

# RESOURCE ADEQUACY AND WATER

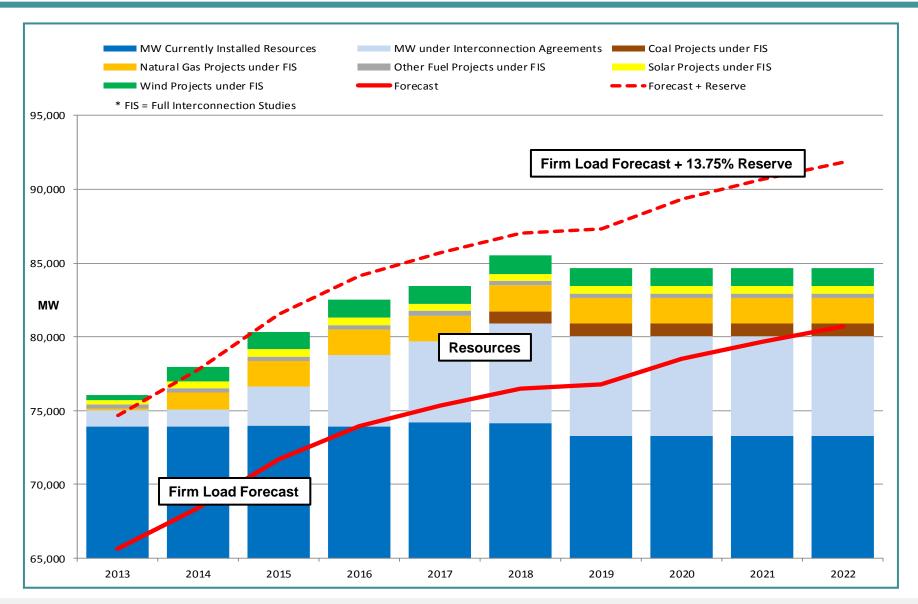
Trip Doggett
President & CEO
ERCOT

House Natural Resources June 28, 2012

#### WHAT TO EXPECT THIS SUMMER

- ERCOT expects tight reserves this summer. There is a significant chance that ERCOT will need to declare an Energy Emergency Alert (EEA) on multiple occasions during the summer of 2012. However, these EEA declarations are not likely to result in the need for rotating outages.
- If a higher-than-normal number of forced generation outages occur during a period of high demand, or if record-breaking weather conditions similar to last summer lead to even higher-than-expected peak demands, the ERCOT system is likely to have insufficient resources available to serve those demands. This insufficiency would result in the need for rotating outages to maintain the integrity of the system as a whole.
- Drought conditions have improved during the winter and spring on many river basins. Reservoir levels are not expected to drop below power plant physical intake limits during summer 2012, but potential risks exist under ongoing drought conditions.

# MAY 2012 CAPACITY, DEMAND AND RESERVES REPORT (CDR)





#### WATER IS A RESOURCE ADEQUACY ISSUE

### **Challenges and Ideas:**

#### Generation

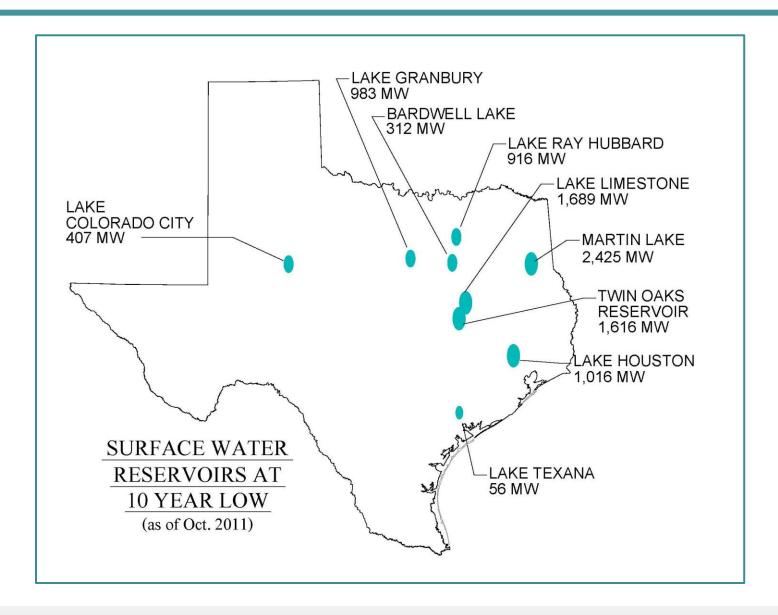
- Water conservation measures
- New technologies
- Ideas to optimize use of existing water supply
- Consideration of back up supply

