



**ERCOT Testimony to House
Environmental Regulation Committee,
Chairman Byron Cook**

September 30, 2010

**Trip Doggett
President & CEO**

Peak demand hits all-time high (four times)



63,594 MW Aug. 4
63,830 MW Aug. 10
64,805 MW Aug. 16
65,776 MW - Aug. 23
*Beats previous 2009 record
by ~2,300 MW*

Instantaneous demand hits 66,000 MW,
Aug. 23, 2010 at 3:52 pm.

A year of slashing records

Winter peak demand

- **New record – 55,878 MW (Jan. 8, 2010)**
- **Beats previous 2007 record by ~ 5,500 MW**

Summer peak demand

- **New record – 65,776 MW (Aug. 23, 2010)**
- **Beats previous 2009 record by ~2,300 MW**

Wind output record

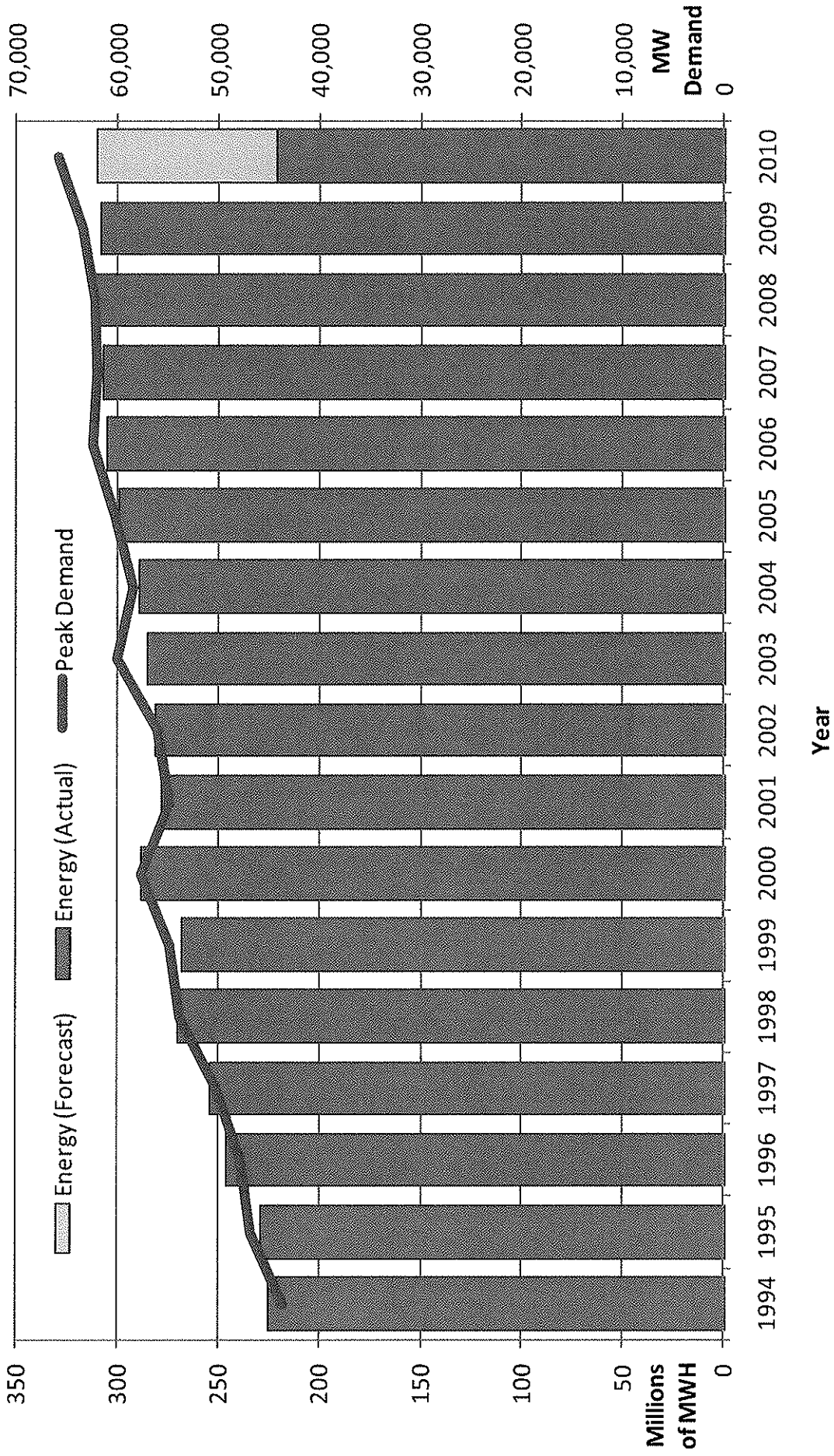
- **New record – 7,016 MW (June 12, 2010)**
- **Beats previous 2009 record by ~800 MW**

