STATE OF NEW HAMPSHIRE BEFORE THE PUBLIC UTILTIES COMMISSION

DG 15-289

LIBERTY UTILITIES

Petition for Franchise Approval

PREFILED DIRECT TESTIMONY OF TOM EVSLIN On Behalf of NG ADVANTAGE LLC

January 22, 2016

1	Q.	Please state your name and business address.
2	A.	My name is Tom Evslin. My business address is: NG Advantage LLC, 480 Hercules
3		Drive, Colchester, VT 05446.
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5 .	Q.	Please state your position at NG Advantage LLC.
6	A.	I am the Co-Founder, Chairman and CEO of NG Advantage LLC ("NG Advantage" or
7		"NGA").
8	Q.	Please summarize your professional experience and education.
9	Α.	Except for brief stints of public service, I have been a successful entrepreneur. I have
10		recognized opportunity in disruptive change and created new products and services to
11		serve new and existing industries. In the public sector, I was recently volunteer Chief
12		Technology Officer for the State of Vermont and Chief Recovery Officer (Stimulus Czar)
13		responsible for coordinating Vermont's use of federal Stimulus Funds. In the 1980s, I
14	ŧ	was Secretary of the Vermont Agency of Transportation.
15		My business experience includes founding and serving as CEO of ITXC Corporation, a
16		NASDAQ-listed company that grew from a startup in 1997 to the world's leading
17	1 13 4 41	provider of wholesale voice over internet protocol ("VoIP") service with a presence in
18		over 175 countries. ITXC became one of largest carriers of international voice service of
19	12	any kind, and in 2004, Deloitte & Touche named ITXC the Fastest Growing Technology
20	+ A ₄ 1	Company in North America.
21		Before founding ITXC, I conceived, launched, and ran AT&T's first internet service
22		provider - AT&T WorldNet Service. Prior to my employment with AT&T, I worked at
23		Microsoft where I was responsible for the development and initial marketing of Microsoft

1		Exchange and Outlook. I went to Microsoft when key assets of Solutions, Inc. (a
2		Vermont software company I founded and ran) were sold to Microsoft. In the 1970s,
3		Solutions developed the first commercial electronic transfer of funds software for banks.
4		In the 1980s, Solutions was the first developer of commercial communications software
5		for the Macintosh computer.
6		I have a bachelor's degree <i>cum laude</i> in American History and Literature from Harvard
7		College in Cambridge, Massachusetts. I am an inventor and hold eight United States
8		patents.
9	Q.	Please describe NG Advantage's business and experience with "island" local
10		distribution companies ("LDCs").
11	Α.	In 2013, NG Advantage became the first company in the United States to provide regular
12	4.3.	deliveries of trucked compressed natural gas ("CNG") to commercial and industrial
13		companies located beyond the reach of natural gas pipelines. Today, NGA operates the
14	.042%	largest trucked CNG service in the United States. NGA serves 26 customer sites from
15		two compressor locations: one in Milton, Vermont and the other in Pembroke, New
16		Hampshire. NGA's direct customers include four hospitals, seven asphalt plants, six
17		paper mills, and miscellaneous other businesses. NGA's delivery of approximately 16
		truckloads/day of CNG to International Paper is the largest such "virtual pipeline" supply
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19		chain in the US.
20		Since January 2014, NGA has also been providing service to a "gas island" operated by
0.4		an I DC in Middlehumy Verment which is not yet connected to a transmission nineline

1	•	The "gas island" is distribution pipe owned by Vermont Gas System ("VGS"). NGA
2		trucks gas to the site and injects it into the distribution pipe. The gas is metered and
3		delivered by VGS to industrial/commercial customers in Middlebury including Agri-
4		Mark and Middlebury College.
5		In the fall of 2016, Clean Energy Fuels purchased a majority interest in NGA. Clean
6		Energy is the largest provider of both CNG and liquefied natural gas ("LNG") for
7		transportation in the United States. Clean Energy also operates two liquefaction plants
8		and has offtake agreements with many other customers nationwide. Clean Energy and
9.		NGA have developed plans for hybrid CNG/LNG installations which need the economies
10		of CNG but also must be secure in knowing that they will have natural gas at the burner
11		tip at all times, and therefore cannot use an alternate fuel.
12	Q.	What is the purpose of your testimony?
13	A.	The purpose of my testimony is to provide the New Hampshire Public Utilities
14		Commission ("the Commission") with information that supports the position that the
15		award of any natural gas distribution franchise in Hanover/Lebanon should be
16		conditioned on the gas utility's obligation to construct its facilities to support dual fuel
17		(i.e. CNG and LNG) capability and the requirement that the utility procure its natural gas
18	÷	supplies through fair and open competitive bidding processes.
19	Q.	What is NGA's position on Liberty's franchise petition for the Hanover/Lebanon
20		area?

While NGA would like to see the Commission award a franchise for LDC natural gas service in this geographic area and potentially others in New Hampshire, NGA is agnostic as to whom the franchise is awarded. We would like to see the gas island/LDC actually get built and succeed. NGA believes that a "gas island" LDC in the Hanover/Lebanon area can be a significant benefit to large energy users like Dartmouth Hitchcock and Dartmouth College as well as smaller operations and residential users. There is an enormous environmental advantage in moving from oil products to natural gas, not just in carbon dioxide reduction but also in elimination of particulate matter and sulfur dioxide. There is also an economic advantage.

