

ELECTRIC TRANSMISSION WEEK

Volume 16 Issue 37 **Monday, September 18, 2017**

New study debunks transmission myths that deter grid modernization

by [Andrew Coffman Smith](#)

Misconceptions and outdated thinking about high-voltage transmission are muddling decision-making, according to a new white paper that seeks to debunk the myths that are undermining needed upgrades and expansions of the power grid. Released Sept. 12 by WIRES, an association of publicly owned entities favoring investment in the electric transmission grid, the report by London Economics International identified 16 of the most prevalent preconceptions

and misunderstandings impeding transmission projects.

Kathleen Shea, WIRES president and president of transmission for Eversource Energy, and James Hoecker, WIRES' counsel and former FERC chairman, said in the paper's forward that many in the industry wrongly believe that, for instance, lower demand for electricity means upgrades and expansions of the power grid are not needed, and further, that the benefits and responsibil-

ity for improvements to facilities or systems are limited to the service territory, state or region in which those facilities are located.

"These 'myths' can often inflict a significant cost on investors in transmission and on customers because they contribute to protracted project delays and discount the importance of the flexibility and resilience that a robust grid provides," said Shea and Hoecker. Instead, the report asserted, North America will become more dependent on

Continued on p 8

In this Issue

[Click on headline to advance to story](#)

Calif. lawmaker signals punt on Western grid, 100% clean energy bills

DOE announces \$50M for microgrid, cybersecurity research

DOE hits 2020 target for solar costs, turns focus to grid reliability

ISO New England scrutinizes growing natural gas reliance in draft system plan

Entergy Mississippi spending \$16.6M to upgrade aging infrastructure

PJM, CAISO detail load changes during solar eclipse

Ariz. regulators authorize Salt River to build 230-kV power line

Utilities set expectations for restoration after Irma

by [Colby Bermel](#)

Electric utilities in Florida and Georgia are working to restore power after Hurricane Irma tore through their states and are attempting to set expectations that rebuilding infrastructure in hardest-hit areas will be a drawn-out process.

"It's not going to be as pretty as we would like," Florida Power & Light Co. President and

CEO Eric Silagy said Sept. 12 of his utility's efforts. "In the months to come, we'll come back and we'll rebuild it to the strength and the smart grid equipment that we like to have on our system."

FPL on Sept. 11 alone brought back power to 2.3 million accounts, utility spokesman Rob Gould said, with over 5 million outages

Continued on p 7

After Irma, FPL says grid investments 'absolutely' worth it

by [Colby Bermel](#)

Florida Power & Light Co.'s CEO said Sept. 11 that damage from Hurricane Irma would have been a lot worse were it not for billions of dollars spent on storm-hardening measures over the past decade.

The storm will also prove a test of Georgia Power Co.'s infrastructure, with the utility announcing Sept. 11 that over 748,000 of its customers were without power as Irma entered the Peach State, leaving Florida behind. The Southern Co. subsidiary added that it was prepared to respond with about 3,400 Georgia Power personnel and outside workers.

Although nearly 70% of FPL's 4.9 million customers were without power after Irma, President and CEO Eric Silagy argued that the NextEra Energy Inc. subsidiary's nearly \$3 billion in grid investments since 2006 were "absolutely" worth it.

"With this kind of storm, what I can tell you is we would be facing a much longer restoration," he said at a Sept. 11 news conference. "When you're rebuilding, everything is measured in weeks versus restoring, which is measured in days. It might be multiple days, but if we were replacing tens of thousands of

New study debunks myths *continued*

electricity as sales of electric vehicles grow, construction of energy-intensive data centers accelerates and the use of electricity for home heating spreads.

Demand growth to continue

As a result, the reliability and resiliency of the grid will become more critical, the authors asserted. That contradicts the assumption that transmission is built solely to meet current peak demand and future electricity demand growth is likely to slow or flatten thanks to a low population growth and energy efficiency improvements.

The report also seeks to debunk the claim that transmission upgrades and expansions are not needed, as retiring power plants will “make room” for new generation in the same location.

“New power plants are not always built in the same locations as retiring power plants,” countered the report. “For example, new wind plants are typically far from urban load areas or located where the grid is already at its performance limit. As a result, capacity freed up by retired power plants may not be utilized by new generation, without additional transmission infrastructure.”

In ISO New England, for example, more than 4,200 MW of generation, or 15% of the region’s capacity, are expected to shut down between 2012 and 2020, with another 8,800 MW of coal, nuclear and oil capacity at risk of retirement in the coming years. Most of these retiring units are in central and southern New England. Natural gas pipeline capacity constraints and limited access to gas in many parts of the region limit the potential locations for the new gas-fired plants that are expected to fill the void. In addition, new wind farms, mostly located in northern Maine, require new power lines to interconnect with the New England grid.

The long-term view

The authors also sought to counter the notions that the grid is incapable of adapting to a more distributed generation mix, that energy storage and demand response are substitutes for transmission, and that transmission projects are costly undertakings with few benefits for utilities and large upfront costs that are immediately passed onto consumers.

Ultimately, grid planning is too shortsighted and too focused on short-term costs, rather than long-term benefits, the researchers said.

“Not only is transmission a long-lived asset, its required siting, permitting and construction time frames are also lengthy,” said the study. “Investors need to project drivers for transmission investment many years into the future, so that when the transmission development project is finally completed and energized, it will be the right size, and in the right place. For example, the timing of many nuclear license expirations (for the 2030s and early 2040s) seems far into the future right now; but a transmission development process that begins in 2018 and takes 10-15 years to complete will result in a project that will serve the market for many years after those nuclear plants retire.”

[Industry Document: A Wires Report - The Truth about the Need for Electric Transmission Investment: Sixteen Myths Debunked](#)

[Industry Document: Wires Study Debunks Myths around Transmission Investment](#)

[Read this article on SNL web.](#)

NEWSLETTER RESEND: If you do not receive your newsletter, call our Subscriptions Department at +1.434.977.5877.

©2017 by S&P Global Market Intelligence, a subsidiary of S&P Global Inc. All rights reserved. No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P Global Market Intelligence or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an “as is” basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT’S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P Global Market Intelligence’s opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Global Market Intelligence assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P Global Market Intelligence does not act as a fiduciary or an investment advisor except where registered as such. While S&P Global Market Intelligence has obtained information from sources it believes to be reliable, S&P Global Market Intelligence does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P’s public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees