

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

VALLEY GREEN NATURAL GAS, LLC

Petition for Franchise in the City of Lebanon and Town of Hanover

DW 15-

Direct Pre-filed Testimony of Kenneth H. Stanley

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May 1~~5~~⁴, 2015

1 Q. Please state your name and business address.

2 A. My name is Kenneth H. Stanley. My business address is 38 Resnik Rd, Suite # 102,
3 Plymouth, MA 02360.

4 Q. By whom are you employed and what position do you hold?

5 A. I am President and CEO of TRI-MONT Engineering, Co. ("TRI-MONT").

6 Q. Please describe your educational background and business experience.

7 A. I attended the following programs:

8 Lowell University - B.S. Studies in Civil Engineering;

9 Central New England College - B.S. Studies in Survey Engineering;

10 Quinsigamond Community College - A.S. Studies in Business Administration;

11 NCO Prep. Leadership School - Dyess AFB, TX-Distinguished Graduate Honors (1984);

12 Air Traffic Control Operator, Keesler AFB, MS;

13 Combat Control Team Operator & Special Forces/Ops Team Member Pope, AFB, NC;

14 and

15 Motorola Government Electronics Group-Navigation, Navigational Aids & GPS

16 Positioning.

17 As President and CEO of TRI-MONT, I lead the firm in its services in the field of energy
18 development, such as development efforts involving alternative/biomass fuel supply, bulk fuel
19 storage, power generation, steam generation, and natural gas infrastructure development
20 including transmission, distribution and storage.

21 I have over 28 years of engineering consulting experience. Prior to joining TRI-MONT in
22 January 2012, I was an Owner and Vice President at Coler & Colantonio, Inc. in Norwell, MA, a
23 medium-to-large engineering firm whose duties included the oversight of a 125-person energy

1 Infrastructure Consulting Group (23 years). This group supported the natural gas, oil, products
2 and electric, transmission, distribution and storage industries. These efforts involved multiple
3 engineering services as well as project and construction management, design/build, and
4 operations & maintenance services. I have developed projects with major utility transmission,
5 distribution and power generation clientele. I also led the firm's growth nationally with offices
6 in Denver, Houston, Dayton (OH), Fairmont (WV) and four locations in New England. In
7 addition, I developed projects in 32 states across the U.S., and projects in Peru and Canada. In
8 addition to my technical/business responsibilities, I was also the Principal-in-Charge of the firm's
9 Health & Safety Program and Anti-Drug & Alcohol Program. Prior to entering the civilian
10 arena, I served as an active duty member of the United States Air Force, Special Forces/Special
11 Ops. My military responsibilities included the operation of navigational aids; airfield
12 management of short field landing zones, drop zones and extraction zones as well as a multi-
13 positional Air Traffic Control Operator, during which time I was located in the U.S. and Central
14 America.

15 Q. Please describe TRI-MONT.

16 A. TRI-MONT is a multi-disciplinary engineering consulting firm, established in 1985, with
17 offices in Plymouth, Massachusetts and Dayton, Ohio. TRI-MONT's expertise is in the natural
18 gas infrastructure, power generation, steam, and bulk fuel handling industries. TRI-MONT also
19 has experience in a wide variety of general mechanical, civil, structural and electrical
20 engineering projects. Our experience is nationwide having completed project located in over 35
21 states in the U.S. and a handful overseas. TRI-MONT's engineers and designers have been
22 involved in all phases of project support from concept planning, cost estimating, licensing
23 support, construction specifications and design, contractor solicitation, construction support,

1 construction inspection, plant testing/start-up activities, and the operations and maintenance of
2 completed facilities; and have worked with utility, industrial, and public clients throughout the
3 United States.

4 TRI-MONT currently supports natural gas infrastructure projects in Massachusetts, New
5 Hampshire, Maine, Ohio, and Texas, including, notably, a project to establish a new natural gas
6 LDC for a municipality in Massachusetts. A partial list of our clients is shown below:

- 7 • Unitil – New Hampshire, Massachusetts & Maine
- 8 • Northeast Utilities – NStar Gas & Electric
- 9 • Liberty Utilities – New England Gas Company
- 10 • Distrigas Of Massachusetts – LNG
- 11 • OSCOMP Systems, INC. – CNG Virtual Pipeline
- 12 • Sprague Energy - Bulk Fuel Storage Support Services NH, ME & MA
- 13 • Veolia Energy – Steam Line & Plant Operations & Maintenance (Kendal Station)
- 14 • MATEP – Steam, Gas & Power - Plant Operations & Maintenance Services

15 Q. Please explain the purpose of your testimony.

16 A. I will be providing an overview of the Valley Green Natural Gas, LLC ("Valley Green")
17 gas storage and regasification facility, and distribution system and TRI-MONT's support of this
18 project.

19 **Storage**

20 Q. Has TRI-MONT been involved in the design of the storage facility?

21 A. Yes, TRI-MONT designed the storage facility as shown on Attachment A.

22 Q. What factors did you consider when designing the storage facility?

1 A. For the Conceptual Design of the Storage facility, TRI-MONT designed the facility to
2 address the requirements of NH PUC Chapter 500 Rules, the NFPA 59A Standards, and 49 CFR
3 193 and 49 CFR 192 Regulations. TRI-MONT has completed preliminary Flashing & Jetting
4 and Vapor Dispersion Modeling. TRI-MONT will ensure that as the design progresses and is
5 modified, it will continue to comply with these requirements. In determining the appropriate
6 tankage to be used for storage at the facility, we consider the loads expected for Dartmouth
7 College and the other two initial service areas, how the loads may develop over time, and what
8 the total permitted storage limit was for LNG at the facility. Based on this information, we
9 determined the use of prefabricated 60,000-gallon LNG Storage Tanks best fit the needs of the
10 project. The storage facility is permitted for up to 1.19 million gallons but initial storage needs
11 are expected to be near 223,314 gallons. By planning for the use of these types of tanks, Valley
12 Green can bring additional storage volume on line as needed to support increasing customer
13 demand as it expands its system, without incurring the upfront cost of building all 1.19 million
14 gallons of storage it is permitted for. The area allocated for storage and containment on the site
15 has been laid out to facilitate the efficient installation of tankage up to the 1.19 million gallons.

16 Q. Has TRI-MONT considered loads of potential customers in its design?

17 A. Yes, using preliminary estimated numbers. Valley Green provided TRI-MONT with a
18 listing of potential customers within the service areas and identified Dartmouth College as one of
19 its major potential users in the Dartmouth College Service area. Using this information, TRI-
20 MONT estimated the potential customer load by analyzing the fuel consumption data provided
21 (Dartmouth College), and for locations without such data we estimated the expected load based
22 on the square footage of facilities indicated as to be served and applying a demand factor to the
23 same that we obtained from the U.S. Energy Information Administration. TRI-MONT estimates

1 customers in the initial buildout will consume up to 63,804 gallons of LNG on a peak day and
2 27,095 gallons of LNG on an average day. This load data will be updated and refined as more
3 detailed information is obtained from the customers, and the design and storage requirements
4 will be adjusted accordingly if needed.

5 Q. Did TRI-MONT assist Valley Green in designing its facility to meet the Commission's 7-
6 day storage requirement? If so, please explain.

7 A. Yes. TRI-MONT discussed the 7-day storage requirement with Commission Staff and
8 developed the calculation Valley Green will be relying upon to comply with the 7-day storage
9 requirement. These calculations will be updated and refined as more detailed customer data is
10 obtained. The design and storage volume will be adjusted accordingly, if needed. It should be
11 noted that the tankage required to meet the 7-day storage requirement based on assumed demand
12 for the initial service areas represents less than 25% of Valley Green's 1.19 million gallon
13 permitted storage volume.

