

**STATE OF VERMONT
PUBLIC UTILITY COMMISSION**

Case No. 17-3550-INV

Investigation pursuant to 30 V.S.A. §§ 30 and 209 regarding the alleged failure of Vermont Gas Systems, Inc. to comply with the certificate of public good in Docket 7970 by burying the pipeline at less than required depth in New Haven, Vermont	
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Case No. 18-0395-PET

Notice of Probable Violations of Vermont Gas Systems, Inc. for certain aspects of the construction of the Addison natural gas pipeline	
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**DIRECT TESTIMONY OF
CARLOS J. CHAVES
ON BEHALF OF VERMONT GAS SYSTEMS, INC.**

September 10, 2021

SUMMARY OF TESTIMONY

Mr. Chaves testifies about his June 2021 engagement with VGS to review prior surface loading calculations performed in 2016 and 2017 and address questions about the appropriate assumptions to use when performing such surface loading calculations. Mr. Chaves also sponsors a Memorandum he prepared addressing the Vermont Public Utility Commission's questions and setting forth the basis for his conclusion that the Addison Natural Gas Pipeline meets the HS20+15% surface loading standard under a variety of conditions, including those where the depth of cover is two feet.

EXHIBITS

Exhibit VGS-CC-1	Resume of Carlos J. Chaves
Exhibit VGS-CC-2	Memorandum re Surface Loading, June 15, 2021

**DIRECT TESTIMONY OF
CARLOS J. CHAVES
ON BEHALF OF VERMONT GAS SYSTEMS, INC.**

1 **Q1. Please state your name, occupation, and business affiliation.**

2 **A1.** My name is Carlos J. Chaves. I am a Principal Project Manager with Mott MacDonald, a
3 professional engineering consulting firm.

4

5 **Q2. Please describe your educational background, pertinent professional experience,
6 and current job responsibilities.**

7 **A2.** I obtained a Bachelor's of Science degree in Civil Engineering from Rensselaer
8 Polytechnic Institute and a Masters of Business Administration from the University of
9 Massachusetts. I have approximately 18 years of work experience with a primary focus on linear
10 infrastructure projects including 9.5 years of natural gas pipeline experience. I am currently an
11 area manager for Mott MacDonald's Oil and Gas pipeline division encompassing the geographic
12 region of the Northeast US and Canada. My current role includes a variety of responsibilities
13 including project leadership/management roles, staff resource manager, business development as
14 well as management of the West Springfield Mott MacDonald office. I have been involved with
15 numerous natural gas pipeline projects ranging in magnitude from small integrity brownfield
16 replacements to large greenfield expansion projects throughout the US and Canada. See **Exhibit**
17 **VGS-CC-1**, which is a copy of my resume.

1 **Q3. Have you previously provided testimony before the Vermont Public Utility**
2 **Commission (the “Commission”)?**

3 **A3.** No.
4

5 **Q4. Have you previously submitted testimony in this case?**

6 **A4.** No.
7

8 **Q5. Describe the purpose of your testimony today.**

9 **A5.** In June 2021, Vermont Gas Systems, Inc. (“VGS”) engaged Mott MacDonald to review
10 several questions the Commission raised in an April 30, 2021 decision relating to surface loading
11 calculations performed in connection with the Addison Natural Gas Project (“ANGP”). In
12 particular, the Commission identified three assumptions that were used in 2016 calculations that
13 were performed by other Mott MacDonald personnel in 2016 and 2017. In response to VGS’s
14 request, I prepared a Memorandum regarding my opinion about the assumption inputs used for
15 calculating the surface loading in 2016 and 2017 and performed additional loading calculations
16 using a variety of input parameters to confirm that the ANGP meets the HS20+15% loading
17 standard under conditions. I am sponsoring my Memorandum as **Exhibit VGS-CC-2**.

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19 **Q6. Does this conclude your testimony?**

20 **A6.** Yes.