

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7970

In Re: Petition of Vermont Gas Systems, Inc., requesting a certificate of public good, pursuant to 30 V.S.A. Section 248, authorizing the construction of the “Addison Natural Gas Project” consisting of approximately 43 miles of new natural gas transmission pipeline in Chittenden and Addison Counties, approximately 5 miles of new distribution mainlines in Addison County, together with three new gate stations in Williston, New Haven and Middlebury, Vermont

**RESPONSE OF VERMONT FUEL DEALERS ASSOCIATION TO
ESTIMATE OF INCREASE IN PHASE I CAPITAL COSTS**

The Vermont Fuel Dealers Association (“VFDA”) submits these comments in response to the Board’s Order of January 2, 2015, which solicited comments of the parties on the Department’s Rule 60(b) motion and the response and motion of Mr. Palmer.

As the Board knows, Vermont Gas Systems’ (VGS’) latest increase filing brings the cost of Phase I to almost double the cost on which the Board’s Final Order of December 23, 2013 was based. VGS has promised, but so far hasn’t provided, justification for the most recent increase. The VFDA submits that, under the circumstances, the Board has an obligation to revisit the economic impacts of the project. Reconsideration pursuant to the Rule 60(b) motion or, alternatively, an inquiry initiated by the Board is appropriate. Furthermore, recent sea changes in the economics of the energy market make the premises of the Board’s Final Order obsolete.

Although VGS has not disclosed the basis of its latest increases, the VFDA believes it is appropriate to offer observations on the effects of current and projected energy costs on the economics of the project. The following VFDA commentary is intended to illustrate the consequences of sticking with the original Final Order. The comments draw from proof that was offered by the VFDA at the original hearings, but not given weight by the Board in its Final Decision, together with illustrative data and calculations based on today's markets. The VFDA projections have turned out to be prescient, as proven by current market forces.

In short, claims that homeowners can cut their bills in half by converting from oil heat to utility gas are not credible, especially in today's markets. Any purported economic benefit attributed to the project has vanished.

In the July 2013 hearings in this docket, the VFDA's filing questioned the economic savings claimed by VGS through oil to gas conversions. It is valuable to revisit some of the points made by the VFDA witnesses in light of the increase in pipeline construction costs and the decreased cost of oil heat. It is also critical for the Board to review conversion cost estimates when determining whether the savings suggested by VGS actually exist.

VFDA's Positions Have Proven Correct

VFDA's economic expert characterized the economic assumptions by VGS as "irresponsible and naive." In the 18 months since that statement was made, construction costs for the Addison County natural gas pipeline have increased by nearly 100% while the cost of crude oil has decreased by 50%. As stated by the VFDA, the price of natural gas was relatively low at the time of comparison because producers developed new supplies, particularly in Pennsylvania where hydraulic fracturing in the Marcellus Shale had depressed the commodity price. VFDA's contention then and now is that markets will develop to absorb the increased natural gas supplies, supply and demand will equalize, and prices will rise. The commodity also has upward price pressure from three rapidly developing markets. One is

electricity generation in the U.S., where many electric utilities are switching from coal to natural gas. As a larger share of natural gas supply is diverted to power suppliers, prices for residential customers will likely increase. Another likely driver of higher natural gas prices is the liquefaction and export of U.S. natural gas supplies. According to FERC, there are now 11 LNG export terminal operating in the United States.¹ Finally, expanded use of natural gas in transportation and manufacturing will create upward pressure on prices.

In VFDA's 2013 economic filing, it was noted that the U.S. oil and natural gas markets are undergoing significant and rapid changes that have both domestic and global implications. The VFDA urged all parties not to use the commodity price differential cited in the November 2012 Vermont Fuel Price Report as the basis for a twenty year economic analysis. VFDA's economic expert predicted that the price differential cited in the November 2012 report was unlikely to persist. A far more likely scenario was that the price gap between utility gas and oil heat would narrow. ***This is precisely what happened.***

In February of 2014, the Henry Hub natural gas spot price spiked to \$6 per million BTU, nearly double the cost at the same month in 2013.² As suggested by VFDA in its testimony and exhibits, the increased use of natural gas for power generation led to the price spike. As stated by Vermont Public Service Commissioner Chris Recchia, existing gas-fired generators in New England have trouble finding adequate supplies during the winter heating season.³

The economic expert for VGS predicted that the cost of oil would increase. In fact, it has dropped like a stone. This was not a surprise to anyone that read VFDA's prefiled

¹ Federal Energy Regulatory Commission <http://www.ferc.gov/industries/gas/indus-act/lng/exist-term.asp>

² Energy Information Administration <http://www.eia.gov/dnav/ng/hist/rngwhhdm.htm>

³ WCAX-TV, December 18, 2014. Found here: <http://www.wcax.com/story/27660882/some-see-gas-as-replacement-for-vermont-yankee>

testimony in July of 2013, which stated, “U.S. crude oil prices could drop [to] as low as \$50 a barrel within the next two years.”⁴

*Eighteen months later — on January 9, 2015— crude traded at \$47 a barrel.*⁵

Furthermore, energy experts have suggested that the trends experienced over the last six months will continue over the next decade. According to the Energy Information Administration, the U.S. could soon rival Saudi Arabia as the world’s leading supplier of crude oil. Energy experts say the era of \$100 oil is over and that prices could drop as low as *\$20 a barrel.*⁶ Higher domestic production makes the U.S. less dependent on foreign oil and drives down the price of refined products like heating oil. An analysis by Lindemer shows further evidence of higher natural gas prices and lower oil prices in the near term.⁷

VGS’ Positions Have Proven Very Wrong

VGS’ economic arguments and public relations campaign are built on numbers written in sand. VGS claims that homeowners and businesses in Addison County who convert from oil heat to natural gas will save \$200 million over 20 years.⁸ This is based on commodity costs that are no longer relevant and conversion costs that have never been credible.

