



FEDERAL ENERGY REGULATORY COMMISSION

Summer 2011 Energy Market and Reliability Assessment

Item No: A-3
May 19, 2011

Mr. Chairman, Commissioners, good morning. We are pleased to present the joint Summer 2011 Energy and Reliability Assessment.

Key Takeaways

- Demand forecasts essentially unchanged;
- Adequate reserve margins;
- Drought conditions expected in Texas and the Southwest;

The key takeaways from today's presentation are as follows:

- Demand forecasts are essentially unchanged when compared to last year;
- Generation reserve margins are projected to be adequate for the summer;
- Drought conditions are expected in Texas and the Southwest, but are not yet projected to affect power generation;

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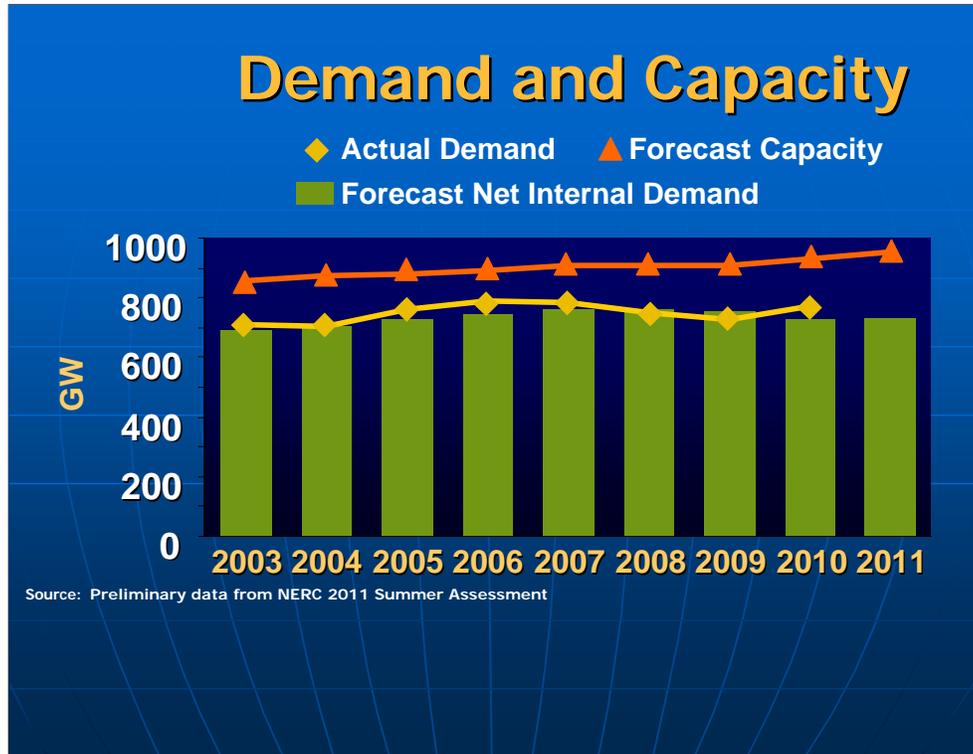
Key Takeaways

[Continued]

- Forward energy prices show movement;
- Abundant Hydro production in the West; and
- Market impacts from new infrastructure.

- While the movements in forward electric prices differed by region, forward gas price movements were more uniform;
- Abundant hydro production will lower electric prices in the West; and, finally,
- New infrastructure will have market impacts.

I now turn it over to David Andrejcek..



Thank you Alan.

Preliminary data from NERC's Summer Assessment indicates that the 2010 U.S. actual non-coincident peak load was 2.7 percent more than the 2010 forecasted load, due to hot weather in some parts of the country. This year, some areas, such as Texas and the Southwest are projecting a small amount of load growth over last year's forecast, while loads in other areas, such as the Pacific Northwest, are projected to decline slightly. Overall, NERC forecasts that the total U.S. load, when weather adjusted, will rise by less than one percent when compared to last year, while the capacity available on peak is projected to rise by three percent.

