



ENVIRONMENT / OPINION

Gordon Van Welie, do your job

LNG makes pipeline expansion unnecessary

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THE US ENERGY Information Administration is a federal agency that "collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding of energy [policy]." According to the agency's data, the six New England states consumed a total of 889 billion cubic feet (bcf) of natural gas in 2013. The data also show that New England's natural gas inflow capacity is currently 1,709 bcf/yr, exclusive of the region's three liquefied natural gas (LNG) import facilities, which in the past have contributed additional capacity of up to 150 bcf/yr. So why, despite a natural gas inflow capacity that is nearly twice the region's annual demand, does Gordon Van Welie, the CEO of the region's power grid operator ISO New England, persist in his claim that we must expand our gas pipeline infrastructure to keep electricity prices down and avoid the threat of rolling blackouts in the future?

Recent data on winter price spikes in electricity have shown that, during a handful of days per year, there are episodes where regional demand for natural gas causes prices for gas on the spot market to increase. As a result, generators in New England who have not contracted for firm pipeline capacity may be forced to sit idle on those days.

The way the gas-electric market works, generators that do not commit to long-term contracts with their suppliers are lower on the priority list than local distribution companies that commit to firm supply contracts for gas to heat people's homes. What this means is that electricity price spikes in winter have much more to do with market practice than pipeline constraints, especially given that the same winter price spikes have been observed in parts of the United States where supply and access to natural gas is abundant.

If you were to add up all of the gas required to get through these so called "peak-shaving" intervals during the course of one year, it is estimated to total on the order of 5-10 bcf, or about 1 percent of the region's annual natural gas consumption—roughly the equivalent of one or two LNG tankers.

To the gas company executive looking to export natural gas to global markets, a massive overbuild of pipeline infrastructure looks like the ideal solution to New England's peak shaving problem. However, to the landowner about to be subject to a forcible land taking via eminent domain, a pipeline expected to deliver in

excess of 800 bcf/yr of natural gas to solve the peak-shaving problem is tantamount to driving an eight-penny nail with a 2,000-pound sledgehammer. If ISO New England is truly agnostic with regard to the fuel source that drives our power generation, then the grave impact that this sledgehammer will wield over the thousands of working American families living within this pipeline's projected path demands that we ask: "Is there another way?"

We already know the answer. This year, ISO-New England's 2014-15 Winter Reliability Program included tariff-based incentives for gas-fueled generators to stockpile LNG reserves. As it turns out, downward pressure on oil and LNG prices in the global market provided sufficient incentive of their own for power generators to burn LNG—as of March 1, zero LNG was burned under the Winter Reliability Program.

Either way, access to LNG reserves helped keep winter peak electricity prices to roughly 30 percent of the historic peak prices seen one year ago. This during what has been reported by climatologists at the National Oceanographic and Atmospheric Administration as the second-coldest winter the Northeast United States has seen in the last 80 years.

Clearly this winter is a case study that shows that, whether the incentives are market-based or tariff-subsidized, access to LNG during peak-shaving periods can provide the sought-after hedge against winter electricity price spikes. ISO deserves some credit for expanding their Winter Reliability Program this time; however, they did it only after pressure by ratepayer advocates and LNG interests to expand the previous year's Winter Reliability Program fuel diversity mix.

In fact, ISO New England's 2013-14 reliability program actually precluded LNG from participating as an alternate fuel source during peak shaving intervals out of concern that "compensating natural gas resources for incremental [liquefied] natural gas could reduce opportunity costs, and thus wholesale electric prices, at times of high natural gas demand, thereby sending the wrong signal during times of natural gas scarcity."

The desired result was achieved. Electricity rates spiked in December 2013 and January 2014 during periods of very high demand when gas-fueled power generators could not gain access to sufficient gas supplies on the spot market. To the informed layperson, this gives the impression that ISO New England may have knowingly attempted to manipulate market pricing signals during the winter of 2013-14, so as to strengthen the case for expansion of gas pipeline infrastructure. This is fuel source agnostic?

