From: Welch, Thomas L
Sent: Tuesday, September 17, 2013 1:26 PM
To: Woodcock, Patrick C (Patrick.C.Woodcock@maine.gov)
Subject: gas pipelines

Patrick:
I'll be attending a meeting (being set up by Dan Esty) in Boston Sept. 25. I've attached a couple of documents I would like to use there. One is the case for a pipeline (I admit I'm basing this on a piece Tony B. put together that I've edited to remove most of the adjectives and clean up some of the numbers); the other is the framework of an agreement to move forward on infrastructure. I wanted to give you a chance to comment on these before I floated them with Esty and others. Thanks in advance for your thoughts.

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For September 25 Discussion

Framework for Agreement

States [through NESCOE?] agree that:

- Will support regional cost allocation for public policy [and/or economic upgrade] transmission project(s) up to [3600] MW of import [and/or transfer from renewable resources located in "other states" in NE]
    - Allocation of TR costs based on load weighted share
    - States agree to support siting where:
        - Project facilities facilitate satisfaction of public policy objectives of the siting state, and/or
        - Project provides economic development and price benefits for energy in the siting state sufficient to offset cost to the siting state
    - Process:
        - Through regional procurement [and/or Order 1000 process], states will seek proposals for:
            - Energy/capacity from Canadian and NE hydro and renewable resources
            - Stand-alone transmission that would have the capability of increasing import/transfer MW
            - Combined projects (i.e. energy/capacity plus merchant transmission)[allocate portion of the TR cost regionally?]
        - States [through NESCOE?] will evaluate and reach agreement on project or projects that meet the criteria above

- States [through NESCOE?] will request that ISO include in its RNS an infrastructure recovery charge sufficient to ensure development of sufficient natural gas pipeline capacity into NE to eliminate basis differential between Dracut and [Wright? Henry Hub?]
    - States agree that the incremental amount required is [1500] mmcf beginning in 2018 [AIM at 400, other at 1100]
    - ISO would purchase firm capacity to ensure 1500 incremental mmcf and release the capacity into the market [annual auction?]
        - Who would be purchasing vehicle? [ISO, NESCOE, utilities?]
    - Recovery through RNS would be of net cost (i.e. charge for firm capacity less proceeds of release)
- In the event ISO can't, or won't, include pipeline cost in rates, states agree to find mechanisms (e.g. Maine's approach) to purchase their [load weighted – electric load] share of incremental amount needed.

OPPORTUNITY TO LOWER ENERGY COSTS BY ELIMINATING GAS PIPELINE BOTTLENECKS

SUMMARY

New England consumers are now collectively facing the prospect of an annual $3.6 billion yearly burden caused by natural gas pipeline capacity shortages into New England. All consumers shoulder this cost in proportion to their respective consumption of electricity and natural gas. This cost can be dramatically reduced if not eliminated entirely by timely investment in additional gas pipeline infrastructure. The cost of the needed infrastructure is a small fraction of the savings that are likely to be realized by bringing New England natural gas, and thus electricity, prices to levels more nearly comparable to areas in close proximity, or with inexpensive access, to the low cost natural gas now being produced.

BACKGROUND

For decades, New England's limited energy choices have impaired public health[1] and suppressed New England's economy. Our extraordinary reliance on imported oil[2] for heating and transportation (and historically for electricity) has held New England hostage, first to price volatility, and now, consistently high prices.[3] Air emissions from the use of oil, coal, and gasoline as fuels have contributed to respiratory disease and cost hundreds of lives.[4] Despite significant efforts by political leaders, renewable energy and cleaner, cheaper energy sources have only recently seen significant growth.[5]

Since 2000, New England has increased its renewable energy commitments and also substantially replaced oil and coal electric generation with lower-cost and less-polluting natural gas generation.[6]

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[1] JONATHON LEVY, HARVARD SCHOOL OF PUB. HEALTH, ET AL., *Estimated Public Health Impacts of Criteria Pollutant Air Emissions from the Salem Harbor and Brayton Point Power Plants*, at 4-5 (May 2000)