Impacts of economy and weather on Load Forecast

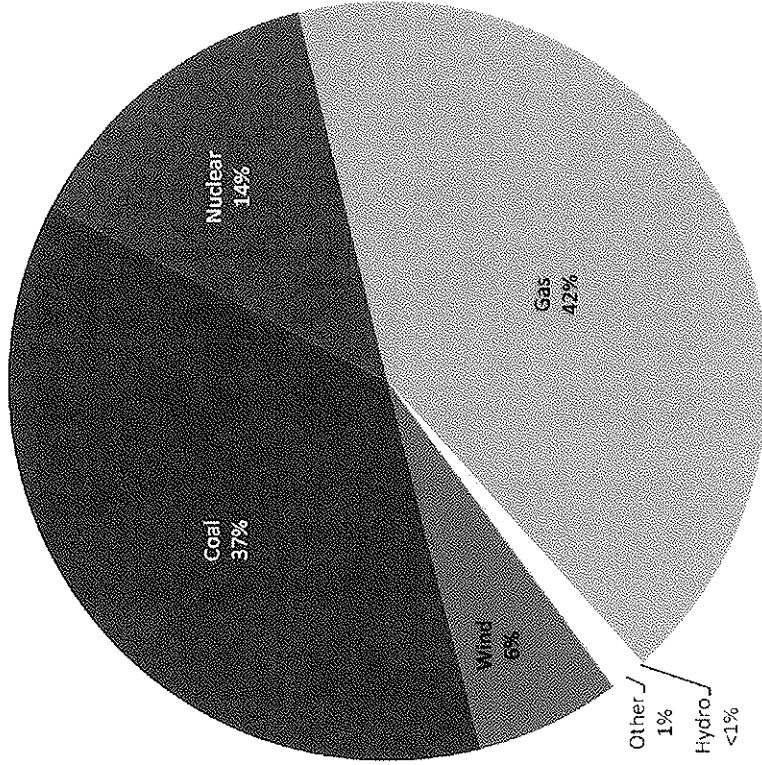
Impact of Economy & Weather on Load Forecast Error*



A history of ERCOT's energy profile (through August 2010)