14 Q. Please explain how Valley Green's facility will satisfy the 7-day storage requirement.

15 A. As currently designed, Valley Green will satisfy the 7-day storage requirement through a
16 combination of on-site storage tanks (50%) and a firm fuel supply contract with Gulf (50%).
17 Initially, Valley Green will have five (5) 60,000 gallon LNG storage tanks, each having a
18 nominal storage capacity of 52,689 gallons, for a total of 263,445 gallons of storage on-site. As
19 Valley Green expands its areas of service it will follow the same approach to meeting the 7-day
20 storage requirements. Commission Staff has reviewed and commented on this approach to
21 satisfying the 7-day storage requirement.

22 Q. Please describe the considerations for not relying upon 100% on-site storage to meet the
23 7-day storage requirement.

1 A. It would be uneconomic for Valley Green to maintain 100% on-site storage as it would
2 require higher initial capital costs and thus higher rates to the end users. Gulf has an established
3 record of making fuel deliveries in the Northeast and as such establishing a Firm Delivery
4 Contract with them provides a sound source of supply that helps to limit the initial capital
5 expense of establishing the utility and affords Valley Green the ability to provide its customers a
6 lower rate.

7 **Regasification**

8 Q. Please explain TRI-MONT's involvement in the design of the regasification facility?

9 A. TRI-MONT designed the regasification facilities at a conceptual level to understand
10 budgetary, space, and capacity requirements. At present, the expectation is that two Indirect
11 Fired Water Bath Vaporizers will be used. As the design moves forward and more detailed load
12 information is obtained, we will continue to evaluate regasification alternatives such as ambient
13 air vaporizers, cold water cryogenic vaporizers, vaporizers using ground source heating or a third
14 party cooling load, etc.

15 **Distribution**

16 Q. Has TRI-MONT been involved in the design of the distribution system?

17 A. Yes.

18 Q. Please describe TRI-MONT's involvement.

19 A. TRI-MONT designed the distribution system at a conceptual level to understand,
20 budgetary, space, capacity, and construction related concerns. The distribution route is expected
21 to run along Etna Road, Great Hollow Road, Labombard Road, Mount Support Road and Route
22 120 into Dartmouth College, as depicted on Attachment B. Initial calculations related to trunk
23 lines have been completed to understand potential required pipe sizes and operating pressures. A

1 conceptual pipe layout identifying routes the pipe could take to reach end users has been
2 completed, and a conceptual level cost estimate for the complete design, permitting,
3 construction, and future operation of the distribution system has been provided.

4 Q. Please describe how Valley Green will secure rights of access to its proposed distribution
5 routes.

6 A. Valley Green will obtain licenses or other necessary approvals from the New Hampshire
7 Department of Transportation, the City of Lebanon and the Town of Hanover, as the case may
8 be.

9 **Vehicle Refueling**

10 Q. Has TRI-MONT been involved with the design of the vehicle refueling portion of the
11 project? If so, please describe TRI-MONT's involvement.

12 A. Yes, but to date this has only been from a conceptual and footprint standpoint. At this
13 juncture, detailed design of the vehicle fueling station has not been required. Area and access
14 has been conceptually laid out, but nothing further has been done by TRI-MONT.

15 **Construction**

16 Q. Will TRI-MONT be involved in overseeing construction of the storage, regasification,
17 and distribution facilities and if so, in what capacity?

18 A. Yes. TRI-MONT will be the construction engineer/owner's engineer for the entire
19 Valley Green project. Gulf may also be involved in oversight and construction activities
20 associated with the storage and regasification facility.

21 Q. Please explain TRI-MONT's role in the construction of the Valley Green project.

22 A. TRI-MONT will be designing and permitting the project, developing the bid packages,
23 evaluating the bid packages, and performing construction inspection, oversight, and management

1 including review and approval of construction submittals and invoices TRI-MONT will also be
2 performing an inspection role to ensure that the contractors install all facilities in accordance
3 with the plans and specifications. In addition we will ensure that all data will be collected,
4 organized and stored in a fashion consistent with, and as required, to support future operations
5 and maintenance efforts as well as integrity management of the system. TRI-MONT has
6 conducted the requisite LNG storage modeling: Spill Dispersion Modeling and Flashing and
7 Jetting Dispersion Modeling. TRI-MONT has also drafted an Operations & Maintenance
8 Manual, Distribution Integrity Management Plan, and Emergency Response Plans..

