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)

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

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

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

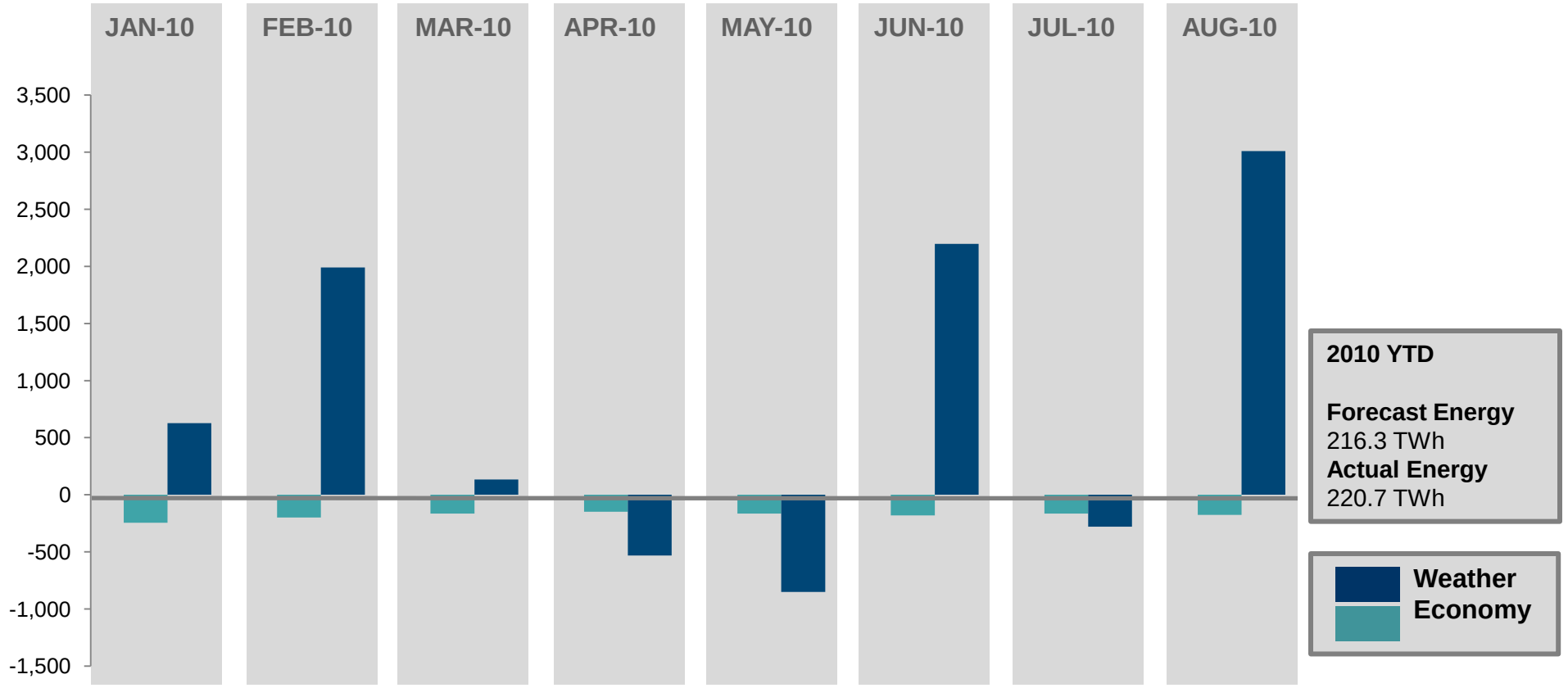
- **New record – 65,776 MW (Aug. 23, 2010)**
- **Beats previous 2009 record by ~2,300 MW**

Wind output record

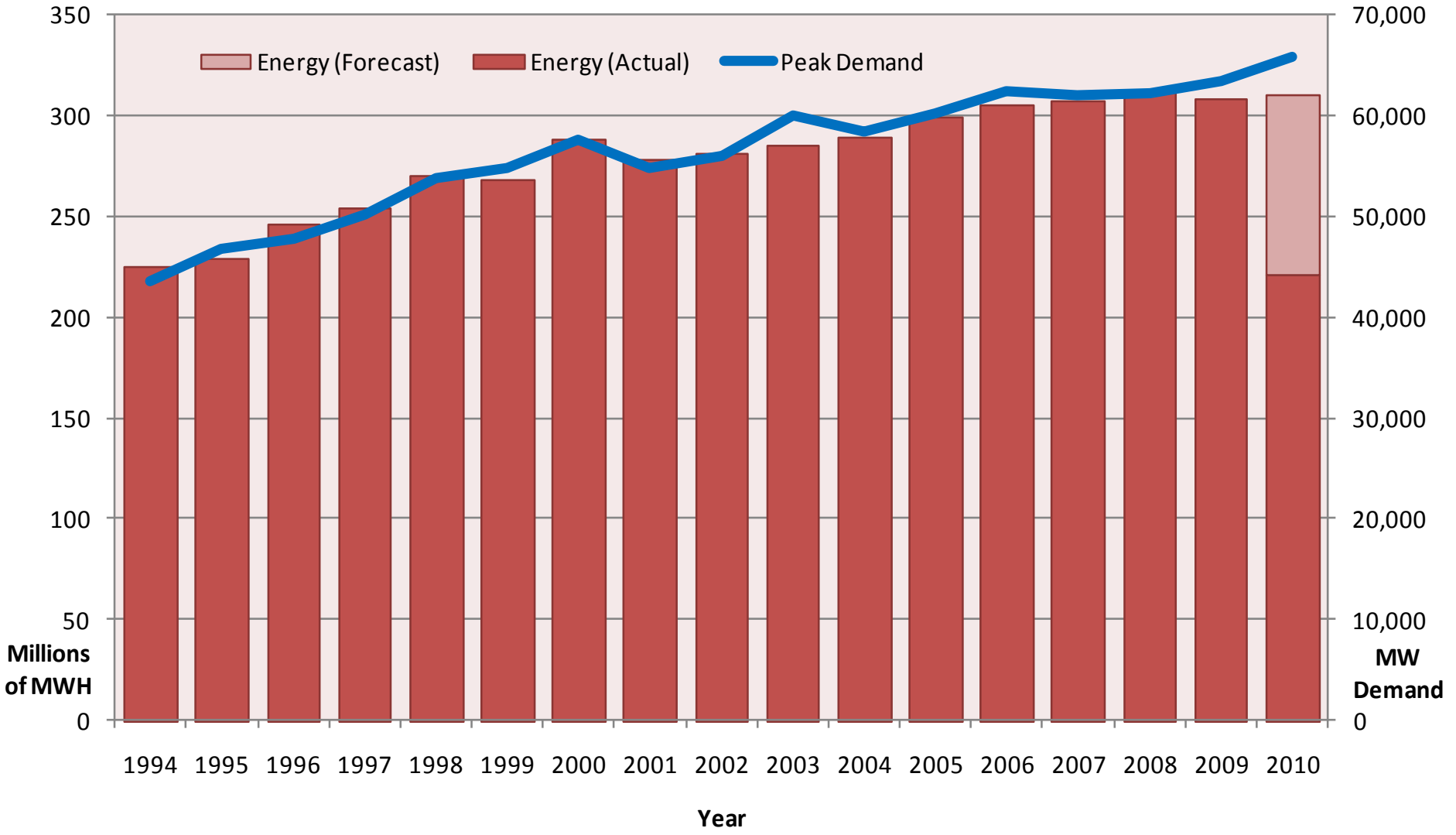
- **New record – 7,016 MW (June 12, 2010)**
- **Beats previous 2009 record by ~800 MW**

