U.S. Electricity Sales: In Need of a Jumpstart

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The construction industry is readily adopting “green” building standards and materials. Attractive federal tax incentives, updated building codes and declining costs will continue to promote the construction of energy efficient buildings across all sectors.

Technology that enables customers to control how they consume and generate their energy is quickly evolving. Distributed generation (DG) stole the show across the entire electric utility industry in 2013, and many industry analysts feel that last year was merely the opening act.

Fueled by federal and state incentives and declining costs, DG will continue to gain market share. Solar is certainly the leading DG technology today, but natural gas has the potential to become another primary fuel for DG.

Recent breakthroughs in battery-storage technology promise to greatly improve the economics of DG for users. A number of companies are reportedly on the verge of commercializing some very cost-effective battery technologies that could revolutionize the use of DG.

Moving forward, the combination of changing customer preferences, growing energy efficiency, and advancements in DG and battery technology will likely continue to drive a wedge between growth in electricity sales and real GDP growth.

Flat load growth, greater energy efficiency and advances in distributed generation technology are propelling the evolution of the traditional utility business model. Electric utilities will probably see more change over the next 10 years than they did over the previous 100 years.

Over the next 3 to 5 years, electric utilities will have fewer captive customers, so their business models should evolve to become more customer-centric.

Key Points:

- U.S. total electricity demand has “decoupled” from the pace of overall economic activity. It’s not clear, however, whether this break represents a transitory or permanent shift.
- The decoupling of growth in electricity sales from real GDP growth coincides with accelerated adoption rates of energy efficiency across all end-use sectors.
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- Fueled by federal and state incentives and declining costs, DG will continue to gain market share. Solar is certainly the leading DG technology today, but natural gas has the potential to become another primary fuel for DG.
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- Moving forward, the combination of changing customer preferences, growing energy efficiency, and advancements in DG and battery technology will likely continue to drive a wedge between growth in electricity sales and real GDP growth.
- Flat load growth, greater energy efficiency and advances in distributed generation technology are propelling the evolution of the traditional utility business model. Electric utilities will probably see more change over the next 10 years than they did over the previous 100 years.
- Over the next 3 to 5 years, electric utilities will have fewer captive customers, so their business models should evolve to become more customer-centric.