Framing the Issues: Natural Gas and Electric System Interdependencies

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JISEA Annual Meeting – April 5, 2018
Conventional wisdom

At least in the near term, the U.S. natural and electric industries are and will continue to be highly interdependent:

- The electric industry will become even more dependent upon natural gas than it has been in the past
Generating capacity additions by fuel type (2005-2050) (EIA AEO 2018)
Electric generation by fuel (1990-2050) (EIA AEO 2018)

- Natural gas
- Coal
- Renewables
- Nuclear

EIA generation data
Conventional wisdom

At least in the near term, the U.S. natural gas and electric industry are and will continue to be highly interdependent:

- The electric industry will become even more dependent upon natural gas than it has been in the past

- The natural gas industry will rely on power sector demand for a growing and important share of its market for some years to come
Natural gas: Estimated consumption by sector (EIA AEO 2018)

Natural gas consumption by sector
trillion cubic feet

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<tr>
<th>Year</th>
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- Electric power
- Industrial
- Transportation
- Commercial
- Residential

This figure does not show the increasing role of LNG exports as part of the industry's market outlook.

https://www.eia.gov/outlooks/aeo/
Panelists on gas/electric issues

- Arnie Quinn (Federal Energy Regulatory Commission)
- Thomas Coleman (North American Electric Reliability Corp)
- Greg Stark (National Renewable Energy Lab/JISEA)