On Dec. 16, 2014, Van Welie graciously hosted a roundtable discussion at ISO's Holyoke headquarters with a delegation of anti-pipeline coalition leaders to discuss the group's concerns over his advocacy for new pipeline infrastructure. At that meeting, which lasted over three hours, Van Welie admitted that ISO's public messaging could be more balanced. Suggestions put on the table included increasing the attention directed by ISO New England toward alternative resources such as wind, solar, demand response, and energy efficiency, and even pitching the state legislatures to consider increasing the carbon tax on gas-fueled generation to quantify its environmental impact in terms of a metric that everyone can relate to: cost.

However, in the three months since that meeting, there has been little movement in the message traffic coming out of ISO's Holyoke headquarters. So, out of fear that our December discourse has gone for naught, we now ask this: Stop managing New England's power grid like a man who believes the climate tipping point is a foregone conclusion. Have the courage and foresight to advocate for a strategic energy policy that balances the region's demand for electricity against the impact to our environment, our water supply, our neighborhoods, and our families' health and safety.

Follow the lead of the New York Public Service Commission, whose model introduced in April 2014 rethinks the central-station utility paradigm and recasts the ISO as a Distributed Systems Operator (DSO). This

concept urges the grid operator to view renewables, efficiency, and demand response as "preferred resources," blessed with beneficial impacts rather than as "disruptive technologies".

The DSO assumes responsibility for balancing supply and demand variations at the distribution level and linking wholesale and retail market agents. Make no mistake, this new paradigm will present significant technical challenges, such as large scale production of battery storage technology, and the adaptation of an electrical distribution network largely designed for one-way transmission. However, these are technical challenges that we are confident New England's engineering, technology, manufacturing, and business communities are well poised to tackle.

Not only will these new technologies diversify our energy resource mix as more coal-burning and nuclear assets retire, they will bring thousands of long-term, well-paying jobs to New England, and enhance the region's economic competitiveness for decades to come.

To further embrace natural gas-fueled electricity generation is a policy choice, and a misguided one at that. Ann Berwick would seem to agree. In her recent op-ed piece published in *The Boston Globe*, the former chair of Massachusetts' Department of Public Utilities wrote, "Natural gas now accounts for about half of the electricity produced in the region, compared with 15 percent in 2000...just as we diversify financial investments, we need to avoid becoming over-dependent on one source of energy."

Reliance on natural gas in the near term as a bridge fuel, through the leveraging of existing LNG resources, is one thing. However, construction of new pipeline infrastructure that further ties us to natural gas for the long term is quite another. An opportunity exists here for ISO New England to establish itself as the standard bearer for large-scale integration of distributed, renewable energy resources, and to begin weaning the region off of fossil-fueled power generation. Why not take it?

As an independent, not-for-profit company, ISO New England has a responsibility to serve the interests of the millions of ratepayers throughout New England, not just a handful of corporate stakeholders. We challenge Van Welie and ISO New England to step up and own this responsibility.

Develop and execute a plan to decarbonize the region's power supply. Do it NOW. Put away the "easy button" and DO—YOUR—JOB! Stop advocating for a solution that is predicated upon eminent domain land takings for private enterprise. Stop advocating for a plan that will

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irreversibly damage our most precious natural resources. Stop advocating for the sledgehammer because it makes your job easier. Start working with the state legislatures, the business and manufacturing communities, and the ratepayers, to develop and execute an energy policy that is truly sustainable. The climate tipping point is not a foregone conclusion, Van Welie. Millions of ratepayers across New England are depending on you. Please don't let them down.

Vince Premus is a Massachusetts resident and member of Stop the Northeast Energy Direct, a coalition of concerned citizens and utility ratepayers opposed to Kinder Morgan's Northeast Energy Direct pipeline proposal.