Impacts of economy and weather on Load Forecast

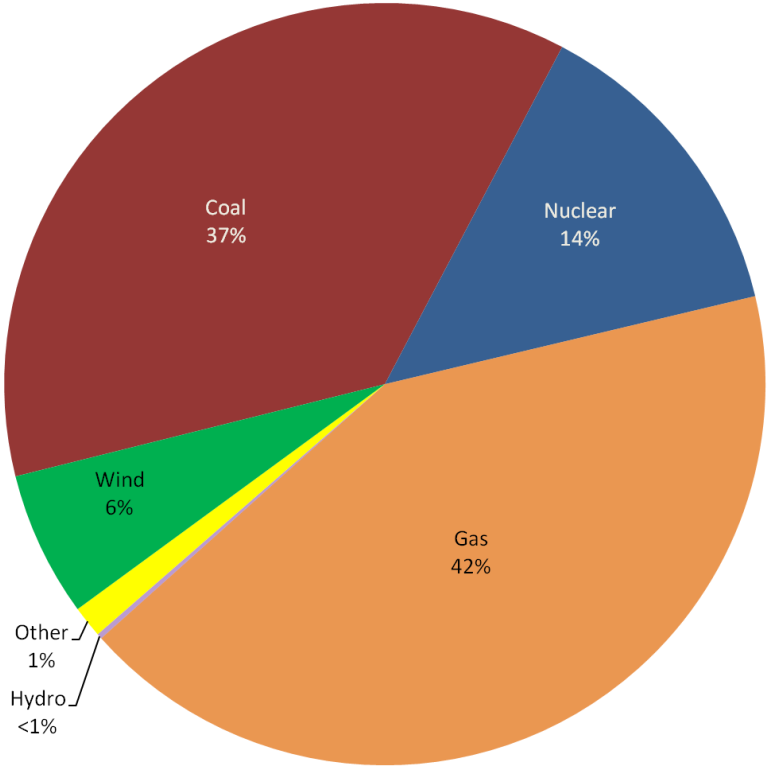
Impact of Economy & Weather on Load Forecast Error*