#### Transmission

- Equipment contamination/flashovers & mitigation
- Emergency coordination
- Wildfire risk



# SURFACE WATER SUPPLIES AT 10-YEAR LOWS (OCT 2011)





# LAKE LEVELS UPDATE - 01 JUNE 2012

Surface Water & (MW)	*Level @ Full Conservation Pool	*Level on Jan 1, 2011	*Level on Oct 7, 2011	*Level on June 01, 2012
Lake Texana (56)	44.50	41.00	32.81	43.00
Bardwell Lake (312)	421.00	420.71	416.23	420.96
Lake Colorado City (407)	2,070.20	2057.33	2052.4	2051.46
Lake Ray Hubbard (916)	435.50	432.37	429.22	434.92
Lake Granbury (983)	693.00	691.90	686.27	691.70
Lake Houston (1016)	41.73	42.10	36.76	41.52
Twin Oaks Reservoir (1616)	400	398.87	398.27	400.32
Lake Limestone (1689)	363	359.03	354	362.15
Martin Lake (2425)	306	300.48	295.06	301.85

<sup>\*</sup> In Feet above Mean Sea Level

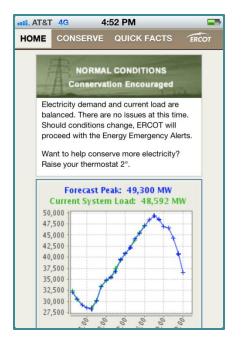


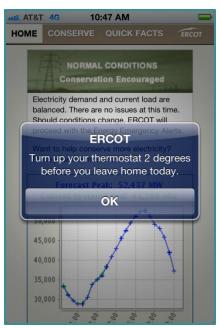
### **ERCOT ACTIONS TO MANAGE DROUGHT IMPACT**

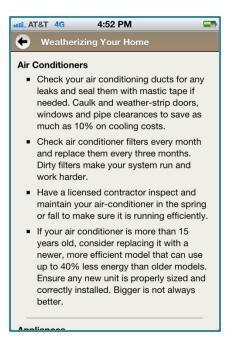
- Survey generation entities in the state and review drought concerns and possible mitigations
- Identify water resources used by electric generation that were at historically low levels
- Review public sources regarding state and regional water plans
- Coordinate plans and activities with TCEQ staff and drought response teams
- Conducted a workshop on 27 February 2012 to share best practices relevant to drought conditions
- Increased communication with water permitting entities, users, and stakeholders
- Provide regular updates on water resources to ERCOT Board of Directors

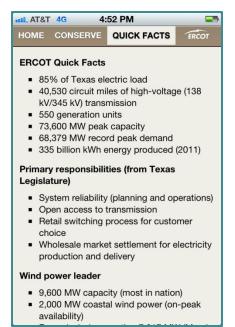


#### **OUTREACH: ERCOT MOBILE APP GIVES REAL TIME GRID UPDATES**









#### **ERCOT Mobile App**

- iPhone and Android Phone users
- · Pop up notifications
- Applications for first release
  - Conservation Spotlight
  - Load Forecast versus Actual graph
  - ERCOT Conservation Tips
  - ERCOT Quick Facts