2009 Energy Actually Produced - by Fuel



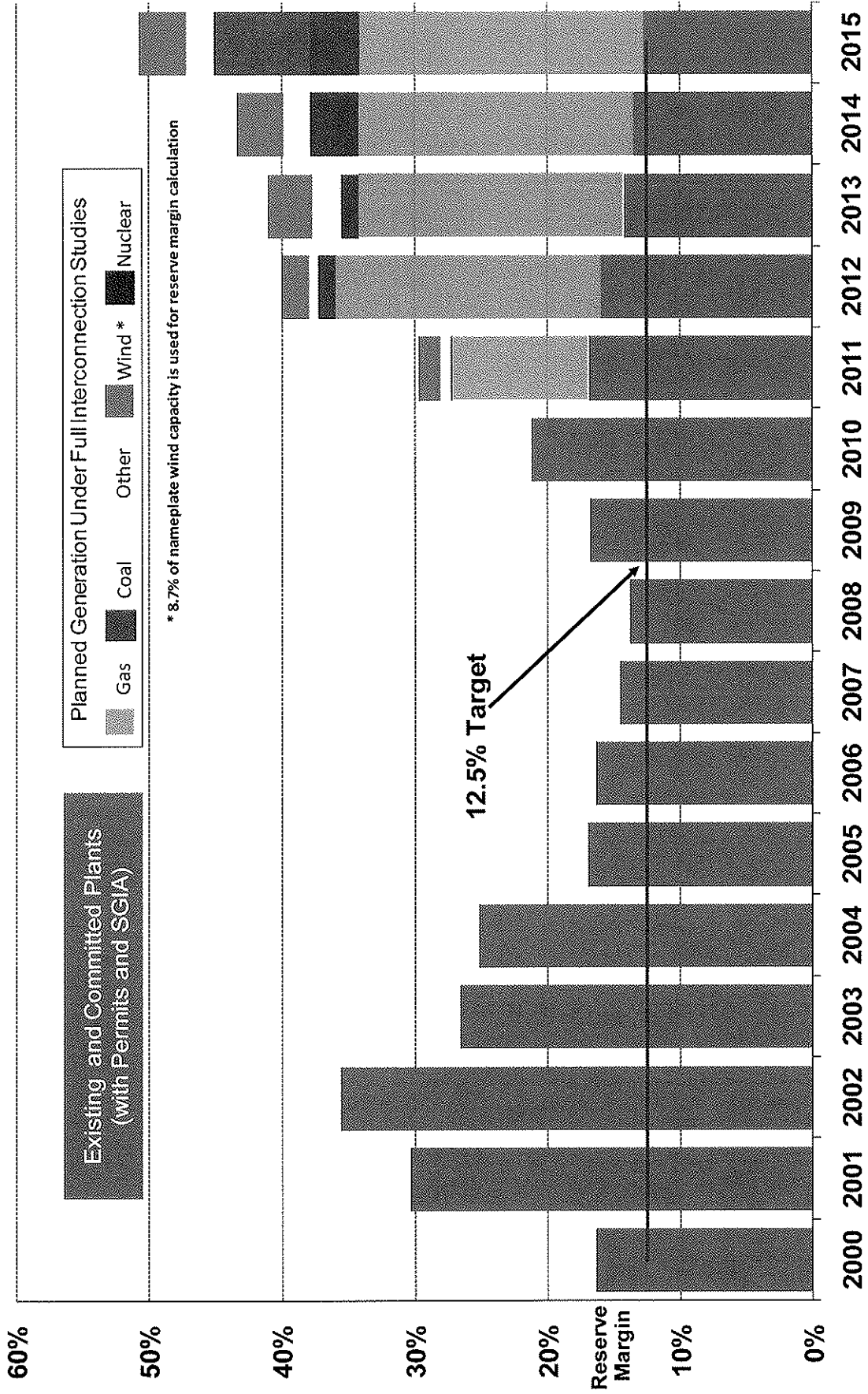
Example – Nuclear:

