

**STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION**

DOCKET NO. DE 16-___

**PETITION FOR APPROVAL OF A LONG-TERM CONTRACT
FOR NATURAL GAS INTERSTATE PIPELINE CAPACITY**

**DIRECT TESTIMONY OF
TILAK SUBRAHMANIAN**

February 18, 2016

1 **Q. Please state your name and business address.**

2 A. My name is Tilak Subrahmanian. My business address is One NSTAR Way, Westwood,
3 Massachusetts.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am the Vice President of Energy Efficiency for Eversource Energy Service Company,
6 which provides services to the operating subsidiaries of Eversource Energy including
7 Public Service Company of New Hampshire d/b/a Eversource Energy (“Eversource”).¹

8 **Q. Please describe your education and professional background.**

9 A. I have been employed by Eversource Energy or its corporate predecessor since 2009,
10 holding various positions of increasing responsibility. I have held the position of Vice
11 President, Energy Efficiency since March 2013. I have a B.Tech Engineering Degree
12 from the Indian Institute of Technology, Madras, a Master of Business Administration
13 from the University of Michigan Stephen M. Ross School of Business, and a Master’s
14 Degree in Engineering from the University of Washington. As Vice President, Energy
15 Efficiency for Eversource Energy, I oversee one of the largest energy efficiency
16 portfolios in the industry, serving more than 3.5 million electric and natural gas
17 customers in three New England states.

18 **Q. Have you previously testified in any formal hearings before regulatory bodies?**

19 A. Yes, but not in New Hampshire.

¹ The term “Eversource Energy” will refer to the parent company of Eversource in this proceeding.

1 **Q. What is the purpose of your testimony?**

2 A. Eversource administers energy efficiency programs pursuant to New Hampshire law. My
3 testimony will describe the role that these Energy Efficiency programs play in the
4 evaluation of the resource alternatives for the development of natural gas transportation
5 and storage capacity.

6 **Q. Is Eversource sponsoring other witnesses to support this filing?**

7 A. Yes. The testimony of Mr. James G. Daly, Vice President of Energy Supply for
8 Eversource Energy Service Company provides an overview of the Companies' filing
9 requesting approval of two infrastructure contracts with the Algonquin Gas Transmission
10 Company for the proposed "Access Northeast" project. Mr. Daly's testimony provides a
11 listing of the testimonies offered in support of the proposed contracts.

12 **Q. Please describe the Energy Efficiency programs administered by Eversource in New**
13 **Hampshire.**

14 A. Eversource currently operates comprehensive energy efficiency programs targeting the
15 residential, low-income, and commercial and industrial ("C&I") customer sectors, and
16 generally referred to in New Hampshire as the "Core Programs." These programs are
17 presently operated pursuant a plan approved by the Commission in Docket No. DE 14-
18 216, and the Commission's approval of our 2016 plan to invest \$17.5 million and deliver
19 over 550,000 MWh of savings for our customers. Eversource is also actively involved in
20 the on-going Docket No. DE 15-137, investigating the potential to capture additional
21 cost-effective energy efficiency opportunities. Eversource is optimistic that this process
22 will deliver results that benefit our customers in New Hampshire.

1 **Q. Are electric energy efficiency resources dispatchable?**

2 A. With the exception of Combined Heat and Power (“CHP”), energy efficiency resources
3 are predominantly non-dispatchable. Moreover, CHP resources, if dispatched, tend to be
4 fired by natural gas, so dispatching these resources to alleviate a gas pipeline constraint is
5 simply reducing consumption at one gas-fired electric generation resource, and increasing
6 it at another.

7 **Q. Given the need for natural gas expansion and the requirements of the Eversource**
8 **request for proposals in this proceeding for a regional scale solution in the order of**
9 **0.5 to 2.0 BCF, does incremental Energy Efficiency have the ability to meet this level**
10 **of response?**

11 A. 0.5 BCF is roughly equivalent to 2,500 MW. To help understand the magnitude of that
12 number, ISO-NE data reports that New Hampshire’s 2015 peak load was 2,219 MW.
13 The 2,500 MW offered by the pipeline solution is a level of capacity that is larger than
14 New Hampshire’s peak load, and dramatically larger than what our energy efficiency
15 programs could deliver. I can confidently say that while there is potential for more
16 ambitious energy efficiency programs in New Hampshire, there is no practical path for
17 energy efficiency to materially affect the identified need for additional pipeline capacity.

18 **Q. Does this conclude your testimony?**

19 A. Yes, it does.