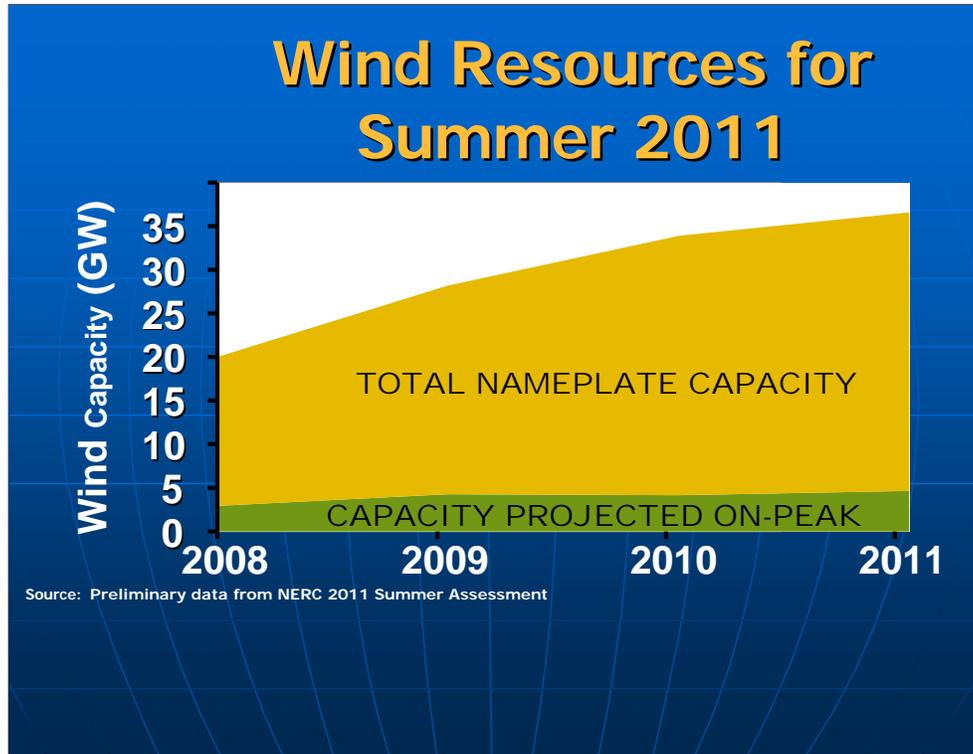
Factors That May Affect Reliability

- Reserve margins projected to be adequate
- Water levels projected to be sufficient in Northwest and Southeast
- Drought begins to affect Texas and the Southwest

Forecasted reserve margins are 14 percent in ERCOT, 24 percent in WECC, 33 percent in FRCC, 25 percent in MAPP, 21 percent in MISO, 19 percent in NPCC, 26 percent in PJM, 21 percent in SPP, and 29 percent for the areas of SERC that are not part of the MISO or PJM RTOs. Target reserve margins vary by region, and NERC is projecting that all regions will meet their reserve margin targets this summer.

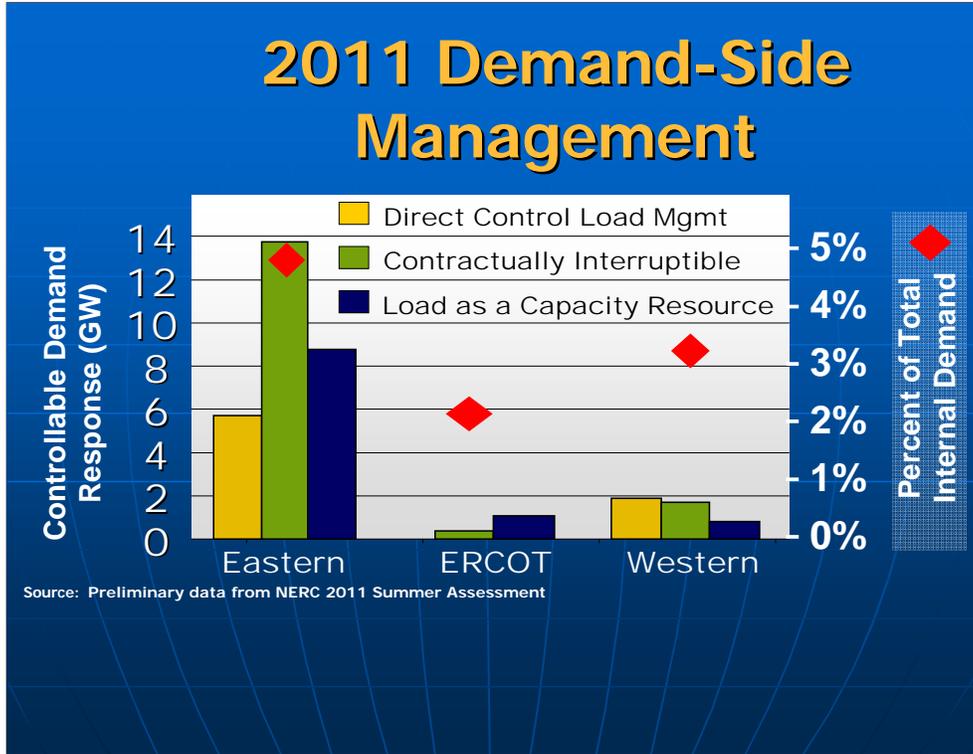
The Southeast has recovered from the 2008 drought, and water conditions are now at or near normal levels. Alan will discuss the Northwest hydro conditions later in the presentation, but in short, runoff from the heavy winter snowfall is expected to support sufficient hydro generation this summer.