Nuclear energy produced in 2009 = 41,559,723 MWH

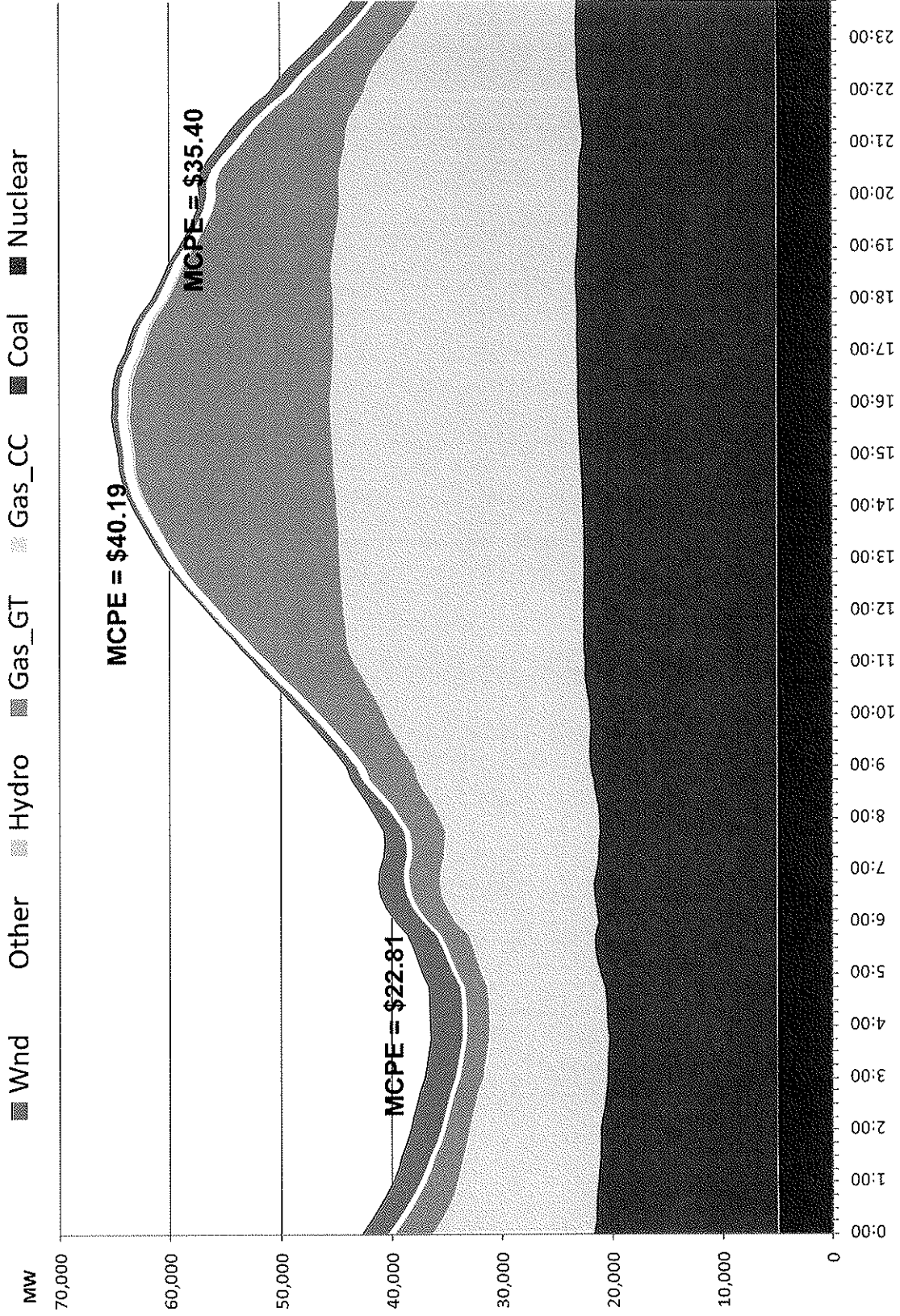
Total energy produced in 2009 = 305,432,222 MWH

