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**Testimony of Jerry Elmer, Esq., Senior Attorney,**  
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**On SB-1078 Before the Senate Committee on Energy and Technology**  
**March 17, 2015**

My name is Jerry Elmer. I am a Senior Attorney for the Conservation Law Foundation (CLF), and I am testifying today on behalf of CLF.

CLF is New England's leading environmental advocacy organization. Since 1966, CLF has worked to protect New England's people, natural resources, and communities. CLF is a nonprofit, member-supported organization with offices throughout New England. CLF promotes clean, renewable and efficient energy production throughout New England and has an unparalleled record of advocacy on behalf of the region's environmental resources.

While there are significant portions of SB-1078 that CLF supports, there are significant problems with the bill; consequently, CLF regrets that it must oppose passage of SB-1078 in its present form.

**Section 4 of SB-1078 Provides for New Gas Pipeline Build-Out:**  
**There Are Six Separate Reasons Why CLF Opposes**  
**State Subsidies for Gas Pipeline Build-Out**

CLF addresses first Section 4 of SB-1078, in the middle of page 4 of 6 of the bill, the newly inserted subsection (a). This newly inserted subsection authorizes the Commission (the Commissioner "may"), in cooperation with other states within the ISO-NE footprint, to solicit proposals for additional energy resources for Connecticut in five specific, enumerated sub-categories. CLF strongly supports additional procurement by Connecticut in three of the five categories specified in the bill, as follows: (3) Class I renewable resources; (4) active and passive demand response; and (5) distributed generation. In addition, CLF recognizes the possible value of one of the five enumerated sub-categories as a limited and temporary short-term solution for providing winter reliability for single-fuel gas-fired generating units: (2) LNG.

However, CLF strongly opposes the inclusion of the remaining sub-category in this sub-section: (1) new natural gas pipeline capacity. This provision would permit state subsidies on the backs of electricity ratepayers for expansion of natural-gas-pipeline infrastructure. Although recently enacted state laws in Rhode Island (R. I. Gen. Laws §39-31-1, et seq.) and Maine would theoretically permit such a thing (and in an on-going proceeding in the Maine PUC there was a preliminary finding that the costs of such ratepayer subsidy would likely be outweighed by the

benefits to such an arrangement),<sup>1</sup> in fact, actually providing state subsidies for construction of new gas pipeline has never been done. Moreover, such a proposal is inconsistent with long-standing principles of utility deregulation, and would unwisely shift the risk of significant financial loss away from Fortune 500 companies and onto the backs of Connecticut ratepayers.

CLF here presents six separate reasons why Connecticut legislators should not endorse state subsidies for gas-pipeline infrastructure build-out: (1) It undermines utility restructuring; (2) The market is already providing incremental additional pipeline; (3) The needle price spikes of last winter are not being repeated this winter; (4) ISO-NE reforms are working to alleviate existing issues and problems; (5) Energy efficiency and demand response provide cleaner alternatives that will be less expensive for both gas and electricity ratepayers; and (6) Such a purchase would be inconsistent with Connecticut's Global Warming Solutions Act.

Reason # 1: Utility Restructuring – For the past two decades, Connecticut – like the rest of New England and much of the rest of the country – has worked hard to deregulate both gas and electricity utilities. The public-policy underpinning of utility deregulation, as practiced in Connecticut and elsewhere, is that competition among providers ultimately benefits ratepayers. This bill would re-insert the state into gas and electricity utilities, and would unwisely make the state an active energy market participant instead of the regulator. Such state intrusions into the energy markets create uncertainty for market participants; this uncertainty undermines investor confidence and discourages private investment; and this redounds to the detriment of ratepayers.

Reason # 2: Already Announced Gas Pipeline Projects – Several proposed expansions of existing gas pipeline have already been announced for New England. In September 2014, Spectra Energy, parent company of Algonquin Gas Transmission (AGT), which owns existing pipeline in southern New England, and Maritimes & Northeast, a Maine pipeline owner, announced the intention to build a 200,000-300,000 Dth/day expansion of the Algonquin gas pipe line in 2017 (without the need for any New England state to purchase capacity) and another expansion of that line in 2018 of between 200,000-1,000,000 Dth/day, depending upon market interest. These Spectra projects are in addition to its already-subscribed 342,000 Dth/day Algonquin Incremental Market (AIM) project, which was just approved by Federal Energy Regulatory Commission (FERC), and Tennessee Gas Pipeline's (TGP) 72,000 Dth/day CT Expansion project, which is still undergoing review by FERC, and are expected to be in service in 2016 and 2017, respectively. Consequently, with already-announced gas pipeline projects – without governmental intervention – New England can expect natural gas pipeline capacity increases over the next several years of 342,000 Dth/day in 2016, 272,000-372,000 Dth/day in 2017, and 200,000-1,000,000 Dth/day in 2018. All told, this will likely mean that upwards of 800,000 Dth/day of new pipeline capacity, a nearly 25% overall increase, could be in place in New England by 2018, without ratepayers shouldering any of the expansion cost.