Based on NGA's experience with gas island LDCs, what issues does NGA believe the Commission should consider as it reviews a franchise petition for a gas island LDC?

From NGA's experience with CNG and LNG, we believe that the Commission should not approve a franchise of a gas island LDC that proposes using an LNG-centric design such as that presented by Valley Green in its franchise filing, Docket DG 15-155. As NGA has indicated in its prefiled testimony in that docket, such a proposal will result in an energy supply significantly more expensive than competing oil-based products - including propane - and also significantly more expensive than the CNG service provided to Dartmouth Hitchcock today by one of our competitors and to the Pike Plant in West Lebanon by us. The landmark customers will not pay a large premium to move to the proposed LDC system, and small customers will not invest the capital necessary to convert from oil products to natural gas if the natural gas supply is more expensive than their current fuel.

Please explain further your concerns about an LNG-centric gas island LDC? Q.

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Our concern is based on the cost of LNG relative to the cost of both oil and CNG. 2 A. Typical quotes for delivery of LNG to the proposed franchise area are in the range of 3 \$13/mmBtu. This is the equivalent of \$2.00/ gallon for #6 oil (which is currently 4 available to large users at about \$1.214/gallon), or \$1.80/gallon for home heating oil 5 (which is currently available at \$2.23 or less to consumers). Because a gas island LDC 6 must recover not only its O&M costs but also the capital to build the pipeline, it is likely 7 that all-in distribution rates will be significantly higher than the price paid for LNG 8 supply. Given that LNG supply costs are higher than those for #6 oil and close to the 9 price of retail home heating oil, it is unlikely that customers would switch to higher-10 priced alternative fuel and delivery service offered by a gas island LDC. NGA or its 11 competitors could deliver CNG to the Lebanon area in the quantities required by a built-12 out gas island/LDC for as low as \$6 or \$7/mmBTU in the summer and perhaps a dollar 13 more in the winter based on today's natural gas index prices, and assuming the offloading 14 equipment is owned by the utility. NGA does not know what price Dartmouth Hitchcock 15 is currently paying for CNG but we are reasonably confident that it is significantly less 16 than the delivered price of LNG even before pipeline delivery charges are added. NGA recognizes that CNG alone is not sufficient to meet the reliability needs of a utility with small business and residential customers. There will be a need for LNG as a backup fuel. However, the economics of a successful gas island LDC service depend on the expensive LNG being used ONLY as backup fuel if the CNG supply is interrupted for any reason. If a gas island LDC constructs expensive LNG infrastructure and builds a

system into which CNG cannot easily be introduced, it is unlikely that the LDC would move toward CNG supply in the future. Therefore, NGA believes it is necessary to design a hybrid CNG/LNG system at the outset, in order to obtain the economies of CNG along with the reliability of LNG. The gas island LDC must have a competitive service offering to incent customers to sign up. A competitive service requires the economies afforded by a CNG base supply. Given current oil and CNG prices, this is not possible with an LNG-only supply.

Q. In addition to system design, does NGA have any other concerns related to the operation of a gas island LDC in the Hanover/Lebanon area?

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- Yes. NGA is also concerned that a gas island LDC utility cannot meet its responsibility to 10 A. its customers to provide service at just and reasonable rates if it does not adhere to a 11 policy of procuring supply through a truly competitive process. When gas is procured 12 from a transmission pipeline, a utility can easily compare the prices at various hubs and 13 the transportation tariffs of various pipelines and obtain a least-cost supply of gas. There 14 is no similar transparent market for either trucked CNG or LNG. However, there are 15 highly competitive markets for both CNG and LNG, and the only way to assure the best 16 price for customers is to solicit bids through a competitive procurement process. 17
- Q. If the Commission awards a gas island utility franchise to Liberty for the
 Hanover/Lebanon area, what if any conditions does NG Advantage believe the
 Commission should impose?
- A. NGA believes that two conditions ought to be attached to any franchise granted for a gas island LDC in New Hampshire:

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2		or it will be uncompetitive with today's oil prices, and generally
3		uncompetitive with trucked delivery of CNG directly to the anchor customers.
4		If the anchor customers don't sign up for LDC service, there will be no
5		service for anyone. The exact mix of CNG and LNG should at least partially
6		be determined during the bidding process or dynamically as prices change.
7		2. A competitive process must be followed for trucked delivery of natural gas to
8		the gas island (either LNG or CNG). The reason for this condition is that in
9		the absence of the transparency that exists with gas pipeline purchases, neither
10		the utility nor the Commission can be certain that ratepayers are paying a
11		reasonable price for trucked LNG or CNG without competitive bidding.
12	a	Fortunately, both the LNG and CNG trucking businesses are fiercely
13		competitive so there should be multiple bids. For best results, bids should be
14		allowed that reflect scenarios in which the truckers own the storage and
15		offloading equipment and in which the utility owns these assets.
16	Q.	Does this conclude your testimony?
17	A.	Yes.

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