

COMMENTS OF EQUIPOWER RESOURCES CORP.
ON SENATE BILL NO. 1078 AND HOUSE BILL NO. 6985

EquiPower Resources Corp. (EquiPower), a Hartford based competitive power generation company, owns 1,360 megawatts (MWs) of highly efficient natural gas generators in Connecticut and is the second largest generator of electricity in the State. We offer testimony today on Senate Bill No. 1078 and House Bill No. 6985, both of which address lowering electricity costs through state backed activity to increase natural gas pipeline capacity and other long term contracting. We fully support the natural gas pipeline initiative but oppose other long term contracting, as we discuss below.

We believe that the most impactful investment that can reduce the cost of energy in Connecticut and throughout New England is adding incremental natural gas pipeline infrastructure. There is not a natural gas supply issue or an overreliance on natural gas but rather Connecticut and New England have insufficient infrastructure to deliver relatively inexpensive gas into the region. There are a number of estimates of the potential cost savings that range up to \$3 billion - \$5 billion (using winter 2013/14 as an example), which could pay off the investment in additional gas pipeline in a very short time horizon. Regulated gas local distribution companies (LDCs) have made investments in pipeline projects to reduce the cost of gas for direct home and business use; however, many competitive power generators have not made these investments due to the very different transactional timeframes for regulated pipelines versus competitive generators. Regulated interstate pipeline companies have shown no interest in transacting in the shorter timeframes necessary for generators to purchase pipeline capacity, and generators cannot justify making 10-20 year investments in pipeline infrastructure given the nature of the market structure in ISO-NE and the lack of guaranteed cost recovery which regulated electric distribution companies (EDCs) and LDCs enjoy.

EquiPower strongly supports market-based solutions, but when they fail to work due to transactional structure differences among the relevant business sectors and when there is a compelling value proposition that will benefit the overall economy of a region, we can support public/private partnerships that ultimately have elements of competitive markets. We may be the only power generator that has publicly supported¹ the investment in pipeline infrastructure through an electric tariff (wholesale or EDC) that is ultimately sold to electric generators in timeframes generators can accept given the market structure they must compete in. In our view this is a transactional bridge to a competitive market solution and would be a last resort solution that must be structured in a way so as not to unfairly impact the ISO-NE markets and competitive generators.

To that end, we believe that any public/private solution, whether region-wide or state-by-state, should have oversight from ISO-NE, to ensure that pipeline investment is sized to support only the natural gas supply needs of electric generators and is not used to undermine the competitive wholesale electric markets using regulated utility market power. In addition, there should be a transparent and open process, whether at FERC or at state regulatory agencies, fostering robust testimony and analysis of the pros and cons of such investment, including the costs to ratepayers.

There will be a strong lobby by anti-natural gas advocacy groups seeking to thwart investment in natural gas pipeline infrastructure on grounds ranging from the safety of pipelines to anti-fossil fuels to fracking risks.

¹ EquiPower comments to NESCOE dated May 13, 2014

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The U.S. Department of Transportation (which regulates interstate pipeline operations and oversees pipeline safety) reports that, “Pipelines are one of the safest and most cost-effective means to transport the extraordinary volumes of natural gas and hazardous liquid products that fuel our economy”². Natural gas is the lowest CO₂ emitting fossil fuel, and intermittent renewable resources are incapable of providing the baseload power necessary to run a reliable electric system. The fracking debate continues throughout the country, with varying views about its impact. We have been proponents of increased regulation and disclosure concerning the chemicals used in the fracking process. However, the reality is that there is very affordable natural gas available to Connecticut and New England, and the region cannot control fracking in other States. We believe Connecticut and New England must take advantage of this low cost gas if it is truly serious about reducing electricity costs and relieving its constituents of this unwarranted financial burden.

As for providing subsidies to renewable resources as envisioned in SB 1078, EquiPower supported the compromise which gave preference to the addition of up to approximately 800-1,000 MWs of renewable capacity (200 MWs of capacity credit) in the recent ISO-NE market rules changes as long as it excluded large, provincially owned hydro electric generation. Legislation here should not subsidize purported “clean, low-cost, hydroelectricity from Canada,” as the accuracy of those descriptions is questionable at best. A study funded by the Conservation Law Foundation (CLF) and performed by Synapse found that hydropower from newly flooded reservoirs produces more Greenhouse Gas (GHG) emissions than a natural gas fired combined cycle facility each year for up to three years after impoundment. Additionally, the overall lifecycle GHG emissions can be up to 2/3 that of a natural gas fired combined cycle plant.

