**Comments Of**

**UIL Holdings Corporation**

Submitted Following Quadrennial Energy Review Task Force

Public Meeting Regarding Infrastructure Constraints in New England

April 21, 2014

Providence, Rhode Island and Hartford, Connecticut

Headquartered in New Haven, Connecticut, UIL Holdings Corporation is a diversified energy delivery company serving ~~a total of~~ approximately 700,000 electric and natural gas utility customers in 66 communities across two states, with combined total assets of over $5 billion.

UIL Holdings is the parent company for The United Illuminating Company (UI), Connecticut Natural Gas Corporation (CNG), The Southern Connecticut Gas Company (SCG), and The Berkshire Gas Company (Berkshire), each more than 100 years old. UI provides for the transmission and delivery of electricity and other energy related services for Connecticut’s Greater New Haven and Bridgeport areas. SCG and CNG are natural gas distribution companies that serve customers in Connecticut, while Berkshire serves natural gas customers in western Massachusetts. UIL Holdings employs more than 1,850 people in the New England region. UIL appreciates the opportunity to offer comments to the Quadrennial Energy Review.

As an operator of both electric and natural gas utilities, UIL, and our customers, are directly impacted by the energy related challenges that currently face New England. We believe that an expansion of the capacity and the capabilities our current energy network~~s~~ is necessary to ensure reliability, meet evolving customer needs, and reduce costs. The opportunity to make smart investments in our infrastructure with the support of innovative regulatory frameworks and collaborative regional policies can provide meaningful economic and environmental benefits. The primary drivers that should be addressed in this review include:

• The regional shift to natural gas for both heating and power production.

• The imminent retirement of generation capacity.

• Meeting customer expectations with grid modernization.

**Increased usage of Natural Gas for electric generation**

New England has experienced a dramatic shift in the source of energy used to fuel electric generation, and for the most part those changes have benefited customers in the form of lower energy prices driven by lower cost natural gas. In 2000, natural gas comprised 15 percent of the region’s generation output. Today, that output has risen to 46 percent. As reliance on natural gas generation increases, the historical approach that had provided generators an economical and reliable fuel supply has become, at times, constrained. This is because much of the gas fired generation market relies on excess gas pipeline capacity from the gas LDCs. For many years this approach worked because there was excess capacity available from LDCs which generally satisfied the demands of the generation market. Gas fired generators did not have to incur the cost ~~or~~ nor the contractual obligations associated with securing long term pipeline commitments because they could count on short term arrangements with an LDC.

However, the demands for natural gas for power generation during cold periods can no longer be satisfied with excess LDC supply due to the increase gas demand to serve residential and business markets. This situation threatens the reliability of the electric grid and exposes electric customers to extreme price increases and volatility. Consider that energy market costs were $5.05 billion during this past winter, compared to $5.2 billion for all of 2012[[1]](#endnote-1). The experiences of last winter will cause generators and market suppliers to increase forward prices to account for these growing risks, which will produce higher consumer energy prices. Recent solicitations for United Illuminating’s Standard Service Generation are already seeing this increase in wholesale power bids from suppliers.

UIL believes that without some type of intervention, the problems that were experienced this past winter will continue, and are likely to intensify resulting will be periods of very high cost, but even more concerning are the potential impacts on reliability.

**The imminent retirement of generation capacity.**

The regional energy challenges are further magnified by the impending and projected retirement of non-gas fired generation assets. Those assets, which have provided a reliable natural gas alternative during peak periods are now being forced into retirement due to Environmental regulations, economics, and age of the units. The Wholesale electric markets (including energy, capacity, and reserves) have not induced entry of highly reliable, large-scale, dispatchable alternative resources, nor have they incented gas-fired generators (existing or new) to sign up for firm gas transport/capacity. Coordination, communication, or LNG will not solve this problem – especially on a cold day. What is required is increased gas delivery infrastructure extending back to a highly liquid supply point. The problem is already critical, and since it takes several years to develop the necessary fuel transport infrastructure, we cannot wait and hope that the markets will eventually solve the problem. Also, ISO New England has already been forced to resort to temporary and expensive mitigation measures, e.g. the winter reliability program.

The New England Governors’ proposal is one possible way forward. There may be others, but they must be identified and committed to soon. UIL, partnering with other regulated utilities, is working with NESCOE and other parties to offer solutions. Electric distribution companies are the appropriate vehicles to bring low-cost natural gas into the market to benefit our electric customers, and ultimately the overall regional economy. Since electric restructuring we have relied on many regulatory tools to ensure our markets work and energy policy goals are met. Consider for example Reliability Must Run (RMR) contracts and long-term renewable Purchase Power Agreements (PPA). UIL supports the NESCOE proposal to use an ISO tariff and Capacity Manager Concept to address this crisis and expedite the construction of needed gas infrastructure.

**Meeting Customers’ Demands: Grid Modernization**

The expectations and needs of our customers continue to evolve. Technology advances, policy driven incentives, and other factors have, and will, continue to modify the level and type of service that customers require. UIL has responded by making investments in the modernization of our grid, and the services we deliver to be responsive, flexible, and more resilient.

Today’s power system was designed for a one way flow of electricity from power plant to substations to customers. The integration of Distributed Generation (DG), especially intermittent resources like solar, can result in many operational challenges. While there are technical solutions that can overcome these challenges, it will require policy level decisions to allow the deployment of solutions that can make the distribution system more interactive to meet future DG needs. UI supports a quantitative assessment of the costs and benefits associated with DG. This will enable policy makers to have the information necessary to make informed decisions regarding cost and benefit allocation among all consumers who are connected to the distribution system.

Under today’s volumetric energy based rate design, cross subsidization and cost shifting occurs from participants to non-participants. DG customers usually require the grid to meet some of their needs, but often avoid their share of fixed infrastructure costs, placing them on other customers. These issues, combined with the necessary investment and management of a more dynamic energy grid, will require the engagement of policy makers and all stakeholders to resolve.

In Closing, UIL is fully engaged and committed to enhancing the energy networks that our vital to our customers. We thank you for this opportunity to share our perspectives.

1. \*ISO-New England, Cold Weather Operations, April 2014 [↑](#endnote-ref-1)