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<sup>1</sup> Phase 1 Order, Maine PUC, Docket No. 2014-00071.

In this context, a glaring omission in the current text of SB-1078 is the complete absence of any needs assessment prior to state commitment to additional gas pipeline. CLF strongly urges that, if this bill is approved, the General Assembly amend it to provide for such a prior needs assessment, and a requirement that the PURA must, after an adjudicatory proceeding, make a determination that the benefits of any procurement of pipeline capacity exceed the costs. (CLF addresses separately, below, the unwise provision in SB-1078 for fast-track consideration by the PURA.) A similar provision (for a prior needs assessment) was included in the Maine law authorizing the Maine PUC to procure gas capacity. In its pending proceeding, the Maine Commission has engaged London Economics International (LEI), an expert consultant. According to the Maine Commission, “LEI will employ sophisticated econometric and regional energy modelling to gain a full understanding of the likely effects of each of the project proposals. The results of this detailed analysis will be critical to the Commission’s decision-making.”<sup>2</sup>

Reason # 3: The Problem of “Needle Spikes” – The often-repeated “justification” for such unprecedented state intrusion into the wholesale gas and electricity markets is the high cost of electricity in New England during the winter of 2013-2014, when there were episodic basis spikes during certain periods of coincident high demand by residential gas heating customers and New England gas-fired electricity generators. At these times, gas generators purchase their gas supply on the spot market where coincident demand can result in exponentially higher “needle peak” prices than during periods of typical demand. However, such needle spikes in gas basis are relatively infrequent and are already being addressed successfully by market reforms that have been implemented by ISO-NE, the independent entity that runs the New England electricity grid.

Depending on the study and the particular scenario, episodic basis spikes are expected to occur between 18-60 days a year.<sup>3</sup> Because the duration of these spikes is extremely short the result is “needle spikes” early in the morning hours and in the evening hours when demands for gas-fired space heating compete with demands for electric generation. While these spikes may extend through the day on extremely cold days, for the most part, it is the simultaneous pull of supply during these two peaks that drives the basis differential. That means that the need for additional capacity is limited to very specific portions of the day and to a limited number of days of the year. While additional pipeline capacity is one means to meet the demand created by such peaks, it is unlikely to be either cost effective or compatible with the greenhouse gas reduction requirements that Connecticut – like the other New England states – believes are necessary to mitigate climate change.

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<sup>2</sup> Ruling on Scheduling Motions, Maine PUC, Docket No. 2014-00071 (March 12, 2015).

<sup>3</sup> ICF, *Assessment of New England’s Natural Gas Pipeline Capacity to Satisfy Short and Near- Term Electric Generation Needs: Phase II, Draft Report*, submitted to ISO-NE, at 39 (December 16, 2013); ICF, *Options for Serving New England Natural Gas Demand*, prepared for GDF Suez, 4 (October 22, 2013).

Moreover, several studies have confirmed that these basis spikes are not the result of fully subscribed pipelines, but instead, begin to occur at roughly 75% of subscribed pipeline capacity. One of the reasons for the spikes that occur on the system beginning at this level is the fact that most natural-gas-fired electricity generation in New England is not supported by firm transportation contracts on natural-gas pipelines. Although the pipelines are fully subscribed, they are not actually being fully utilized even at time of peak demands.