$41,559,723 / 305,432,222 = 13.6\%$

Reserve Margins for Years 2000 through 2015



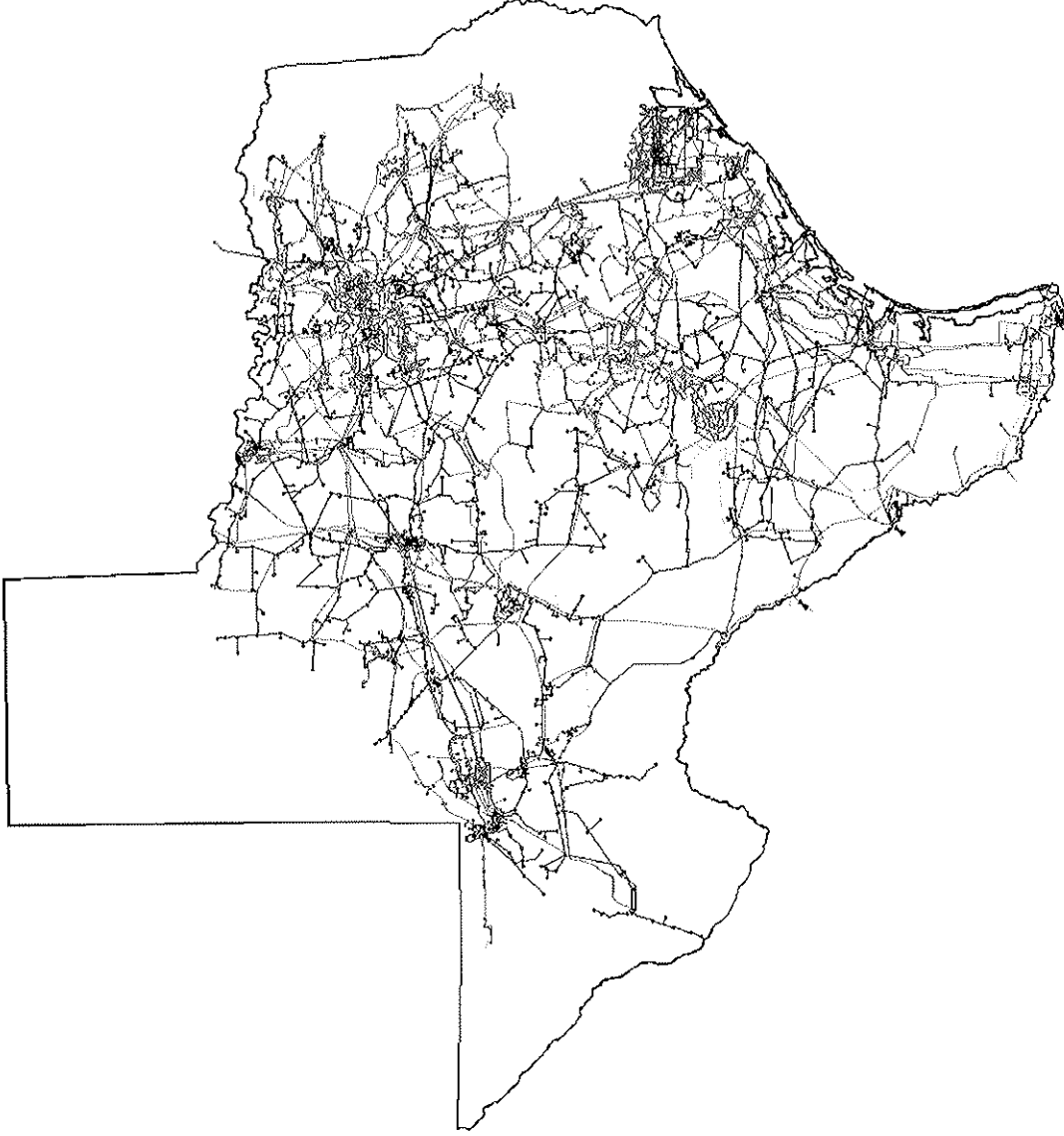
Generation Output by Fuel – Summer Peak Day (August 23, 2010)