[2] STRAUSS, FUTUREMETRICS, LLC, ON BEHALF OF THE NORTHEAST BIOMASS WORKING GROUP, *Gulf of Mexico Offshore Oil and the Northeastern United States' Dependence on Heating Oil*, chart entitled "Petroleum Dependency" at 3 (January 2010) (interpreting Energy Information Administration data to show that each of the New England states is in the top 15 most petroleum-dependent continental states. NH is the most petroleum-dependent, with VT second, ME third, CT eighth, MA ninth, and RI fourteenth.)

[3] *See, e.g.*, ENERGY INFO. ADMIN. (EIA), *Annual Electric Power Industry Report (EIA-861)* (October 2, 2012) at table entitled "Average Price by State by Provider, 1990-2011;" EIA, *Petroleum Marketing Monthly* (August 2013) at Table 4, "U.S. Refiner Prices of Petroleum Products for Resale."

[4] LEVY, *supra* note 1 at 4-5; *see also*, THE AMER. LUNG ASS'N., *State of the Air 2013* at 8-9, 96-97 (2013) (Identifying people "at risk" due to air pollution, including older and younger people, people with asthma, chronic obstructive pulmonary disease, cardiovascular disease, and diabetes, and impoverished people.

[5] *See, e.g.*, EIA, *Annual Energy Outlook 2013* (April 2013) at Figure 78, "Additions to electricity generation capacity, 1985-2040 (gigawatts)" (hereinafter "AEO 2013").

[6] ISO NEW ENGLAND, *ISO New England Winter Operational Experiences and Regional Actions* (presentation to FERC), slides 5-6 (May 16, 2013) (In 2000, New England's electric capacity was comprised of 34 % oil, 18% nuclear, 18% natural gas, 12% coal, 11% hydro/renewables, and 7% pumped storage. In 2012 the mix shifted to 22% oil, 15% oil, 43% natural gas, 8% coal, 4% hydro/renewables, and 5% pumped storage. Meanwhile, New England's energy production has shifted from 31% nuclear, 22% oil, 18% coal, 15% natural gas, 13% hydro/renewables, and 2% pumped storage to 31% nuclear, <1% oil, 3% coal, 52% natural gas, 13% hydro/renewables, and 1% pumped storage in the same period.); AEO, *supra* note 6 at 60, 64-65, 72, 74-75 (attributing regional non-hydro renewable electricity generation growth to "availability of renewable energy resources, cost competitiveness with fossil fuel

Together, renewables and natural gas can sustain a regional and lower-cost electric grid and possibly replace some of the gasoline and diesel used in transportation. But today, as New England seeks to join New York, New Jersey, and Pennsylvania in making greater use of natural gas, particularly the low-cost, high-quality natural gas from the Marcellus Shale deposits in New York and Pennsylvania, our transition is blocked by natural gas pipeline bottlenecks into New England.[7]

THE ECONOMICS OF NATURAL GAS IN NEW ENGLAND

The price of natural gas in the United States has declined significantly due to the technological ability to recover the Marcellus and other shale gases cheaply.[8] The preference of environmental regulators for gas-fired electric generation and the expansion of natural gas infrastructure have increased demand for gas throughout the year.[9] Unfortunately, demand has grown faster than construction of new natural gas pipeline capacity into New England. Pipelines in several New England states are more than 75% utilized more than 100 days per year. Over 75 days a year, almost all of which occur during winter, pipelines from New York into New England are inadequate to meet gas demand.[10] Insufficient pipeline capacity renders natural gas unavailable for electric generation during cold winter weather, forcing New England consumers to rely on very expensive imported liquefied natural gas, oil, and coal. The bottlenecks have already imposed substantial costs on New England consumers, by not allowing these

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technologies, and the existence of state RPS programs that require the use of renewable generation[,]"and projecting renewables to comprise 31% of capacity additions in the future, offsetting coal- and oil-generation retirements and partially accounting for demand growth.)