Reason # 4: ISO-NE Reforms Are Working – Several programs of the ISO-NE are already successfully addressing these issues. As described more fully in a February 4, 2015 press release from the ISO, recent ISO reforms have attracted significant competition, including three new power plants in New England, including two in Connecticut. The ISO press release goes on to describe several recent, major reforms in the ISO’s Forward Capacity Market that have contributed to this salutary result: a new Pay-for-Performance bonus for generators who perform during shortage events, combined with penalties for those who do not perform; a new downward-sloping demand curve; a seven-year clearing price lock-in; and the ability of a qualified generation asset to defer a capacity supply obligation for one year.<sup>4</sup>

Reason # 5: Energy Efficiency, Demand Response and Distributed Renewable Generation As Alternatives to Gas Pipeline – Experience has proven what CLF and others have accurately predicted for years: that the most cost-effective resource that we can invest in is energy efficiency.<sup>5</sup> Over time, the electricity energy-efficiency programs that were pioneered in the era of restructuring the electricity markets have been embraced by ISO-NE, and integrated into wholesale markets, as a reliable, quantifiable resource that has resulted in millions of dollars’ worth of savings in deferred transmission investments alone,<sup>6</sup> in addition to the significant direct benefits to ratepayers in the form of reduced bills and reduced pollution.<sup>7</sup> Such investments have

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<sup>4</sup> [http://www.iso-ne.com/static-assets/documents/2015/02/fca9\\_initialresults\\_final\\_02042015.pdf](http://www.iso-ne.com/static-assets/documents/2015/02/fca9_initialresults_final_02042015.pdf)

<sup>5</sup> Conservation Law Foundation, Conservation Services Group and New England Energy Policy Council, *Power to Spare: A Plan for Increasing New England’s Competitiveness through Energy Efficiency* (1987); Dep’t of Energy Resources, *Energy Efficiency in Massachusetts: Our First Fuel*, available at <http://www.mass.gov/eea/docs/doer/energy-efficiency/ee-story-booklet-web.pdf>; ISO-NE, *2013 Regional Energy Outlook*, at 27 (approximating that energy efficiency resulted in a savings of \$260 million by deferring the need for transmission upgrades) available at [http://www.iso-ne.com/aboutiso/fin/annl\\_reports/2000/2013\\_reo.pdf](http://www.iso-ne.com/aboutiso/fin/annl_reports/2000/2013_reo.pdf).

<sup>6</sup> ISO-NE, *2013 Regional Energy Outlook*, at 27.

<sup>7</sup> A detailed analysis of the “avoided energy costs” attributable to energy efficiency programs in New England is available in the *Avoided Energy Supply Costs in New England: 2013 Report*, prepared by Synapse Energy Economics, available at <http://www.synapse-energy.com/Downloads/SynapseReport.2013-07.AESC.AESC-2013.13-029-Report.pdf>. In Massachusetts, for example, the Energy Efficiency Advisory Report to the legislature estimated over \$5 billion in benefits to Massachusetts business and residents from the energy efficiency programs. *Staying on Top: Energy Efficiency Continues to Deliver Benefits to Massachusetts Residents and Businesses*, The

shown themselves to be particularly effective in reducing peak demands on the system that would otherwise necessitate new electric transmission infrastructure and exacerbate the price impacts on needle-peak days.<sup>8</sup> These solutions are especially effective because, as discussed above, the gas pipeline capacity issue is limited to relatively few hours and days per year. As the Union of Concerned Scientists concluded in its newly released report entitled “The Natural Gas Gamble: A Risky Bet on America’s Clean Energy Future,” “Investing more heavily in renewable energy and energy efficiency can put us on a smarter, shorter, and less risky pathway toward a more affordable, reliable, and diversified electricity system that delivers not just near-term economic and environmental gains but also the long-term goal of addressing climate change.”<sup>9</sup>

**Reason # 6: New Gas Pipeline Is Inconsistent With Connecticut’s Global Warming Solutions Act** – Connecticut’s Global Warming Solutions Act commits the state to reducing emissions of greenhouse gases to 10% below 1990 levels by 2020 and 80% below 1990 levels by 2050. Conn. Gen. St. §22a-200a. Such significant emission reductions would be impossible if the state were now, in 2015, to commit to creation of new, expensive, long-lived fossil-fuel infrastructure such as natural-gas pipeline.

**Conclusion: Additional Gas Pipeline Is Not the Solution** – In late 2010, ISO-NE launched a major Strategic Planning Initiative to identify (and try to address) the major risks to continued reliability and efficient operation of wholesale electricity markets in New England. The number one problem identified by the ISO is New England’s ever-increasing reliance on natural gas as a fuel for producing electricity. In 1990, only 5% of electricity generation in New England was natural gas; in 2014, that figure had climbed to 46% -- almost as much as all other fuel sources combined! For the Connecticut General Assembly now to endorse additional gas pipeline infrastructure – as this bill does – risks exacerbating rather than ameliorating the region’s number one energy challenge of over-reliance on a single fuel. Consequently, pipeline expansion should not be considered without first: (a) maximizing the utility of our existing pipelines and maximizing management of existing and potential new gas storage; (b) ensuring that energy efficiency, demand response and distributed generation are being used to maximally reduce peak demand; and (c) determining the extent to which new market efficiencies and mechanisms have already mitigated the needle peak price and gas availability concerns.

