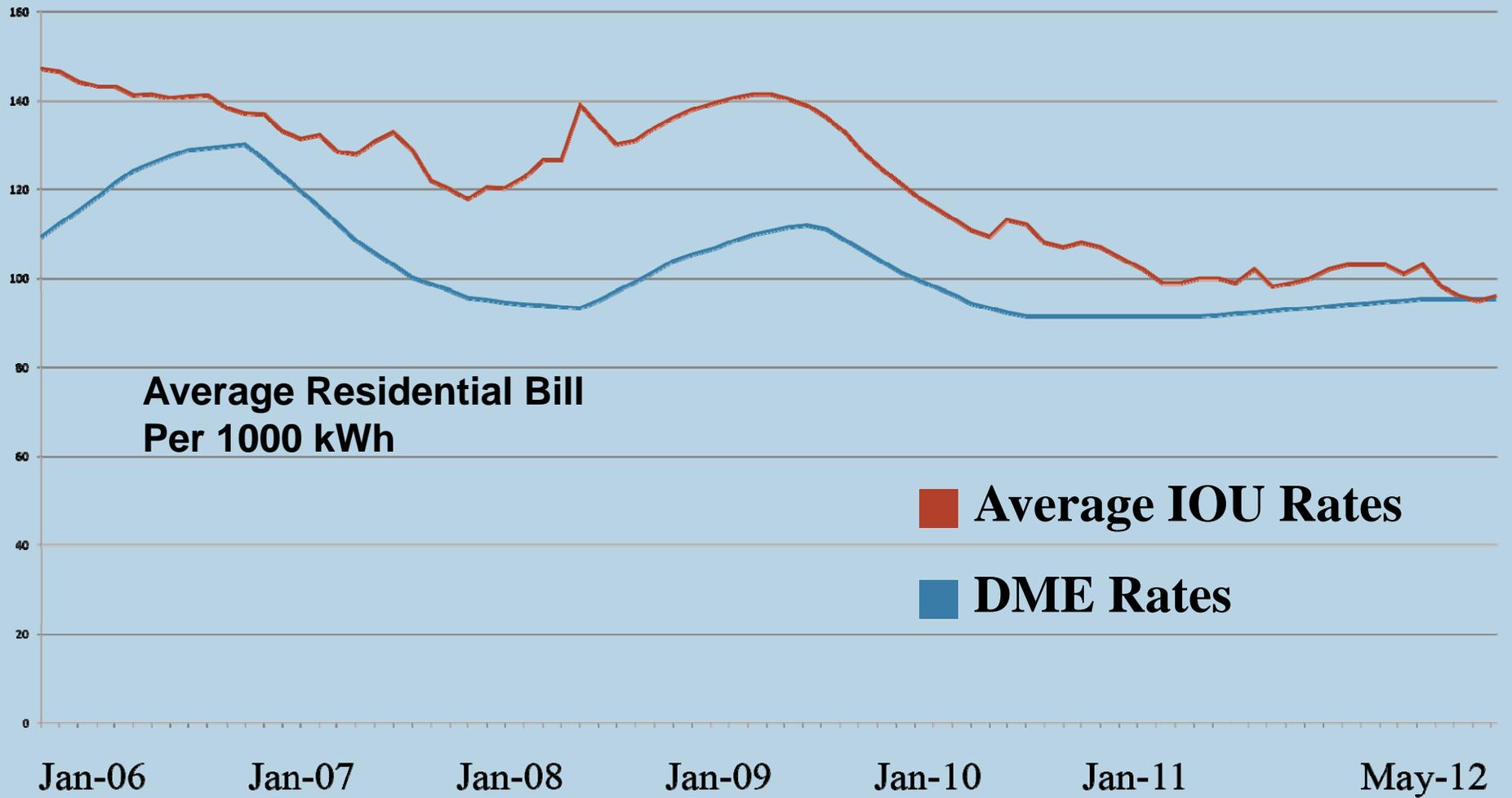


# DME Drives Business Development

- High pressure natural gas pipeline (video)
- Combined Heat & Power (CHP) facility (video)
- CHP-Economic Development District (CHP-EDD) (video)
- Solar Projects (demonstration projects + farm)
- Electric vehicle charging stations
- Fiber optics and Wi-Fi capabilities
- Economic Development Partnership Board => Chamber, City, and business collaborate to drive development
- Ability to set specific tariff rates to attract businesses
- Focus on strategic recruitment

**BUSINESS DEVELOPMENT**





# RATE TRENDS

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*Empowering tomorrow's community today*



# Opportunities for AMI Programs

- **Pre-Paid Metering**
  - **FY 2014 - program implementation**
  - **Mechanism for customers to avoid deposits, late fees, etc.**
  - **25% - 50% bad debt reduction (total bad debt = \$640,000)**
- **Time-of-Use (TOU) Rates**
  - **Shifts load from peak to non-peak**
  - **Encourages conservation through savings**
  - **FY 2015 target date**

**AUTOMATED METERING**



# Key Benefits of Municipally Owned Utilities

## • Local Control

- Low and stable rates (last rate increase was January 2005, then 1995)
- Establish rate tariffs for attracting business
- Input on energy portfolio composition
- High reliability
- Risk mitigation through solid contracting
- Public discussion of utility projects and budgets
- Tax base supported by customer revenues
- Economic / business development focus
- Franchise / Transfer fees
- Public access to utility executives and City officials

**TRANSPARENCY**

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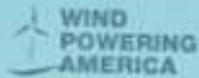
- **DOE Wind Power Award**
- **APPA Reliable Public Power Award (past 3 years)**
- **APPA Community Service Award**
- **USCM 2012 Mayors' Climate Protection Award**
- **EPA Green Power Partner**

## **AWARDS & RECOGNITION**





Denton  
Municipal Electric  
2011  
*Public Power Wind Award*



U.S. DEPARTMENT OF  
**ENERGY**



CPS Energy  
2011  
*Public Power Wind Award*



U.S. DEPARTMENT OF  
**ENERGY**



In the hands of Boulder citizens, the opportunities are

*Limitless!*

**CLOSING**

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