[7] *See, e.g.*, ISO NEW ENGLAND, *White Paper: Addressing Gas Dependence* at 4-5 (July 2012) (noting that:

> "During their peak winter days, the pipelines are fully utilized with not enough infrastructure to meet the needs of the gas-fired fleet. Even on non-peak days, both the Tennessee and Algonquin pipelines, which supply lower-cost gas from the Marcellus shale region, are often loaded to capacity to meet generator needs in New England. This concentration places more pressure on the pipelines. … In a study last year, ICF International confirmed ISO-NE's concerns about pipeline limitations. … [and] concluded that, "… there is not enough gas supply capability remaining to meet the anticipated power sector gas demand." … The study also noted that the additional pipeline capacity that exists in non-winter periods, which is currently used by New England's gas-fired generators, will diminish as the LDC load continues to grow. Notably, the study was conducted assuming that all pipelines are fully available in each scenario (i.e., no contingencies, maintenance, etc.) and that flows on the various pipelines are perfectly coordinated in order to maximize the throughput on the pipeline system. Given those assumptions and the use of theoretical maximums, ICF has acknowledged that the study overestimates gas availability.")

[8] AEO 2013, *supra* note 6 at 39 ("Since 2009 natural gas prices have been relatively low, making efficient natural gas-fired combined-cycle plants increasingly competitive to operate in comparison with existing coal-fired plants…. In 2012, as natural gas prices reached historic lows, there were many months when natural gas displacement of coal-fired generation was widespread nationally.")

[9] ISO NEW ENGLAND, *ISO New England Winter Operational Experiences and Regional Actions*, *supra* note 8 at 9-10 (explaining that in January of 2013 "high demand driven by sustained cold temperatures limited the availability of gas from the west" and that in February of 2013 "the region was vulnerable following January cold weather due to low fuel inventories" but that "[a] relatively mild February averted the implementation of emergency procedures.")

[10] BLACK & VEATCH, *New England Natural Gas Infrastructure and Electric Generation: Constraints and Solutions, Prepared for the New England States Committee on Electricity* at 20-24 (April 16, 2013) (hereinafter the "NESCOE Study").

consumers access to relatively cheaper and abundant domestic sources of natural gas and by inflating the price of gas used by gas-fired generators bidding into the electricity market, and thus the price of electricity throughout New England.[11]

During winter these bottlenecks place a significant premium on the price of gas as compared to the price paid at the central pricing point of the U.S. pipeline system. Known as the "basis differential," this premium is a cost to gas customers must pay in addition to its basic commodity and transportation costs.[12] Because the historic sources for natural gas were the Gulf of Mexico and the panhandles of Texas and Oklahoma, the New England basis differential has long exceeded that paid in other regions. In recent years, the basis differential has averaged $1-2/MMBtu throughout the year, except for a brief period early last decade when gas from Sable Island, Nova Scotia flowed into New England and lowered the basis differential.[13] During especially cold weather, the basis differential in New England can increase above $10/MMBtu, and on the coldest days of the year, it has exceeded $30/MMBtu.[14] Today, basis pricing for a 12-month term is over $3/MMBtu; basis pricing for the upcoming winter (Jan.—Feb. 2014), when usage it at its highest, is close to $7/MMBtu.

The cost of the basis differential falls on all consumers of natural gas and electricity in New England. Natural gas consumers pay more for their fuel used for heating and industrial operations. Electricity consumers pay more for the power they use because New England's wholesale electricity prices are driven by the cost of natural gas. In 2013, some experts expect the basis differential to add nearly $3.6 billion to the cost of natural gas and electricity in New England.[15] Every electricity consumer in New England will pay an estimated 1.7 cents/kWh more for electricity, year round.[16] This cost will continue to be imposed on consumers until the bottlenecks into New England are alleviated or unless the worldwide price for liquefied natural gas price falls dramatically.[17]

WHAT CAN BE DONE ABOUT THE PROBLEM?