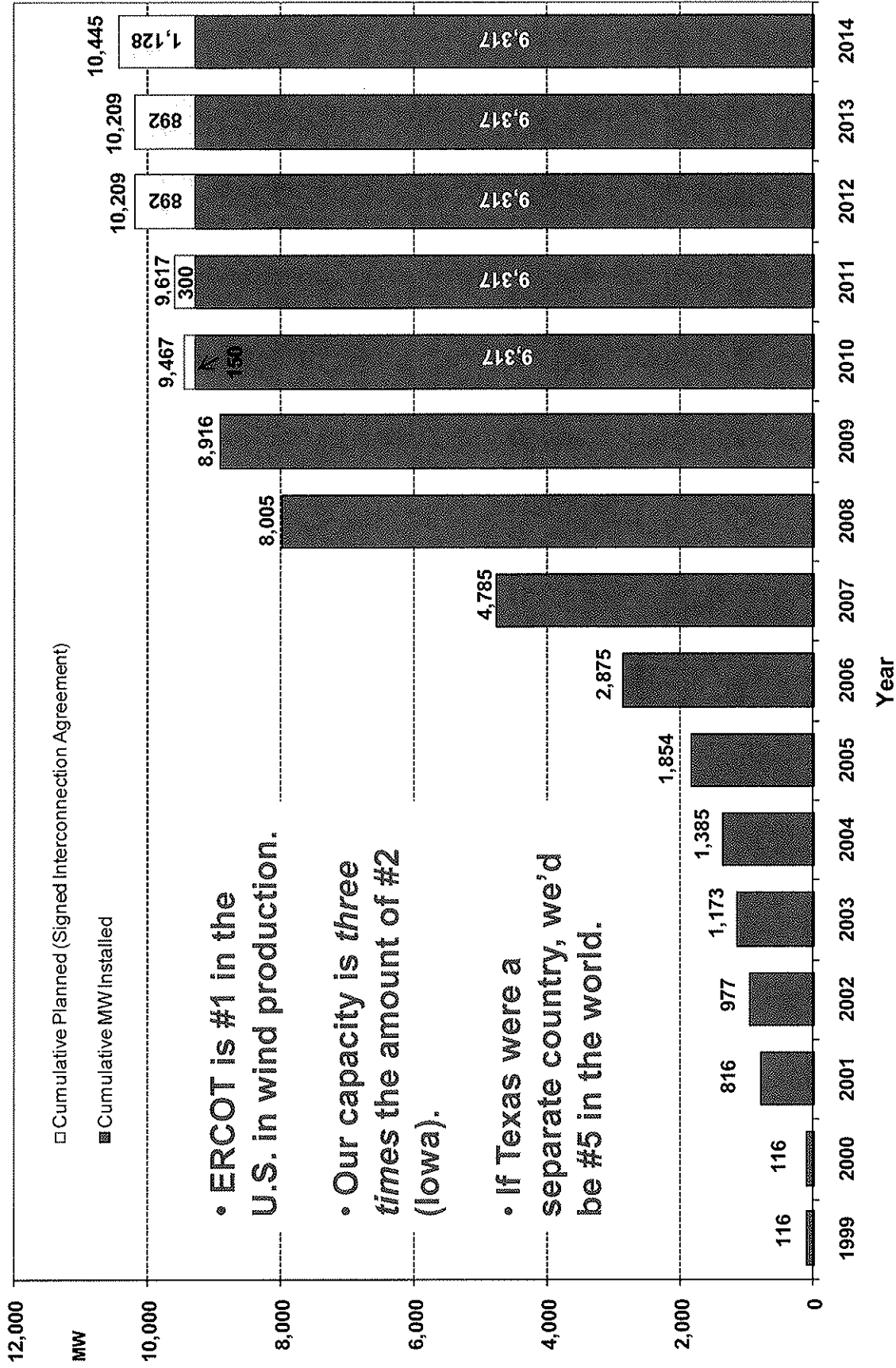
The ERCOT Transmission Grid

There are 40,327 Miles of Transmission Lines in Texas...

- 8,917 Miles of 345kV Lines
- 19,748 Miles of 138kV Lines
- 6,593 circuit miles of transmission built since 1999
- 5,729 circuit miles of transmission under study
- \$4.4 b investment in transmission placed in service since 1999
- \$8.2 b under development (including CREZ transmission)



