



CCET

Center for the Commercialization of Electric Technologies

Discovery Across Texas

A CCET Smart Grid Demonstration Project
Providing
Technology Solutions for Wind Integration in ERCOT

Presentation to the:
ERCOT Long-Term Study Task Force
by Dr. Milton Holloway
24 September 2010

CCET Overview

- **Texas 501(c)6 non-profit**
- **Formed** with 4 founding members in September 2005
- **Current Membership:**
 - 20 electric and high technology companies (including 4 TDUs, AE, BEC, LCRA, 3 REPs)
 - 5 collaborating universities
- **Mission:**
 - To enhance the safety, reliability, security, and efficiency of the Texas electric transmission and distribution system through research, development and commercialization of emerging technologies



CCET Governing Participants

 <p>AEP TEXAS A unit of American Electric Power</p>	 <p>AUSTIN ENERGY</p>	 <p>CenterPoint Energy</p>
 <p>Direct Energy Simple. Friendly. Direct</p>	 <p>IBM</p>	 <p>ONCOR</p>
 <p>TXU energy</p>		

CCET Affiliate Participants

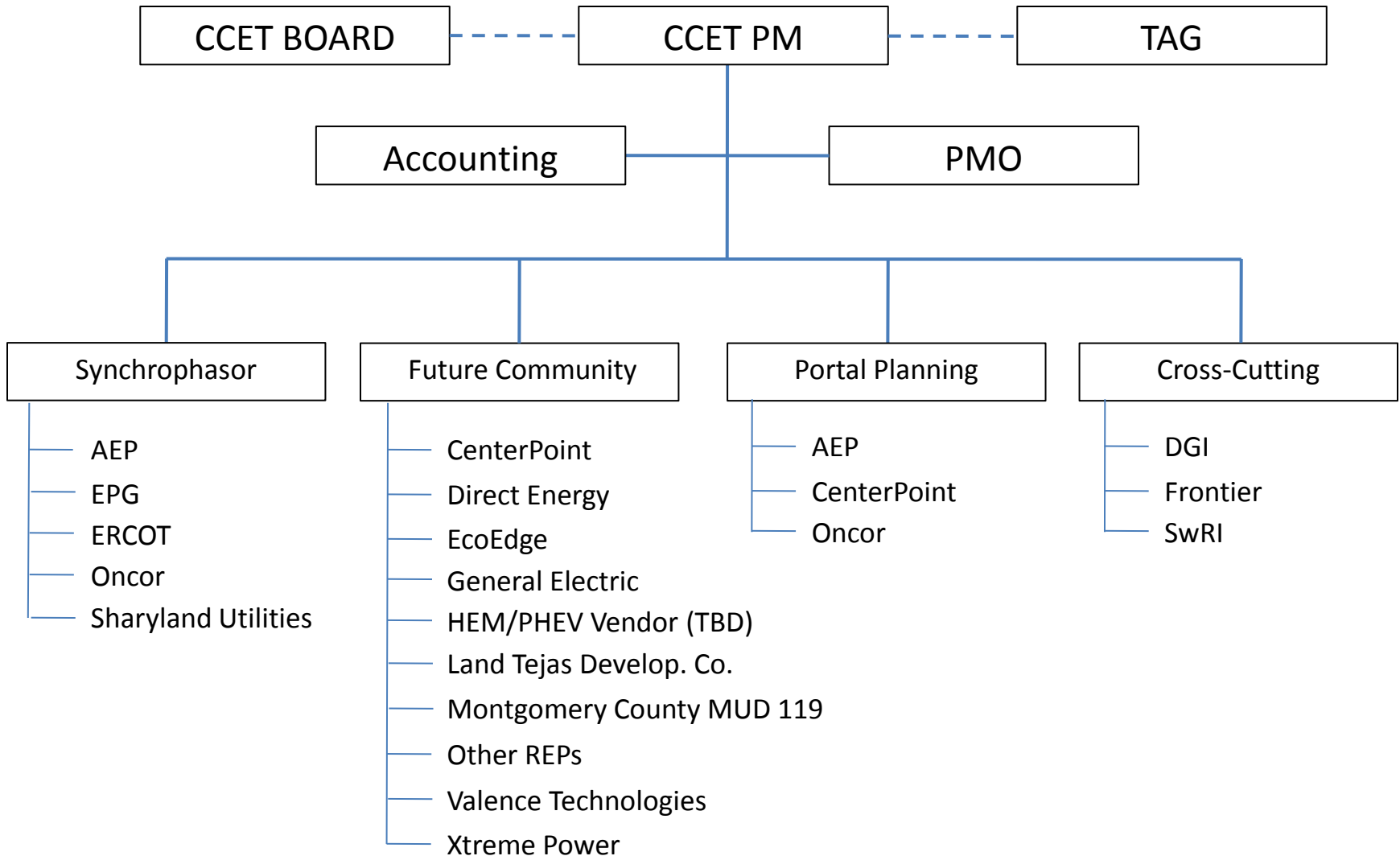
		
		
		
		
		

DOE Smart Grid Demonstration Project

- **Award Date:** 4 January 2010
- **Award Number:** DE-OE-0000194
- **Title:** *Technology Solutions for Wind Integration in ERCOT*
- **Value:** \$27 million total; \$13.5 million DOE
- **Term:** Five-years
- **Team:** 17 companies participating thus far
- **Phases:**
 - Planning and NEPA compliance
 - Design and installation
 - Demonstration and analysis



Project Organization



Project Overview

➤ **Goal:**

- Demonstrate a synergistic approach to managing fluctuations in wind power in the ERCOT transmission grid through better system monitoring capabilities, enhanced operator visualization, and improved load management

➤ **Primary Components:**

- Synchrophasors
- Smart Meter Texas Portal
- Smart Grid Community of the Future