Continuation of the highest basis differential in the country would continue to put New England at a competitive disadvantage relative to its neighbors and would substantially reduce the consumer surplus

[11] EIA, *Today in Energy: Winter natural gas price spikes in New England spur generation from other fuels (April 12, 2013) (*explaining that compared to January 2012 levels, "in response to congestion on pipelines flowing natural gas into New England" coal-fired generation in New England increased by 300,000 MWh and oil-fired generation increased by 200,000 MWh (over 380 percent) during a cold snap in January of 2013.); ISO Newswire, *Bidding in the new winter 2013/2014 reliability program begins July 1* (June 28, 2013) (ISO NE's winter 2013/2014 winter reliability program's object is "to fill a projected 'reliability gap' of up to 2.4 million megawatt-hours of energy." Specifically, the program targets "oil-fired generators that can establish a specified amount of on-site oil.")
[12] Gene Whitney, Carl E Behrens, ENERGY: NATURAL GAS: THE PRODUCTION AND USE OF NATURAL GAS, NATURAL GAS IMPORTS AND EXPORTS, EPACT PROJECT, LIQUEFIED NATURAL GAS (LNG) IMPORT TERMINALS AND INFRASTRUCTURE SECURITY at 70 (2010).
[13] NESCOE Study, *supra* note 13 at Figure 9: Historical New England Basis to Henry Hub.
[14] *Id*.
[15] COMPETITIVE ENERGY SERVICES, Report to the Industrial Energy Consumer Group (April 5, 2013) (hereinafter "CES Report").
[16] ID.
[17] ICF INTERNATIONAL, *Assessment of New England's Natural Gas Pipeline Capacity to Satisfy Short and Near-Term Electric Generation Needs* (June 15, 2012) (hereinafter "ICF Study").

that could be used to fund other activities, including the procurement of renewable resources. Indeed, to the extent that contracts for renewable resources are based on expected market prices, those resources will be more expensive to procure if the basis differential is not reduced or eliminated.

Regional and national public officials, regulators, and other experts have examined the causes and consequences of and solutions to the shortage of pipeline capacity into southern New England. ISO New England (ISO-NE) and the Federal Energy Regulatory Commission (FERC) have expressed concern that New England electric reliability was seriously threatened by inadequate pipeline capacity in January and February of 2013.[18] Remedial steps underway to improve grid reliability include increasing dual-fuel (oil and gas) electric capacity, enhancing demand response programs, and reforming electric capacity markets. Parties are also seeking more efficient use of pipeline capacity and, in the longer term, better coordination of electric and natural gas markets nationally.[19]

While each of these actions will have a positive effect, none will substantially reduce the $3.6 billion in additional cost to New England customers that the basis differential already imposes on New England, and each will take many years to implement.[20] The B&V study commissioned by NESCOE, however, concludes that, if an additional 1200 mmcf is brought into New England (beyond the roughly 4-500 mmcf expected from the AIM project), the basis differential can be virtually eliminated for the next two decades,[21] thus equilibrating New England's natural gas market with the rest of the country. With this step, New England's historic energy cost disadvantage would rapidly disappear. Natural gas could possibly replace oil and/or coal consumption entirely in electric generation, and pervasively replace oil for heating. Further, use of compressed natural gas (CNG) and liquefied natural gas (LNG) to replace gasoline and diesel fuels in transportation would continue to increase rapidly, particularly among truck and bus fleets.

THE ADVANTAGES OF EXPANDING NATURAL GAS PIPELINES INTO NEW ENGLAND

Increased pipeline capacity into New England, most likely from New York, offers several additional benefits. For example, with increased local infrastructure investment, natural gas can be delivered to consumers at retail for about one-half to two-thirds the current price of heating oil.[22] In regard to air