ERCOT is excelling at integrating variable resources

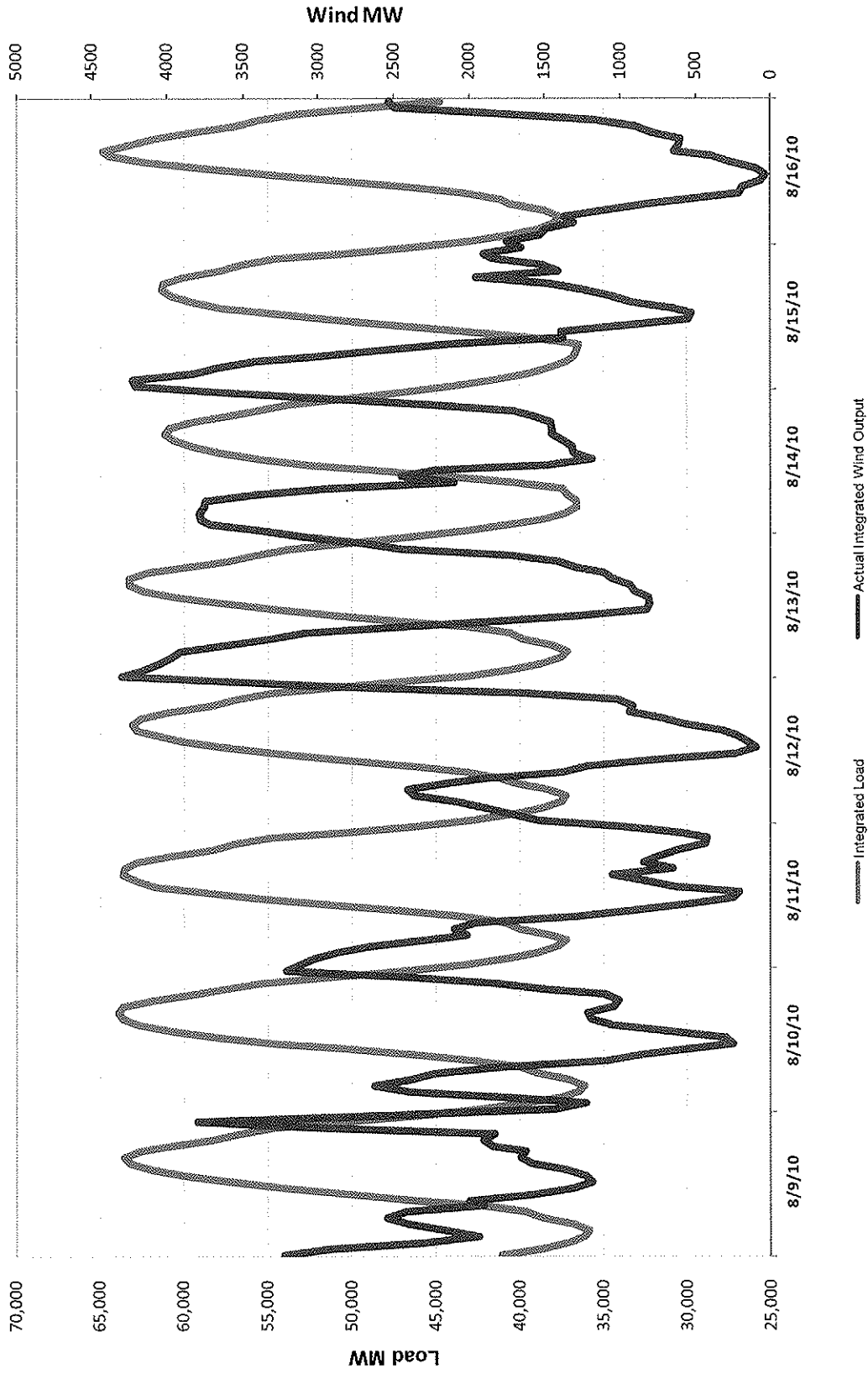


- ERCOT is #1 in the U.S. in wind production.
- Our capacity is *three times* the amount of #2 (Iowa).
- If Texas were a separate country, we'd be #5 in the world.

as of July 31, 2010



Challenge of Following Wind Variability



What will the future look like?

- Market realities are contributing to a tightening of reserve margins over the next few years.
- A significant amount of generation is under study, but continued development of conventional generation is needed to meet load growth and to respond to the variable nature of renewable resources.
- ERCOT will continue to be a world leader in the integration of renewable resources.
- Demand response will be an integral part of meeting Texas' energy needs in the future and will affect ERCOT's load forecasts going forward.
- Nodal will assist in responding to variable generation's steep ramps and will likely influence reserve margins in the out years.