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



2009 Energy Actually Produced - by Fuel

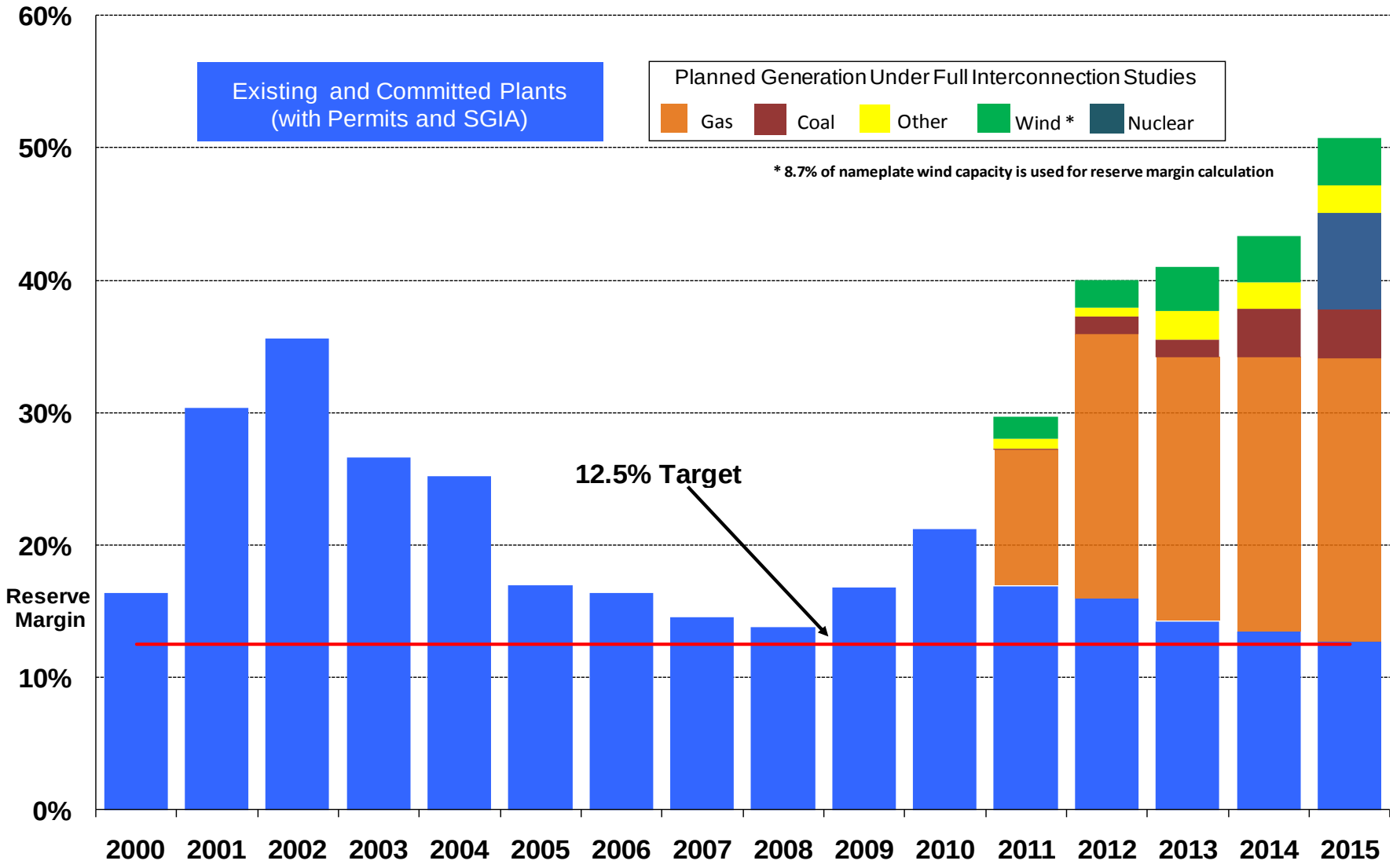


Example – Nuclear:

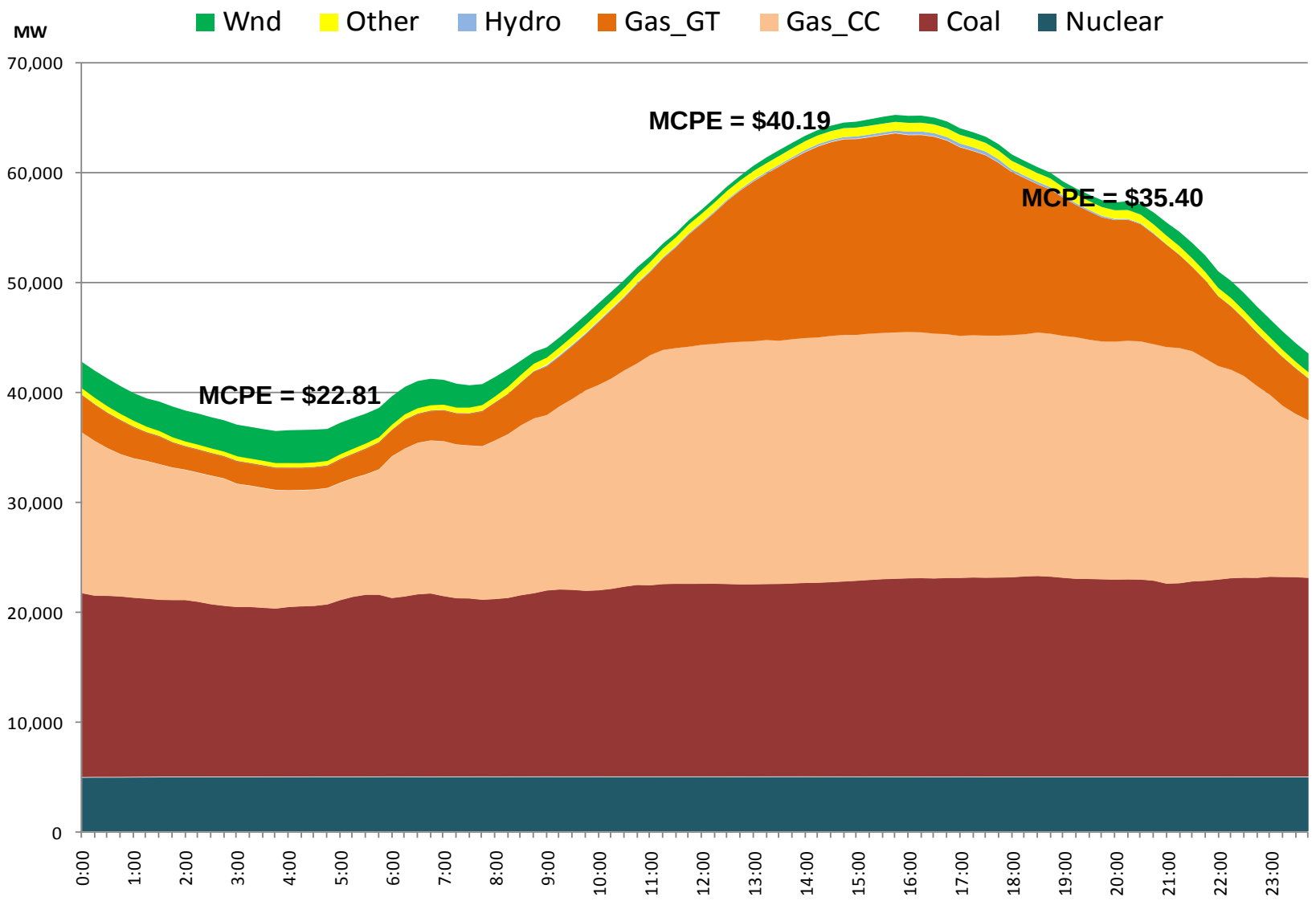
Nuclear energy produced in 2009 = 41,559,723 MWH
Total energy produced in 2009 = 305,432,222 MWH