9 Q. Will an RFP or bid selection process be used in the construction of the Valley Green
10 facilities? If so, please explain.

11 A. Yes. Valley Green expects to issue RFPs for construction contractors in late 2015 and
12 will select a proposal from the responsive bids.

13 **Other**

14 Q. Has TRI-MONT been involved in planning Valley Green's initial build-out? If so, please
15 describe that planning process.

16 A. Yes. Based on the indications of customer interest received by Valley Green, TRI-
17 MONT has assisted Valley Green in designing and planning the initial build-out, which will
18 extend pipe to Dartmouth College and the other two service areas: Dartmouth-Hitchcock
19 Medical Center and areas closest to the Etna Road site.

20 Q. Are you familiar with whether Valley Green has a construction plan and budget? If so,
21 please explain the plan and budget.

22 A. We have and continue to support Valley Green with their construction planning and
23 budgeting. To date, we have provided conceptual level estimates based on the conceptual level

1 design completed to date. As the design progresses, additional estimates and updates will be
2 provided.

3 Q. Are there any cost efficiencies in the Valley Green project that are worthy of special
4 mention?

5 A. At this time, TRI-MONT has provided conceptual costs of the Valley Green project,
6 these costs are still being refined. The ability to add storage tankage as needed is one cost-
7 efficient design feature in the storage facility. As the design progresses, other cost efficiencies
8 will be considered when designing and selecting final equipment, materials, and methods of
9 installation.

10 Q. Will TRI-MONT be involved in any operational and maintenance aspect of running
11 Valley Green's distribution system?

12 A. TRI-MONT anticipates that it will be contracted to provide all operations and
13 maintenance requirements for Valley Green's pipeline distribution system. In such a capacity,
14 TRI-MONT will draw upon its experience and expertise as described earlier in this testimony.
15 The parties are discussing terms of a binding agreement to provide such services.

16 Q. Has TRI-MONT been involved or will TRI-MONT be involved in assisting Valley Green
17 with obtaining permits?

18 A. Yes, TRI-MONT has and will continue to support Valley Green in obtaining the required
19 permits.

20 Q. What involvement did or will TRI-MONT have in assisting Valley Green in obtaining
21 local permits.

1 A. TRI-MONT did not assist Valley Green in obtaining its zoning variance. However, TRI-
2 MONT will assist Valley Green in site plan review, subdivision, and any other future local
3 permitting processes, as needed.

4 Q. Please describe the local permits that Valley Green has obtained and what local permits it
5 has yet to obtain.

6 A. Valley Green has obtained a zoning variance and has filed a preliminary site plan. We
7 anticipate that Valley Green will need to complete site plan review (including approval from the
8 local conservation commission), and obtain subdivision approval, as well as a building permit
9 and licenses to lay pipe in road right of ways.

10 Q. Please describe the State permits that Valley Green has obtained and what State permits it
11 has yet to obtain.

12 A. Valley Green has not yet obtained any state permits. We anticipate that Valley Green
13 will obtain an alteration of terrain permit (which will also address stormwater from the site), an
14 air permit and requisite permits from the N.H. Department of Transportation for work on or in
15 State highways. It plans to file for an exemption from the requirements of RSA 162-H from the
16 Site Evaluation Committee. Tri-Mont will assist Valley Green in obtaining all required state
17 permits, as necessary.

18 Q. Are any federal permits required by the Valley Green project, and if so, please describe
19 the permits and efforts to obtain them.

20 A. Aside from minor federal permits such as identification for hazardous materials or waste,
21 TRI-MONT does not anticipate the project needing any major federal permits.

22 Q. What is your estimate of when Valley Green can commence providing natural gas service
23 to customers?

1 A. Valley Green's goal is to be in service by November 2016, however this is dependent

2 upon obtaining the required approvals.

3 Q. Do you have anything else you would like to add to your testimony?

4 A. Not at this time.

5 Q. Does that complete your testimony?

6 A. Yes.