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[18] ISO NEW ENGLAND, *ISO New England Winter Operational Experiences and Regional Actions*, *supra* note 8 at 9-10.
[19] *See generally*, LANDER, ET AL., SKIPPINGSTONE, *Synchronizing Natural Gas & Power Markets, A Series of Proposed Solutions* (January 2013) (hereinafter "SkippingStone Study"); ISO NEW ENGLAND, *Strategic Planning Initiative: Addressing Gas Dependence* at 1 (July 2012) ("To maintain the benefits provided by the increasing utilization of gas-fired generation, ISO-NE believes that the region must acknowledge the significant role that the natural gas transmission system now plays in the New England electricity system – and the associated challenges. In other words, both the gas and electric industries must make adjustments to ensure the reliability of both systems and the efficiency of both markets.")
[20] *See* SkippingStone Study, *supra* note 22.
[21] *See generally*, ICF Study, *supra* note 20; NESCOE Study, *supra* note 13; and CES Report, *supra* note 18.
[22] *See, e.g.*, MAINE GOVERNOR'S ENERGY OFFICE, "Current Heating Fuel Prices" (August 5, 2013), *available at* http://maine.gov/energy/fuel_prices/index.shtml ("Using this week's average heating oil price ($3.43) and converting to a common heating unit value (million Btu), the price of fuel oil is $24.73. This compares with an equivalent heating unit value for natural gas of $17.00 (at $1.70/therm).") This figure includes the basis differential. If the basis differential is eliminated price of delivered natural gas would be closer to $12/MMBtu.

quality, combusting natural gas has 28 percent fewer carbon dioxide emissions than oil and 46 percent fewer than coal, 58 percent fewer nitrogen oxide emissions than oil and 72 percent fewer than coal, and 99 percent fewer sulfur dioxide emissions than both oil and coal.[23] Additionally, increased pipeline capacity will ensure electric grid reliability more certainly, without requiring reliance on non-market mechanisms such as the oil purchases recently approved by FERC for next winter. A firm supply of natural gas would also help balance intermittent renewable energy sources' grid contributions.[24]

ELIMINATING THE OBSTACLES TO EXPANDING NEW NATURAL GAS PIPELINE FROM NEW YORK

The principal obstacle to creating sufficient new pipeline capacity from New York to New England is the incompatibility of gas and electricity markets. Over 50 percent of New England's electricity is generated from natural gas. Due to low fuel and capital costs, gas generators set the New England market-clearing price for electricity nearly 90 percent of the time. As a result, New England natural gas plants have little incentive to execute long-term contracts for pipeline capacity; they merely use gas at market prices and pass the costs on to consumers. As a general rule, these natural gas generators also sell into short-term markets; therefore, they lack long-term sales contracts that would give them the credit strength to make their pipeline capacity commitments bankable. Thus, New England's natural gas power plants do not have the financial capability to sign long-term contracts to purchase pipeline capacity.

Federal regulation of natural gas pipelines presents a nearly reciprocal phenomenon: FERC will not permit gas pipeline development unless the developer has executed long-term contracts with third parties who commit to pay to use 100 percent of a pipeline's capacity. The direct effect of the FERC policy is to inhibit pipeline companies from building pipelines on speculation that gas usage will grow. Of course, the Marcellus Shale is doing exactly that: driving unprecedented growth in gas usage in New York, Pennsylvania, and New England. While envisioning an energy transition with greater positive effect on our economy and environment than replacing oil and coal with natural gas is difficult, federal policy currently impedes the central coordination efforts necessary to seize this opportunity. Therefore, others—states, electric grid operators, and possibly federal agencies—must take up the task.

CREATING THE CAPACITY TO SOLVE NEW ENGLAND'S PROBLEM

New England lacks the most obvious of mechanisms to solve this problem: the institutional capacity to aggregate the demand of gas for electricity and gas consumers and purchase pipeline capacity to meet

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[23] U.S. ENVT'L. PROT. AGENCY, "Clean Energy: Air Emissions" *available at* http://www.epa.gov/cleanenergy/energy-and-you/affect/air-emissions.html (August 9, 2013).