In Texas and the Southwest, NERC projects that drought conditions will continue through the summer. Severe droughts rarely affect the reliability of the bulk power system, but in some cases water restrictions can affect generator performance levels. At this time, NERC forecasts that reserve margins will be adequate, and does not expect the drought to significantly affect operations in these areas.



The NERC Summer Assessment reports that the projected summer installed nameplate wind capacity will increase by about 2.6 GW, or 7.8 percent from 2010, for a total nameplate capacity across the nation of approximately 37 GW.

The average on-peak wind capacity for the 2011 summer is forecast to be 13.2 percent of nameplate capacity. The on-peak capacity forecasts reflect the differing wind characteristics across the country, and range from lows of 3.7 percent of nameplate capacity in the Southwest Power Pool and 8.7 percent of nameplate in ERCOT, to a high of 34 percent of nameplate in Mid-Continent Area Power Pool.



NERC projects that demand-side management available to reduce peak load for the 2011 summer will increase by about 13 percent to about 34 GW. This change is primarily driven by increases in demand participation in the PJM and Midwest ISO market areas.

Alan...

Electricity Prices Forwards for Summer Peak Months

Hub	Location	2010 Price	2011 Price	Change
Massachusetts	New England	\$ 49.78	\$ 60.62	22%
New York City	New York	\$ 70.50	\$ 78.22	11%
PJM West	PJM	\$ 55.01	\$ 63.00	15%
Cinergy	Midwest	\$ 42.00	\$ 47.00	12%
Palo Verde	Southwest	\$ 48.43	\$ 44.55	-8%
Mid C	Northwest	\$ 47.08	\$ 31.20	-34%
SP-15	Southern Calif.	\$ 49.72	\$ 47.03	-5%

Source: ICE July-August Strip as of May 1

Thank you, David.

I will now turn to the outlook for electric prices. We look at forward electric prices for the peak summer months of July and August for perspective on how market participants currently view the dynamics affecting seasonal prices. We do not view forward prices as a predictor of actual day ahead prices, but analyzing the trends in the forward prices can help us understand market factors heading into summer.

Compared to summer forward power prices this time last year, 2011 prices are mixed; they are higher in the East and lower in the West. These price changes are reflective of the regional differences in resources and are consistent with the current market fundamentals. More specifically, natural gas is the marginal price setting fuel in much of the country. The forward price of gas is up 17% from last year, as we will discuss, and the rise in the Eastern power prices mirrors the rise in gas prices. As a result, Eastern forward power prices are up by 10 to 18%, compared to last year.

Conversely, prices are down in the West based on the expectation of a substantial amount of hydro generation this summer as I will discuss in a few moments. Hydro production can be the single most important factor influencing power supplies and prices in the Pacific Northwest and, to some extent, the West as a whole.