The current winter of 2014-2015 provides all the justification we need to take a more cautious approach as we have not seen the same gas pipeline constraints and electricity price spikes that we saw last winter. This illustrates nothing so clearly as the vagaries and uncertainties of energy markets. The Maine Commission recently declined a request from Tennessee Gas Pipeline

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2012 Report of the Massachusetts Energy Efficiency Advisory Council (November 2013) available at <http://www.mass.gov/eea/docs/doer/energy-efficiency/ma-advisory-council-2012-report.pdf>.

<sup>8</sup> ISO-NE, *2013 Regional Energy Outlook*, *supra* note 4.

<sup>9</sup> <http://www.ucsusa.org/sites/default/files/attach/2015/03/natural-gas-gamble-full-report.pdf>

(Kinder Morgan) to expedite the process in its natural gas proceeding, stating that “due to changed regional and world market circumstances, a number of other variables have been introduced to the equation since this proceeding began that must be taken into account to present an accurate, current cost-benefit analysis. These include dramatic decreases in world oil prices and commensurate reductions in LNG prices and imports, despite a cold snap that rivalled or exceeded last year’s vortex experience. As a result of this winter’s new energy dynamics, LMP and basis differentials were lower than observed last year. These facts have a significant bearing on the cost-benefit analysis required by the Act.”<sup>10</sup>

For decades it has been the considered policy of Connecticut and the rest of New England to allow the financial risks of these uncertain markets to be borne by private businesses. By shifting that financial risk to Connecticut ratepayers, SB-1078 represents a radical departure from that long-established practice. SB-1078 would transfer the risk of uncertain energy markets away from Fortune 500 companies and to Connecticut ratepayers.

Connecticut – like the rest of the country and the world – is facing a climate-change emergency. In order to stave off disaster, we need to switch away from fossil fuel energy sources like natural gas that emit global warming pollution, and toward non-emitting energy sources, like the sources that are currently classified as Class I renewables in Connecticut, including solar and wind.

CLF specifically notes that the sub-section of SB-1078 pertaining to additional natural gas pipeline capacity is unrestricted and unconstrained as to quantity. Any such open-ended commitment to new gas pipeline infrastructure is dangerously wrong. New gas pipeline construction takes decades to amortize financially, and remains workable for perhaps a century or longer. New, open-ended commitments now for such additional fossil-fuel infrastructure would lock Connecticut – and New England – into a fossil-fuel future through 2050 and beyond or leave ratepayers with enormous stranded costs. It would make it impossible for Connecticut to achieve its own carbon-emission-reduction goals.

This Section 4(a) of SB-1078, discussed in the preceding pages, melds with the new Section 4(d), which appears at the top of page 5 of 6. This provision for fast-track consideration of possible new gas pipeline infrastructure is ill-advised for the same reasons just enumerated. Proposals for new fossil-fuel infrastructure, which can cost literally billions of dollars, need to be carefully scrutinized by the public, not put on an unusually fast track for review and approval.

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<sup>10</sup> Ruling on Scheduling Motions, Maine PUC, Docket No. 2014-00071 (March 12, 2015).

**Section 5 of SB-1078 Presents Serious Problems  
Under Controlling Federal Law**

CLF next addresses the new Section 5 of SB-1078, which appears in the middle of page 5 of 6 of the bill. This provision allows electricity distribution companies to seek cost recovery of new natural gas pipeline capacity. However, wholesale electricity markets are governed by the Federal Power Act of 1935, 16 U.S.C. §791a, et seq.; in contradistinction, wholesale gas markets and interstate gas pipelines are regulated under the Natural Gas Act of 1938, 15 U.S.C. §717, et seq. There is apparently no legal authority that would allow for the recovery of the cost of natural gas pipeline through electricity distribution or commodity rates. That is why when proposals just like this one have come up in recent years in several New England states, those proposals have been soundly defeated. Even staunch supporters of building additional gas pipeline into New England have opposed this type of funding scheme. Even supporters of new gas pipelines recognize that this type of funding scheme would, at the very least, invite many years of expensive litigation – during which new energy infrastructure projects would not be able to proceed.