[24] *See, e.g.*, THE CENTER FOR CLIMATE AND ENERGY SOLUTIONS, *Leveraging Natural Gas to Reduce Greenhouse Gas Emissions*, at vii (June 3, 2013) ("[N]atural gas and renewable energy sources such as wind and solar can be complementary components of the power sector. Natural gas plants can quickly scale up or down their electricity production and so can act as an effective hedge against the intermittency of renewables. The fixed fuel price (at zero) of renewables can likewise act a hedge against potential natural gas price volatility."); THE BRATTLE GROUP, *Partnering Natural Gas and Renewables in ERCOT* (June 2013) ("[N]ational labs, energy technology companies, trade associations and think tanks across the U.S. have documented natural synergies between the two resources. As a fast ramping resource that is relatively easily turned on and off, natural gas-fired power plants (in particular combustion turbines) are well- suited for backing up and smoothing out intermittent renewables and providing capacity.")

that demand and eliminate the basis differential. Regulators and experts have explored all available options.[25] As noted, gas generators lack the incentives and necessary credit. Local natural gas distribution companies (LDCs) have the authority and ability to enter into such contracts, and, in fact, already have contracted for nearly 100 percent of the existing pipeline capacity in to New England to meet their own customers' heating loads. However, LDCs are not currently allowed to enter in to contracts to meet the loads of other customers, such as the residences and businesses that use electricity.

A mechanism is needed to aggregate customer demand, so that an aggregating entity can contract for pipeline capacity, resell it to customers, and then subsequently allocate the profits or costs from the contract proportionately among those who benefit from increased pipeline capacity. Having a creditworthy aggregating entity contract for pipeline capacity allows a pipeline developer to secure funding for project development and is necessary within the federal rules requiring that pipeline capacity be committed before it is built. Ultimately, if pipeline capacity can be committed, then a pipeline will be developed with the result of eliminating the basis differential.

The potential "risk" is that the aggregating entity cannot later resell some of the pipeline capacity for which it contracts. In this event, the contract "costs" would need to be passed on to beneficiaries proportionate to the benefit they receive, reducing their total benefit to some extent. However, the only feasible circumstance in which pipeline capacity cannot be resold is that in which pipeline capacity exceeds gas demand. If pipeline capacity exceeds gas demand, by definition, the basis differential cannot exist. Thus, the $3.6-billion "tax" currently imposed on New England will have been eliminated. This $3.6-billion <u>benefit</u> will greatly exceed the costs of unsold pipeline capacity. For example, various studies have estimated the cost to construct sufficient pipeline to increase capacity by 2 bcf/day is no more than $3 billion. Thus, assuming that half of the capacity goes unsold (approx. $1.5 billion), there would still be a massive net benefit of $2.1 billion to the intended beneficiaries.

Alternatively, the aggregating entity could contract for pipeline capacity and resell all of it. This would be indicative of a high gas demand, which means it could resell the capacity at a premium. In this circumstance the aggregating entity could make a "profit" and distribute that profit as "dividend-savings" to the intended beneficiaries, while also partially reducing the basis differential through increased pipeline capacity. Eventually, more pipeline capacity would be needed, but this would immediately provide huge rate relief lasting indefinitely.

<u>OPTIONS FOR AGGREGATION</u>

This cost/benefit analysis has led the State of Maine to authorize its Public Utilities Commission (PUC) to study the value to Maine consumers of the PUC purchasing up to 200 Mcf/day of capacity on a new natural gas pipeline from New York.[26] Further, the PUC is authorized to execute capacity contracts if it

[25] *See generally, e.g.*, ICF Study, *supra* note 20 at 6 ("ISO-NE contracted ICF International to provide an assessment of the amount of natural gas supply available to satisfy New England's gas-fired power generation through 2020.")
[26] This figure is based on Maine's share of all natural gas and electricity consumed in New England, relative to the 2 bcf/day pipeline capacity expansion that would demonstrably eliminate the basis differential.

determines they will serve the public interest. This capacity would be resold by a marketer and any shortfall from unsold capacity would be collected by the PUC from LDC consumers, electric utility customers, and "city gate" gas customers. Under Maine's legislation, costs would be collected from each type of user in proportion to the cost-reduction benefit received by that particular beneficiary.