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

Reserve Margins for Years 2000 through 2015

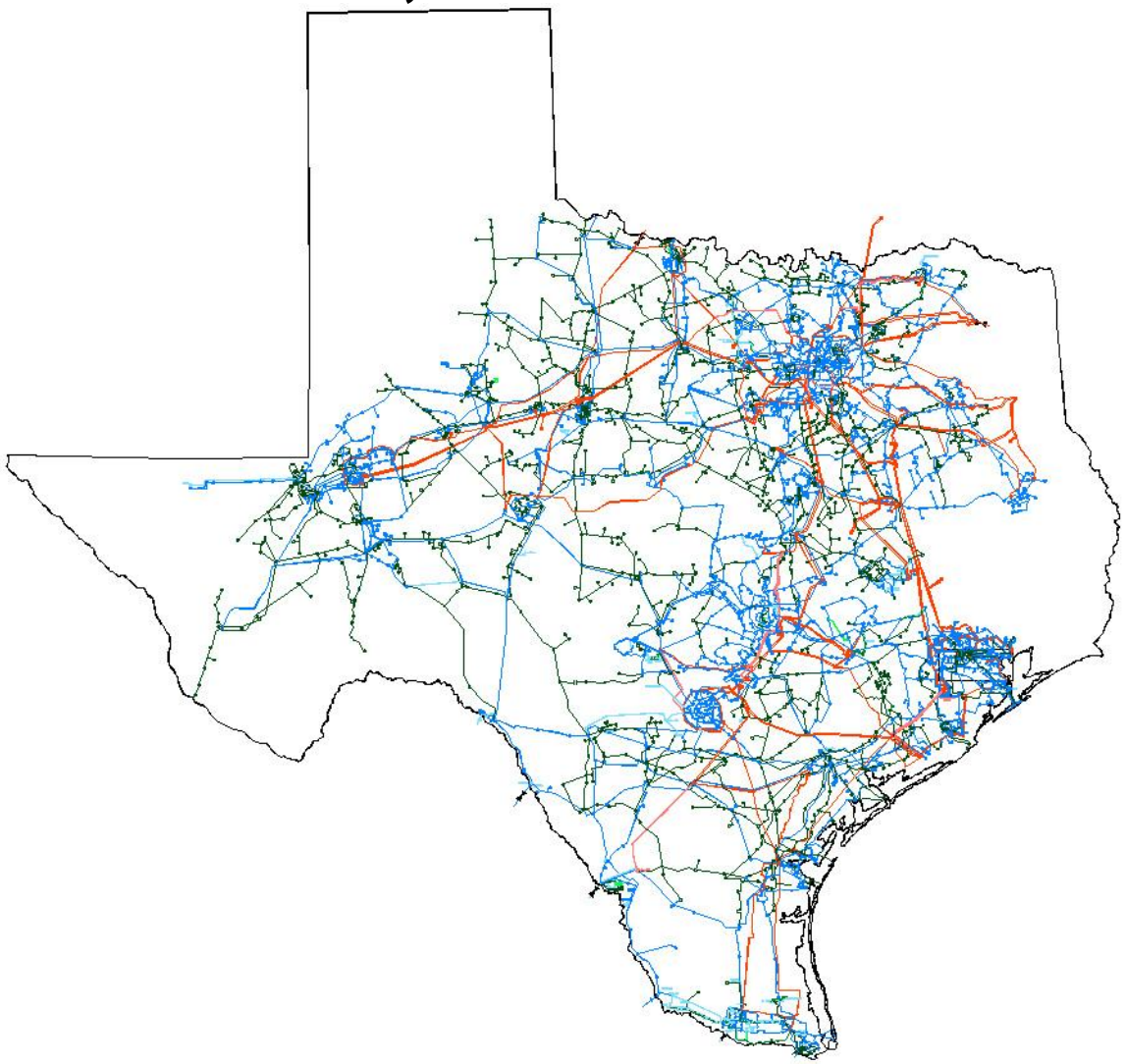


Generation Output by Fuel – Summer Peak Day (August 23, 2010)