In most homes a full conversion, not just a burner change, is necessary in order to achieve efficiency gains needed to deliver savings predicted by VGS. There are expenses associated with a full conversion beyond the price tag on a new gas boiler or furnace. All oil to gas conversions must abide by regulations established by the Vermont Department of Public

⁴ Prefiled Testimony of Eugene Guilford on behalf of VFDA. July 2013. Found here: <http://psb.vermont.gov/sites/psb/files/docket/7970addison/VFDA/VFDA%20Guilford.pdf>

⁵ Bloomberg News. January 9, 2015 Found here: <http://www.bloomberg.com/energy/>

⁶ Bird, M. Business Insider. (January 6, 2015) <http://www.businessinsider.com/how-low-can-oil-prices-go-2015-1>

⁷ Lindemer, K. (2013, March) An Analysis of the Oil and Natural Gas Markets. Found here: <http://govbc.net/analysis%20of%20oil%20and%20gas%20markets%20final%20031113%20Lindemer%20LLC.pdf>

⁸ VT Gas Media Release: <http://www.hinesburg.org/vt-gas-project/vt-gas-supplemental-filing-media-release-022813.pdf>

Safety, Division of Fire Safety⁹ and the Vermont Agency of Natural Resources, Department of Environmental Conservation.¹⁰ This means the fuel tank must be removed and the chimney lined. Fill and vent pipes can not be capped, they must also be removed in accordance with Vermont's AST regulations. When the fuel tank is removed, excess oil must be disposed in an environmentally safe manner. While an analysis in Massachusetts concluded that a full conversion cost can exceed \$18,000. *See chart below.*

	Cost Estimates
New Gas Boiler	\$8,000
Tank removal and remediation	\$500
Chimney upgrades	\$1,500
In house gas piping	\$2,000
DHW indirect HW tank	\$2,500
Gas Service line and meter set	\$4,283
Total Conversion Cost	\$18,783

Source: Massachusetts Department of Energy Resources (DOER) Natural Gas Expansion Study: Stakeholder Response. Energy Partners, December 2013. <http://govbc.net/natgasmassstudy.pdf>

While this is on the high end, a full conversion cost in Vermont is typically between \$8000 and \$12,000, according to an informal survey of heating service companies, depending on the make and model of the new gas equipment. At a conversion cost of \$10,000 it would take more than 20 years for homeowners who convert to gas to receive a return on their investment, based on current prices.¹¹ *See chart below.*

Fuel	Per unit cost	BTU Content per unit	BTU's consumed per year	Units Consumed per year	Annual Access Fee	Annual Assistance Program Fee	Total Annual Heating Bill	Average Conversion Cost	ROI (years)
VT Average Retail Oilheat Price (1/5/15)	\$2.81	138,690	90,148,500	650 gallons	\$0.00	\$0.00	\$1,826.50	—	
VGS Regulated Price	\$1.2305	100,000	90,148,500	901 therms	\$248.53	\$16.68	\$1,373.89	\$10,000.00	22

Conclusion

The VFDA maintains that it is imperative for a realistic assessment of this project that the economics be revisited.

⁹ 2012 Vermont Fire Code. http://firesafety.vermont.gov/sites/firesafety/files/pdf/Code%20Info%20Sheets/2012_firecode.pdf

¹⁰ AST Rules <http://www.anr.state.vt.us/dec/wastediv/ust/regs/ASTRules.pdf>

¹¹ Energy Information Administration http://www.eia.gov/dnav/pet/pet_pri_wfr_a_EPD2F_PRS_dpgal_w.htm

Given the above economic considerations, it is highly unlikely that Addison County homeowners that currently use oil heat will convert to natural gas. This is amplified by the growth in wood pellet stoves and cold climate electric heat pumps over the past several years. These supplemental heat sources and efficiency measures have and will continue to reduce per home consumption of traditional heating fuels. As the cost and consumption of oil heat declines, the homeowner will suffer economically by converting to utility gas.

VFDA does not have an opinion on whether it makes economic sense for VGS and its parent company, Gaz Metro, to invest \$154 million into a 41 mile pipeline that hopes to serve a few thousand customers in Addison County. However, VFDA respectfully asks the PSB to examine current commodity and relevant conversion costs when assessing the economics of the expansion project. Furthermore, if any economic value is attributed to the environmental impacts of oil to gas conversions, VFDA asks that the PSB use low sulfur oil heat as a point of comparison, not #6 oil used by International Paper.¹²

DATED: January 12, 2015

Respectfully submitted,

VERMONT FUEL DEALERS ASSOCIATION

By _____
Richard H. Saudek, Attorney

¹² All Vermont consumers are required by law to use low sulfur oilheat. The Vermont Oilheat Clean and Green Initiative in went into effect on 7/1/2014. The requirement is found in Section 5-221 of the Vermont Air Pollution Control Regulations.

