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

KEVIN R. PETAK
ICF INTERNATIONAL

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I. INTRODUCTION

Q. Please state your name, position and business address.

A. My name is Kevin R. Petak. I am a Vice President, Energy Advisory Services at ICF International ("ICF") and practice leader for the firm's Natural Gas and Fuels Market Practice. My business address is 9300 Lee Highway, Fairfax, VA 22031.

Q. On whose behalf are you testifying?

A. I am testifying in the above-referenced proceeding on behalf of Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource" or the "Company").[1]

Q. Please summarize your professional and educational background.

A. I have over 30 years of experience in the energy industry. I have directed numerous energy market analyses to support strategic planning needs at energy companies, including natural gas producers, pipelines, and energy marketing affiliates. These analyses have investigated the impact of pipeline expansions and growing gas supply on gas prices, the effect of weather on gas markets, strategies to comply with stricter emissions regulations, and the use of alternative fuels to assure system reliability. These analyses have been widely used to support facilities/fuels/contracts management and planning, mergers and acquisitions, investment decisions, risk management, and hedge strategies.

I have directed a number of recent studies on the impact of new natural gas pipelines in the Northeast. In particular, I have supported the ISO New England, Inc. over the last

[1] The term "Eversource Energy" will refer to the parent company of Eversource.

five years, by assessing the supply capability to satisfy winter and summer peak day demand in New England, including all gas demand. The analysis included a detailed look at the pipeline infrastructure and LNG peak-shaving capabilities. I have supported a number of testimonies recently submitted by ICF colleagues that address the impact of natural gas pipelines on markets.

I graduated from The Pennsylvania State University, State College, Pennsylvania in 1984 with a Bachelor of Science degree in Petroleum and Natural Gas Engineering. I worked for nine years from 1984 to 1993 as a Reservoir Engineer with Halliburton Company, where I was responsible for reservoir, well test, and fracturing analysis. While I was employed at Halliburton, I joined a graduate program at The University of Texas at Dallas, Dallas, Texas, and earned a Master of Science degree in Management Administrative Sciences in 1992.

I was hired by Energy and Environmental Analysis, Inc. ("EEA") as a Project Manager in 1993. Between 1993 and 2006, I was employed full time by EEA, rising to the position of Director, Natural Gas Market Analysis. EEA was acquired by ICF International in 2006, and I have been employed full time by ICF International since the acquisition was completed in 2006.

A copy of my resume is attached hereto as Attachment EVER-KRP-1.

Q. Please describe ICF International?

A. ICF International is a consulting firm providing expertise in Energy, Environment, and Infrastructure; Health, Social Programs, and Consumer/Financial; and Public Safety and

Defense. Over the past 40 years, ICF has become one of the largest policy/management and technical consultants to the North American electric, natural gas and oil industries. In the North American power sector, ICF supports both private and public sector clients. In the public sector, ICF has been the principal power consultant to the U.S. Environmental Protection Agency ("EPA") continuously for over 30 years, specializing in the analysis of the impact of air emission programs, especially cap and trade programs. ICF has also worked with the U.S. Department of Energy ("DOE"), Federal Energy Regulatory Commission ("FERC"), Environment Canada, and numerous foreign governments. State regulators and state energy agencies with which ICF has worked include those in California, Connecticut, Kentucky, New Jersey, New York, Ohio, Texas, and Michigan.

For private sector electricity clients, ICF has supported such companies as Dominion Virginia Power, Duke Energy, FirstEnergy, Entergy, Public Service Company of New Mexico, AEP, Southern California Edison, PEPCO, Sempra, PacifiCorp, Otter Tail Power, Manitoba Hydro, PPL, and Tucson Electric. ICF also provides assistance to financial institutions and private equity firms including Credit Suisse and First Reserve Corporation, power marketers including Mirant, fuel companies including Peabody Coal Company, and independent power producers including Sithe Global Power, Kelson Energy and NRG.