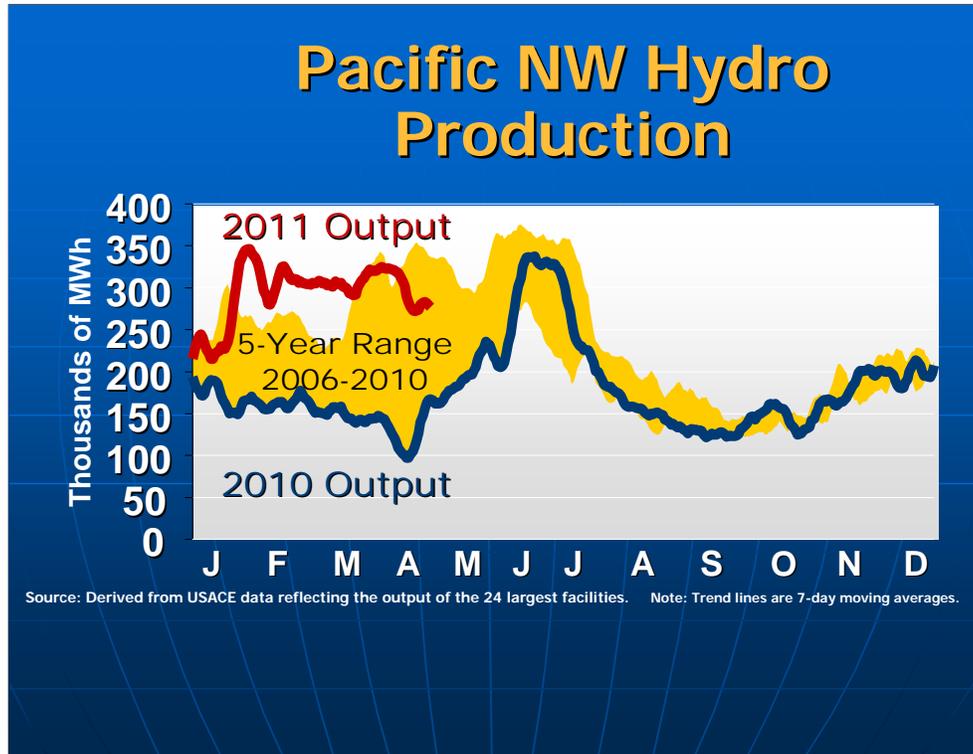
As a perspective on the larger scheme of things, we note that just three years ago forward power prices across the country were more than twice what they are today--all regions over \$100 per MWh and as high as \$175 per MWh in New York City.

Natural Gas Prices Forwards for Summer Peak Months

Hub	Location	2010 Price	2011 Price	Difference
Transco-Z6 NY	New York and New England	\$4.55	\$5.18	\$ 0.63
Tetco M3	PJM	\$4.48	\$5.10	\$ 0.62
TCO	Appalachia	\$4.19	\$4.87	\$ 0.68
Chicago	Midwest	\$4.14	\$4.82	\$ 0.68
SanJuan	Southwest	\$3.90	\$4.51	\$ 0.61
NWP Sumas	Northwest	\$3.95	\$4.34	\$ 0.39
Socal	Southern Calif	\$4.16	\$4.75	\$ 0.59
Henry		\$4.10	\$4.78	\$ 0.68

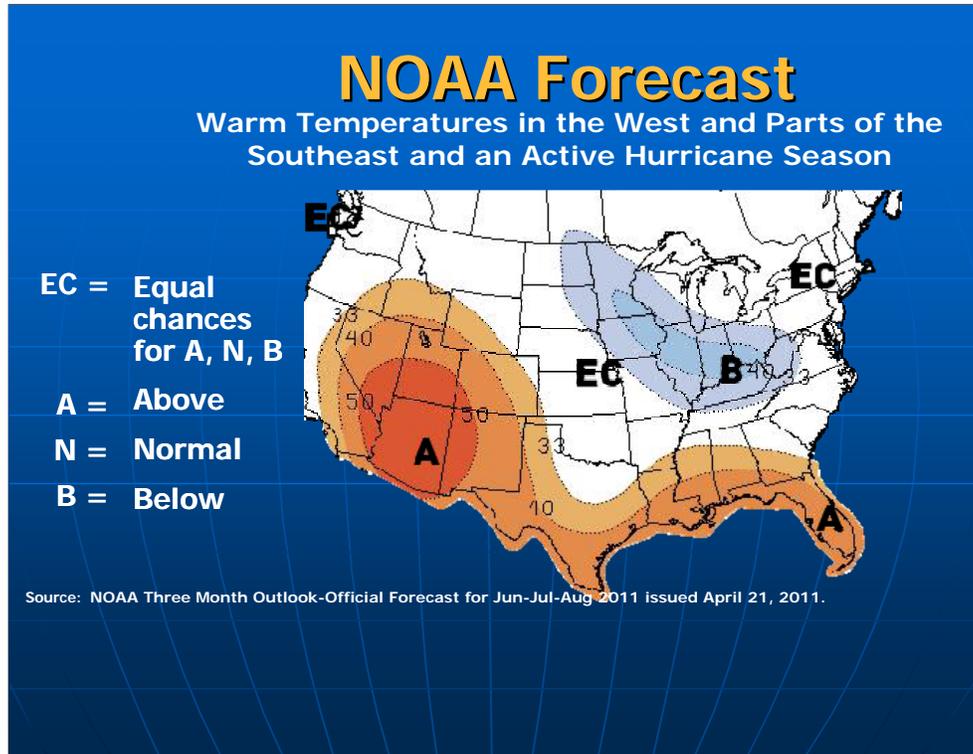
Source: Nymex and Clearport

As of May 1, natural gas forward prices for the major U.S. hubs are about forty to seventy cents higher for this summer than a year ago. Production is at a high level, largely from Marcellus shale, but the increase in production may be just enough to offset growth in underlying demand while storage levels are eight percent lower than last year at this time. A large part of the increased demand is from greater power production. Additionally, particularly recently, we have seen the reemergence of the effects of financial fundamentals in the gas market. In fact, like many commodity markets, these forward prices have fallen about 10% since May 1. Note that the level of change is relatively constant across regions, which reflects the trend toward a more national market. Later I will describe some of the infrastructure enhancements that are contributing to this national market.



