

DME's recent compliance activities

- TRE audited DME beginning May of 2016 through August 26, 2016. The TRE audit concluded with no violations of NERC reliability standards.
- Prior to its 2016 audit, TRE examined DME as part of its Reliability Assurance Initiative (RAI) in April of 2016. DME successfully demonstrated a reduced compliance risk to TRE through its profile, history, and controls. On this basis, TRE reduced the scope of its audit from 82 requirements to 14.
- DME's Transmission Operator certification was re-examined by TRE in March of 2016 with a determination that re-certification was not required.

1

Major blackout events leading to today's compliance environment:

- November 9, 1965, blackout in the northeastern U.S. and Ontario, Can. --30 million people/ ~20,000 MW/13 hours.
- July 13, 1977 - New York City -- 9,000,000 people; 6,000 MW interrupted
- July 2, 1996 - AZ, CA, CO, ID, MN, NE, NV, NM, OR, SD, TX, UT, WA, WY; and parts of Canada and Mexico -- 2,000,000 people/ 11,850 MW

2

- August 10, 1996 – AZ, CA, CO, ID, MN, NE, NV, NM, OR, SD, TX, UT, WA, WY; and parts of Canada and Mexico 7,500,000 customers/28,000 MW
- June 25, 1998 – MN, MT, ND, SD and WI; and parts of Canada - 152,000 customers; 950 MW
- March 18, 2000 – New Mexico – 355,000 customers, 1052 MW

3

August 14, 2003 – the power grid of the United States and Canada experienced the largest blackout ever. – 50 million people/More than 61,800 megawatts (MW) of electrical load lost in parts of Ohio, Michigan, New York, Pennsylvania, New Jersey, Connecticut, Massachusetts, Vermont and the province of Ontario. The cost of the blackout has been estimated to be between 7 and 14 billion dollars.



4

Congress responds

2005 Jurisdictional Expansion

- The National Energy Policy Act of 2005
- FERC gets power to impose mandatory reliability standards on the bulk transmission system.
- NERC applied for and became the ERO under the FERC's authority.

5

The Regulators

• **Federal Energy Regulatory Commission (FERC)** –

- Regulating interstate sales of electricity and natural gas.
- Licenses and inspects private, municipal, and state hydroelectric projects.
- Monitors and investigates energy markets.
- Directs Reliability Enforcement through its Electric Reliability Organization (NERC)
 - Sanctions: Maximum Penalty Amount is \$1,000,000 per day, per violation.

6

- **North American Electric Reliability Corporation (NERC)** – Est. 1968 after the Northeast blackout of 1965. A non-profit corporation created by the electric power industry. In 2007 FERC delegated responsibility to regulate bulk power system owners/operators

- Monitors the bulk power systems.
- Develops and enforces reliability standards.
- Audits electric utility operations for compliance with reliability standards, rules, and procedures.
- Has authority and may impose severe financial penalty for non-compliance.
- Educates trains and certifies industry personnel.

7

- **Texas Reliability Entity (TRE)** – NERC delegated compliance monitoring authority responsible for the Electric Reliability Council of Texas (ERCOT).

- Audits compliance with NERC reliability standards and ERCOT rules.
- Develops regional-specific reliability standards.

NERC REGIONS

8

- **Public Utility Commission of Texas (PUCT)** – regulatory activities applicable to DME:
 - Oversight of market activity through the **Independent Market Monitor**.
 - Enforcement of ERCOT Protocols
 - Oversight and approval of Wholesale Transmission rates
 - Regulating rates and terms of intra-state transmission and distribution service in areas where customer choice has been introduced.
 - Approving and siting of proposals for the construction of new transmission facilities where customer choice has been introduced.

9

- **Electric Reliability Council of Texas (ERCOT)** – manages the flow of electric power to 24 million Texas customers representing approximately 90% of the state's electric load and about 75% of the Texas land area.
 - Coordinates the operation of more than 550 generation units.
 - Coordinates the operation of 46,500 circuit miles of high-voltage transmission.
 - Manages the financial settlement for the competitive wholesale bulk-power market.

10

DME Compliance Activities

- DME— monitors, participates, responds to reliability concerns at national and regional levels.
- DME Compliance monitors the development and change of standards by FERC and NERC.
- DME Transmission operators receive regular specialized training and are required to obtain NERC certifications.
- DME Regulatory Compliance and key staff participate with TRE in the development of compliance procedures and compliance audits.
- DME staff are elected municipal segment voting participants in the ERCOT stakeholder process, including the ERCOT Board of Directors, ERCOT Technical Advisory Committee (TAC), and Protocol Revision Subcommittee (PRS).

11

- DME staff regularly participate in ERCOT groups:

- Reliability and Operations Subcommittee
- Black Start Working Group
- Voltage Profile Working Group
- Operations Training Working Group
- QSE Managers Working Group
- Dynamics Working Group
- Network Data Support Working Group
- Planning Geomagnetic Disturbance Task Force
- Transmission Planning Working Group
- System Protection Working Group
- Steady State Working Group

12

Past:

- DME became subject to mandatory compliance regulations in mid-2007.
- In 2009 DME retooled its compliance program that defines the processes, responsibilities for compliance with the North American Electric Reliability Corporation (NERC) and the Texas Reliability Entity (TRE).
- In 2009 DME established the position of “Compliance Manager” to administer DME’s compliance program.
- DME was certified as a NERC Transmission Operator in December of 2010.
- DME was audited in the 2013 with no findings of violations.