In the natural gas and oil sector, ICF has supported such companies as National Grid, PSE&G, Consolidated Edison, Spectra, Kinder Morgan, Union Gas, DTE Energy, Vector

Pipeline, Dominion Energy, Cabot Oil and Gas, and Range Resources. ICF also provides assistance to financial institutions, such as Energy Capital Partners, PSP Investments, and Brookfield Investments. ICF has also served as consultants to the U.S. Department of Energy, the Federal Energy Regulatory Commission, and the U.S. Environmental Protection Agency as well as government agencies in Canada, India, Mozambique, Qatar, and the European Union. ICF undertakes special studies for industry organizations and NGOs such as the American Petroleum Institute, Interstate Natural Gas Association of America, and America's Natural Gas Alliance, Natural Resources Defense Council, and Environmental Defense Fund, among others.

II. PURPOSE AND KEY CONCLUSIONS

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to sponsor the report titled, "*Access Northeast Project - Reliability Benefits and Energy Cost Savings to New England Consumers*," included as Attachment EVER-KRP-2 in this proceeding.

ICF was engaged by Eversource to provide an independent assessment of the potential impacts of the proposed Access Northeast gas infrastructure project on New England's natural gas and electric markets. In particular, ICF's analysis focuses on the impact that new infrastructure may have on regional gas and electricity prices, and the associated economic impacts on consumers. The assessment includes an independent evaluation of the electric consumer benefits that occur from lower gas prices that result from the proposed Access Northeast project.

Q. Are you sponsoring exhibits in this proceeding?

A. Yes. In addition to my testimony, I am sponsoring the following:

Attachment	Description
EVER-KRP-1:	Curriculum Vitae for Kevin R. Petak
EVER-KRP-2:	ICF Report "*Access Northeast Project - Reliability Benefits and Energy Cost Savings to New England Consumers.*"

Q. Please summarize your principal conclusions.

A. As the ICF report states, Access Northeast, as it is proposed, would generate significant cost savings to New England electric consumers by reducing the price of natural gas delivered to New England power generators, and subsequently, wholesale energy prices in all New England states. ICF's modeling estimates that Access Northeast, as proposed, would save New England electric consumers between $1.4 to $1.9 billion (all values nominal dollars) per year on average (from 2019 through 2035) under normal weather conditions, and about $3.1 billion annually if New England experiences a winter with design conditions and a nuclear plant outage. About 10 percent of the benefits accrue to consumers in New Hampshire. Taking into account the cost of the pipeline, the net benefits to New England electric consumers would range from $0.9 to $1.3 billion per year on average, under normal weather conditions. Additional details are provided in Attachment EVER-KRP-2.

In my opinion, New England needs incremental firm natural gas supplies for the electric sector during winter months due to the region's increased reliance on gas-fired power

generation. Currently, diminishing gas-supply sources for New England increase consumer exposure to non-firm gas supplies. Production in offshore Nova Scotia is declining, with reduced flows into New England on the Maritimes and Northeast Pipeline ("M&NP"), particularly during the winter, and LNG imports into Canaport and Everett are increasingly reliant on non-firm contracts. At the same time, New England would benefit from greater access to the growing production in the Marcellus and Utica production basins in Pennsylvania, West Virginia, and Ohio. Access Northeast would provide such access to this relatively low-cost resource.

Q. Are there any other benefits associated with the Access Northeast project?

A. Yes, as discussed in the ICF report (Attachment EVER-KRP-2), there are additional benefits for electric consumers in New Hampshire. Access Northeast could enhance New England's grid reliability and complement the ISO-NE's market improvements to incentivize generation availability. Access Northeast can potentially serve 6,900 MW, or nearly 70 percent of the region's existing natural gas fired power generation capacity interconnected to the pipeline system and operating without backup fuel capability. By providing secure fuel supplies to these generators, Access Northeast could significantly improve electric reliability across the grid and potentially help the region avoid costly load shedding measures under extreme circumstances. Furthermore, Access Northeast could provide services that are designed to follow hourly gas load variation of power plants as electric load and gas-fired generation fluctuate throughout the day. By allowing generators to better follow the hourly gas load variations, Access Northeast would help

ISO-NE meet its system reliability mandate and help power plants avoid shortage penalties associated with ISO-NE's "Pay for Performance" program.

Lastly, due to the intermittent nature of wind and solar generation, additional quick response resources, such as natural gas combustion turbines, are needed as renewables' share of total generation increases. Access Northeast would be well-positioned to provide fuel supplies to ensure that generators have a reliable fuel supply when renewable resources are not generating due to their intermittent nature.

Q. Does this conclude your testimony?

A. Yes, it does**.**