The Connecticut PURA could, conceivably, try to address the problem of federal law described in the preceding paragraph by limiting the resulting incremental electricity and/or gas price increases to only Connecticut state ratepayers, thereby avoiding the strictures of the FPA that apply only to interstate sales. However, any such effort by Connecticut would most likely run afoul of the requirements in both the FPA and NGA that utility rates be just and reasonable. See FPA, 16 U.S.C. §824(d); NGA, 15 U.S.C. §717c. Such a proposal would run afoul of federal law because the purported benefits (if any) of the proposed gas pipeline(s) would inure to the benefit of ratepayers in several states, but the costs would be borne solely by Connecticut ratepayers. Indeed, even without the strictures of the relevant federal statutes, it is easy to see why this is not just and reasonable.

**Section 3(b) of SB-1078 Unwisely Opens the Door  
To Imports of Canadian Large-Scale Hydro Projects**

CLF next addresses the new Section 3(b), which appears as the first new paragraph near the top of page 3 of 6. This new section would not merely enable, but would obligate (“shall”) Connecticut DEEP to issue an RFP for several things including, but not limited to electricity. In this regard, CLF has examined the February 25, 2015 draft RFP issued by DEEP (and three electricity utilities in Connecticut, Massachusetts, and Rhode Island). CLF is alarmed that the Draft RFP defines “Qualified Clean Energy” to include not only Class I (REC-eligible) renewable energy, but also imports of non-REC-eligible hydro-power from massive Canadian facilities. See 2/25 Draft RFP, at 4-5. CLF is also alarmed that the RFP would facilitate construction of controversial new transmission projects to bring this non-REC-eligible Canadian hydropower into New England. See 2/25 Draft RFP, at 5.

In recent years, New England's renewable energy programs have been a major driver for economic development and growth. Since Connecticut enacted its RPS Statute, the state's economy has benefited substantially from the development of real, local renewable energy projects. These renewable energy projects require RECs to be economically viable. Similar RPS statutes, based on established criteria of REC eligibility, are successfully creating robust clean-energy economies in other New England states, including Massachusetts and Rhode Island. Re-Defining "Qualified Clean Energy" to include these enormous Canadian hydro-power projects (as the current 2/25 Draft RFP does) would seriously undermine Connecticut's existing RPS Statute by placing much of its REC investment in a single, foreign-government-owned carbon-emitting resource and, as such, would hurt the environment and Connecticut's economy.

To the extent that Connecticut intends to include large Canadian hydropower projects in any such RFP process, qualifying resources must be subject to specific criteria and requirements.

First, any procurement of hydropower as a "clean energy" resource in any state with a Global Warming Solutions Act, such as both Connecticut and Massachusetts, must acknowledge the greenhouse gas emissions associated with new hydropower projects and quantify those emissions.<sup>11</sup>

Second, in order to mitigate the long-term energy-market effects of public subsidy for hydropower imports, any actual procurements of Canadian hydropower must be done in a phased process with a specified limit on the size of each phase.

Third, to the extent that hydropower imports are sought by Connecticut to help ameliorate winter energy prices, particularly the effects of natural gas price needle spikes, any procurement must require a firm commitment to deliver power to the New England electric grid during specified time periods for reliability purposes.

Finally, Connecticut should recognize that the most productive role for large hydropower in Connecticut's clean energy future is as a balancing resource for utility-scale renewables. In order to achieve this role, any procurement of hydropower must require a fixed percentage of that procurement to be dedicated to balancing utility-scale renewables.

For these reasons, CLF respectfully opposes this section of SB-1078 in its present form.

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<sup>11</sup> See, e.g., Synapse Energy Economics, Inc., *Hydropower Greenhouse Gas Emissions: State of the Research* (2012), <http://www.synapse-energy.com/project/review-proposed-power-imports-quebec-new-england>.



### **Conclusion**

SB-1078 has significant portions that CLF would be eager to support: increased procurement of Class I renewable resources, passive and active demand response, and distributed generation. Unfortunately, SB-1078 also includes major features that CLF strongly opposes, including those pertaining to gas pipeline infrastructure and imports of large Canadian hydro-power. For these reasons, CLF must oppose SB-1078 in its present form.

Thank you for this opportunity to testify.