Historically, large scale hydro has not been used to satisfy renewable requirements and certainly has not received subsidies from the States or utilities due to the significant environmental impacts (e.g., destruction of vegetation and life it supports and harm to water-borne life) on the region affected. Moreover, as a mature technology, large scale hydro does not need subsidies. Hydro-Quebec (HQ) does not have a renewable energy tracking system like New England and other regions do, so there is no way to know how “green” the energy exports from HQ really are. Data included in HQ’s Annual Reports indicate that only a fraction of the energy that is exported by HQ in a year comes from their hydro reservoirs –as low as 55% in some years.

The reality is that many New England States are contemplating using large scale hydro to meet lofty renewable energy standards, something not originally contemplated, instead of recognizing that traditional renewable resources (i.e. wind, solar) cannot meet the standards and adjusting those goals accordingly. A number of studies suggest new large scale hydro is questionable as appropriate investments to reduce green house gas and as sources for meeting renewable energy standards given that the process of constructing the facilities results in CO₂ levels as high as natural gas facilities in the initial years and, as stated above, nearly 2/3 of natural gas facilities over the life of the projects.

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http://phmsa.dot.gov/portal/site/PHMSA/menuitem.6f23687cf7b00b0f22e4c6962d9c8789/?vgnextoid=2c6924cc45ea4110VgnVCM1000009ed07898RCRD&vgnnextchannel=f7280665b91ac010VgnVCM1000008049a8c0RCRD&vgnnextfmt=print#QA_9. Retrieved March 16, 2015.

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Hydroelectricity from Canada will not be “cheap” as is often reported. Those reports only consider the marginal cost to produce hydroelectricity; however, the capital costs to build the facilities and the transmission required to deliver it to Connecticut and New England consumers are enormous. A 2012 PA Consulting Study estimated the cost of the transmission line to deliver hydroelectricity via Northern Pass (NPT) at more than 4.2 cents/kWh. Recently revised estimates for NPT indicate a project cost of approximately \$1.4 billion, \$300 million over the previous estimate of \$1.1 billion. The added costs are largely due to the need to bury additional portions of the line. This increase brings the cost of NPT to approximately 5 cents/kWh. Further increases to the NPT cost estimate will drive this even higher. This 5 cents/kWh is an average rate assuming the line will be used at a very high level. If, as is often asserted, the hydroelectric imports are adjusted up and down to complement the intermittence of renewable generation in New England to provide a “base load” product, the average loading on the line will go down and the average cost will go up. For example, if the line is loaded on average to 50%, the average cost of the transmission alone will be nearly 10 cents/kWh.

The cost of the electricity delivered via NPT (and paid to Canadian suppliers) would be additive and could bring the total delivered cost to between 11 and 15 cents/kWh, which is approximately double the 7 cents/kWh cost of energy from a new, efficient combined cycle natural gas generator sited in Connecticut and New England (we estimate over \$2 billion/year of excess cost versus new combined cycle natural gas generation). Additionally, the combined cycle natural gas generators would be located in Connecticut and New England, providing local jobs, and would be major sources of income and property tax revenue in their host states and municipalities. Unlike natural gas infrastructure, which would bring consumer costs down, bringing hydroelectricity in from Canada will drive consumer costs up and will reduce the number of new combined cycle generators constructed in New England. Hydroelectricity from Canada would also likely render existing Connecticut and New England generators uneconomic, thus hastening their retirement. Outsourcing both new and existing electric production by bringing in this Canadian hydro would produce jobs and tax revenue in Canada at the expense of the State of Connecticut and New England.

As mentioned above, subsidizing foreign sourced hydro generation will render some existing Connecticut and New England based electric generators uneconomic, increasing the region’s reliance on imports from Canada to from 14% to 17%³ and reliance on variable hydro from 17%, to 20%, the highest of any region in the U.S. California has experienced reliability issues in the past due to the intermittent nature of hydro, particularly during droughts. California had rolling brownouts in the early 2000s as a direct result of droughts and low hydroelectric production. At the time, California’s reliance on hydro was approximately 19%. Western North America has been experiencing drought conditions since 2012, which has caused serious concerns about electric reliability in California. Fortunately, California has avoided blackouts recently because it has added more than 14,000 MW of new natural gas generation since 2001. California has had no issues with reliance on natural gas fueled power plants as they have invested in adequate natural gas pipeline capacity, and it is now benefitting from the plentiful supply and low cost of natural gas.

³ With the addition of a 1,000 MW transmission line.

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We believe the Committee should refocus the legislation to allow Connecticut EDCs to contract for new natural gas pipeline capacity as it is the most impactful way to lower electricity costs for consumers but to reject efforts to enter into long term contracts for provincially owned hydroelectricity, which will significantly increase consumer costs, adversely impact indigenous Connecticut and New England generation including tax revenues and jobs, and harm the competitive electricity markets in New England. We also urge the Committee to ensure that any contracts for pipeline capacity are sized solely based on the need for natural gas to support power generation, with ISO-NE oversight, in order to avoid anti-competitive impacts on the ISO-NE market.

Submitted by,

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