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

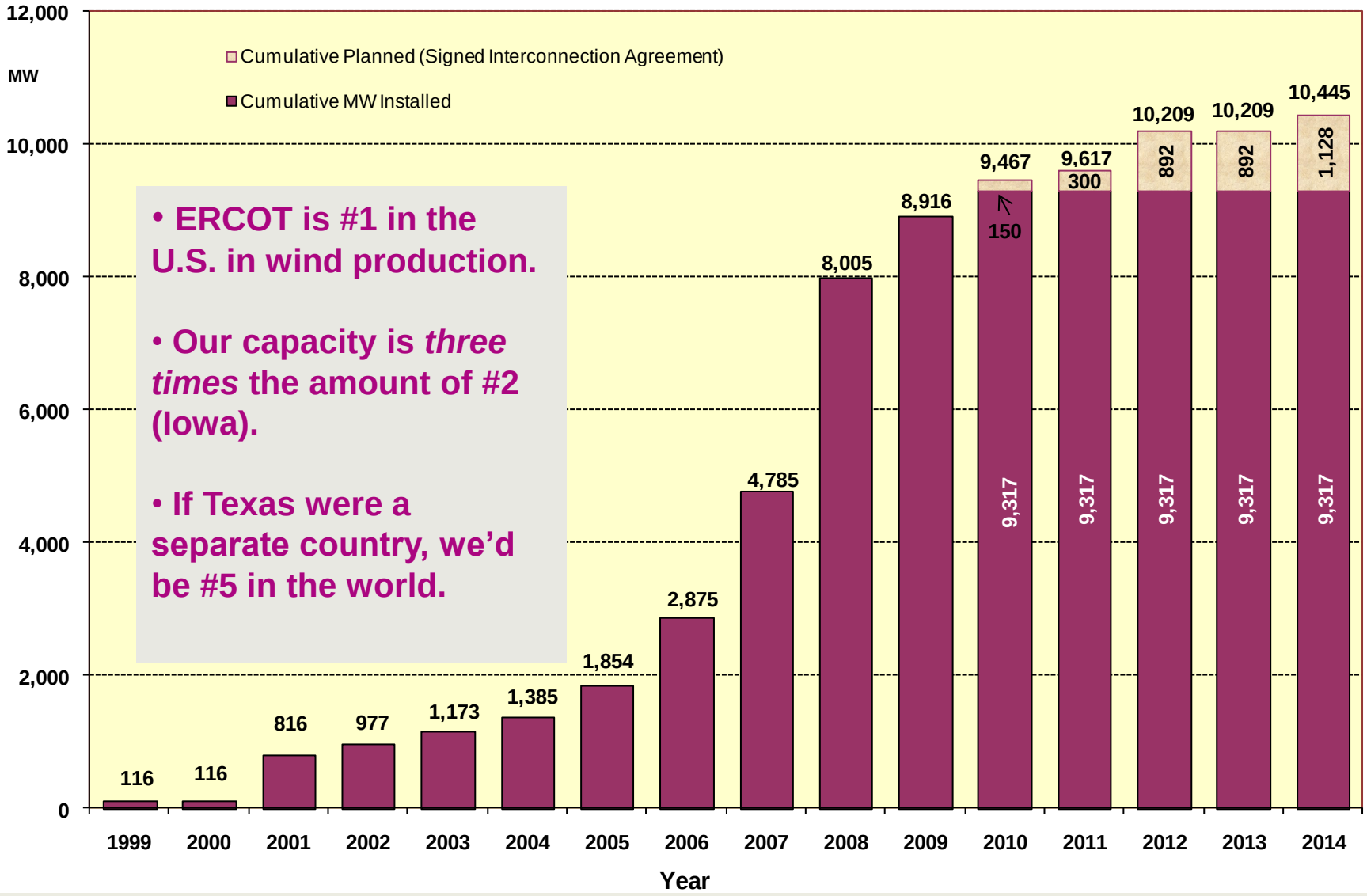
6,593 circuit miles of transmission built since 1999