The State of Maine's action has given additional life to the ongoing efforts to build new or expanded pipeline capacity from New York into New England in the form of two proposed projects: the 600 [500?]Mcf/day expansion of the Spectra-owned Algonquin line into southern Connecticut (project "AIM") and the new Tennessee Gas 500 to 1200 Mcf/day pipeline roughly following Route 2 through Northern Massachusetts to Dracut (the "Kinder Morgan Project"). Both projects are highly useful; the challenge for New England is to cause them to be built, and to have them built at sizes that can virtually eliminate the basis differential in New England. As noted above, basis differential elimination may require up to about 2 Bcf per day in increased pipeline capacity. Thus, more specifically, the challenge is to have creditworthy entities (such as Maine's utilities, acting at the direction of the PUC, with appropriate provisions to insulate the utilities themselves from financial harm) commit by contract to purchase this amount of new capacity. Only these actions will create the mechanism to bridge the otherwise unbridgeable gap between the structure of New England's electricity market and federal limits on gas pipeline approval.

Plainly, New England consumers need public entities to act on their behalf. Public or governmental entities exist to benefit those very consumers hurt by the basis differential and who cannot have any effect through individual action. This is a classic case of government undertaking action citizens cannot undertake themselves. As the Maine example shows, this is a prudent and rational course.

Alternatively, a quasi-public entity such as ISO-NE may need to be asked by the states to purchase pipeline capacity. ISO-NE is a public utility whose responsibilities include assuring the reliability of the electric grid. Grid reliability clearly is threatened by the bottlenecks between New York and New England, so ISO-NE's action may be necessary. ISO-NE, however, prefers to operate efficient markets rather than participate in them.[27]

[27] GORDON VAN WELIE, PRESIDENT & CHIEF EXECUTIVE OFFICER, ISO-NE, Before The Senate Energy & Natural Resources Committee Natural Gas Forum, Opening Statement to "Infrastructure, Transportation, Research And Innovation" (May 14, 2013) ("For power-grid reliability to be maintained, we must increase levels of fuel availability within the region, either through more secure gas pipeline arrangements, gas storage or additional dual fuel capability. … New England cannot access the full benefit of domestic shale-gas deposits because of pipeline constraints leading into New England from the west and south. This winter, New England did not experience record or sustained cold temperatures, or unusually high demand for electricity; however, wholesale electricity prices rose significantly during this period. Natural gas prices in late January spiked to over $30/MMBtu, even though natural gas prices were in the $3 - $4/MMBtu range across the rest of the country. Until additional pipeline capacity is built in the region, New England will likely experience similar price spikes when the current pipelines are fully utilized. … But there are challenges to building additional pipeline capacity to access gas from the west and south. The interstate natural gas pipelines operate under a business and regulatory model that requires a long-term firm commitment by the pipeline customer. Because New England's current wholesale electricity market design does not provide gas generators with the necessary incentives, we have found that generators often do not make arrangements to ensure that they have an adequate and reliable fuel supply for the output of their facilities."

At this point, the creation of legal authority by the State of Maine for its PUC to purchase pipeline capacity shows that the New England states have a critical role to play in eliminating the $3.6 billion extra cost paid by consumers because of pipeline bottlenecks. Maine, acting carefully, has required that any purchase by its PUC be done as a last resort, and requires an adjudicatory proceeding to find that doing so is in the public interest. Prompt action is essential, however, as pipeline construction and permitting can take 4-5 years. Every year of delay could cost New England's energy customers more than the likely total cost of the new pipeline. Investment opportunities with such dramatic, and certain, and immediate, returns are rare. The beneficiaries of this investment – the millions of individual citizens and businesses in New England – are individually too small to make the investment and there is no existing mechanism to aggregate their interests. These are precisely the circumstances where government and regional entities must step forward to prevent New England from falling back into the vicious circle of high energy costs and economic and environmental degredation.