Global View of the Energy Markets

USA Opportunities, Barriers and Challenges

Dr. Sharon Brown-Hruska
National Economic Research Associates

Tulane Engineering Forum, New Orleans, LA
April 20, 2018
Acknowledgements

- Thanks to Tulane Engineering School
  - Louis Sanz and John McGaha

- I’d also like to thank:
  - Professor James McFarland, Executive Director, and my colleagues at the Tulane Energy Institute
  - Eric Smith, Associate Director

- AB Freeman School Masters Program in Business Analytics
  - The one-year Master of Business Analytics program
  - Will give students the skills to transform large, complex data sets into the clear information managers need to make business decisions.
Developments in the Policy Environment
Global Markets for Energy are Robust and Healthy

- The expansion of the global energy market relies upon a robust infrastructure
- Government subsidization of renewables and the abundance of natural gas impacts the cost of electricity
- The shuttering of coal and nuclear plants impacts reliability
- A renewed emphasis on implementing a long term strategy will put the US on firmer footing.
 The economics of fuel diversity supports and strengthens economic stability and sustainability

 Efforts to maintain US energy dominance in key areas of production and development supports and strengthens energy security

 We must support education to keep our edge in educating and innovating for the future.
The ISO/RTO “FTR” markets continue to grow both through new geographies and organically.

Note: The volume is based on awarded obligation volume on both source and sink locations.

Source: Nodal Exchange
US Power Futures Traded Volumes Down Slightly YoY

**US Monthly Power Futures Traded Volume - Industry Down 10% over past year -**

- Jan-Aug 2016
  - Nodal Exchange: 9,737,455
  - ICE: 156,614,010
  - NYMEX: 3,074,526,213
  - NFX: 566,139,173

- Jan-Aug 2017
  - Nodal Exchange: 90,495,470
  - ICE: 124,517,029
  - NYMEX: 2,570,264,768
  - NFX: 656,385,890

Source: Nodal Exchange
But Power Futures Show Robust Competition Among Exchanges

US Monthly Power Futures Open Interest
- Industry Down 7% over past year -

MWh

Aug 31 2016

- 445,660,559

- 1,169,879,005

Aug 31 2017

- 476,723,937

- 988,064,399

Source: Nodal Exchange
Natural Gas Prices Have Been Relatively Range-bound Recently

Natural Gas Spot and Futures Prices (NYMEX)

Source: U.S. Energy Information Administration
Natural Gas Futures Volumes Remain Impressive

Source: Bloomberg, LP
Dynamism and the Policy Environment

- Energy markets continue to grow in size, importance, and dynamism.

- Which brings me to developments in the policy, regulatory, and litigation arenas that may affect energy market dynamism.

Next Up: The Policy Environment
Grid Parity – “sometimes called socket parity…exists when an alternative energy source generates electricity at a cost matching the price of power from the electric grid. As grid parity becomes increasingly common, renewable energy could transform our world and slow the effects of climate change.”

Contact Us

Dr. Sharon Brown-Hruska
Managing Director
NERA—Washington, D.C.
+1 202 466 9222
sharon.brown.hruska@nera.com