5,729 circuit miles of transmission under study

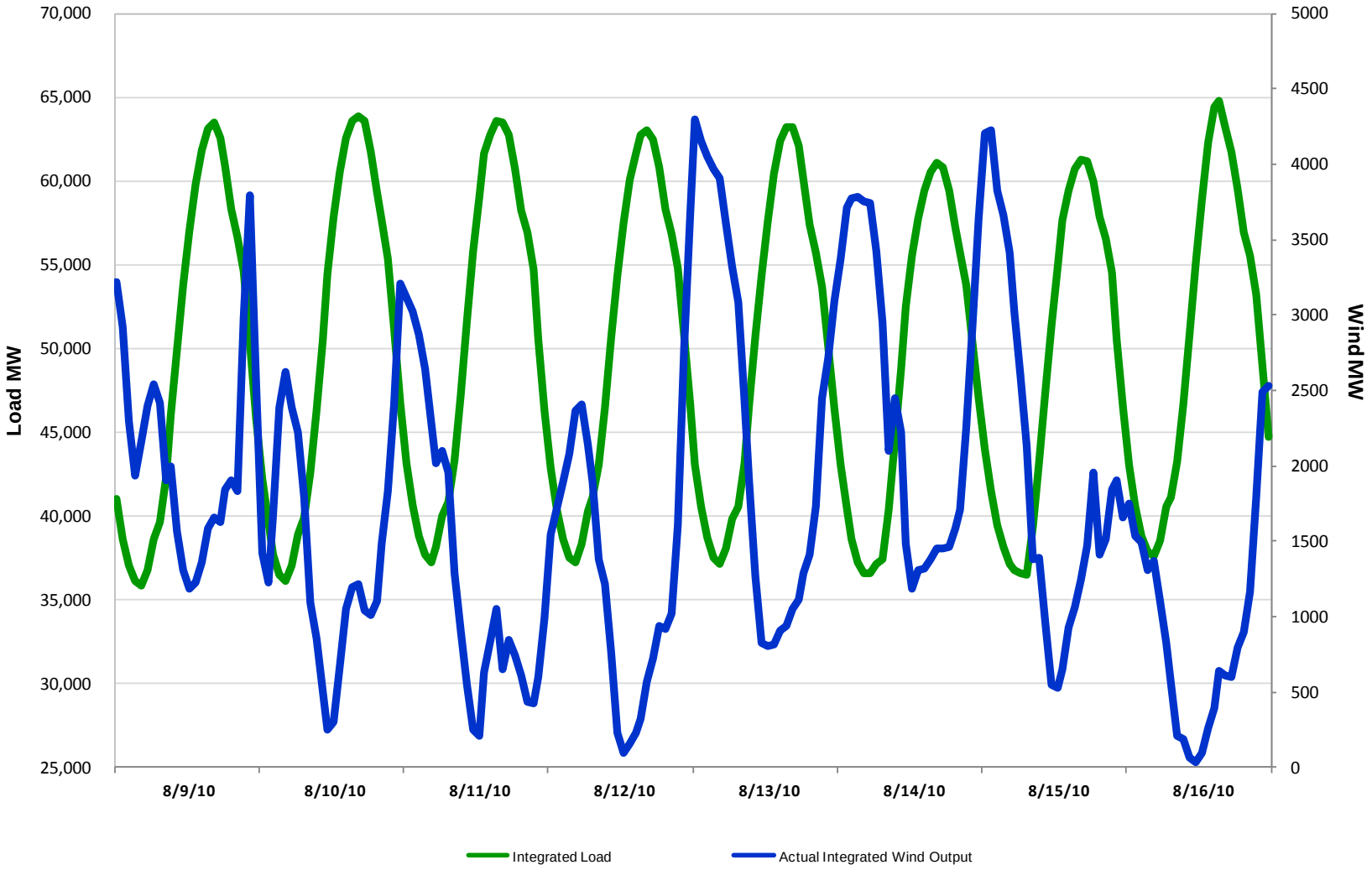
$4.4 b investment in transmission placed in service since 1999

$8.2 b under development (including CREZ transmission)

ERCOT is excelling at integrating variable resources



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.