Abundant hydro supply has placed downward pressure on prices in the West and is expected to continue doing so through most of the summer. Average snowpack in the Pacific Northwest and British Columbia were as much as 151 percent of normal as of April 28. Forecasts for runoff this spring and summer call for flows on the Columbia River at The Dalles Dam at 123% of normal. Increased hydroelectric production generally reduces the need for natural gas-fired generation in the Pacific Northwest and California.

California's snowpack levels were over 171% of normal as of April 28. California routinely relies on imports from outside the state, including the Northwest, during the summer. More plentiful internal hydropower will tend to decrease the need for imports from the Northwest, all else being equal. Still, the availability of low cost supply from the Northwest can be expected to cause congestion on the Pacific AC and the Pacific DC Interties, though the effect should be limited in California due to the relatively robust internal supplies.



The National Oceanic and Atmospheric Administration is calling for a warm summer from the Rockies westward and in the southwest and much of the southeast. A pocket of below normal temperatures is forecasted for the Ohio Valley and parts of the Midwest.

Forecasters are predicting an active hurricane season once again as early estimates range from 15-16 storms and 8-9 hurricanes. Last year, as predicted, was a very active one, but no hurricanes made U.S. landfall as most of the storms remained in the Atlantic and there was a negligible effect on oil and gas operations in the Gulf of Mexico. Overall, the risk to U.S. natural gas supply of a Gulf hurricane continues to decline as the share of production from onshore basins--out of the range of hurricanes--has more than doubled since Hurricanes Katrina and Rita in 2005.

One result of an active hurricane forecast is that NOAA is predicting above average rainfall for the East Coast from Florida to Delaware. Below normal precipitation is expected this summer for the Pacific Northwest.

Market Highlights

- Infrastructure Additions are Expected to Add Electric and Gas Deliverability;
 - TrAIL Project-in PJM;
 - Florida Gas Pipeline-Expansion into Florida;
 - Ruby Pipeline-Rockies to West Coast.
- First Energy Ohio Territory is Joining PJM.

Lastly, we will be tracking a number of infrastructure and market changes that could impact the energy markets this summer.

In PJM the **Trans Allegheny Interstate Line**, better known as the TrAIL project, is due to come on line by June 1 to help alleviate congestion between the western and eastern parts of PJM. Cited in 2006 by PJM as needed to maintain reliable service in parts of Virginia, Maryland, Pennsylvania, and West Virginia, this 218 mile 500 kV line was developed through the RTO's Regional Transmission Expansion Plan process. This new line, in addition to enhancing reliability, is expected to lower congestion costs in the BGE, Pepco, and Dominion zones and other parts of PJM's eastern footprint.

On the gas side, **Florida Gas Transmission** placed into service on April 1 a 483 mile expansion starting in Alabama and transversing the length of Florida. This new pipeline will add 820 MMcf/d of gas transmission capacity into Florida, a 35% increase. The new capacity is expected to reduce price spikes, particularly those associated with power generation during high electric demand. Power generation accounts for 85% of gas consumed in the state.

Another Gas Transmission project of note is **El Paso's Ruby Pipeline**. After some construction delays, this new pipeline connecting the Rockies gas fields at Opal with gas systems serving the west coast near the Oregon-California border is expected to be in operation by July 1. This 42-inch, 675-mile pipeline will have an initial capacity of 1.5 Bcf/d. The utilization of this new pipeline going forward will be affected by other recent infrastructure and market developments that have created a competitive national market.

Also of market monitoring interest this summer is the integration of the Ohio portion of **FirstEnergy** into PJM beginning on June 1. This realignment will move the border between MISO and PJM where flows are coordinated between the two RTOs. As this active transmission region shifts from one market to the other, we will be watching for impacts on congestion costs and effects on prices in the west-to-east corridor.



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This concludes our presentation. We would like to express appreciation to the many members of the Offices of Reliability and Enforcement who contributed to the preparation of the Summer Assessment.

We will be glad to take any questions you may have.

Thank you.