NYSDEC OHMS Document No. 201166576-00054

PUBLIC VERSION

New York State Department of Environmental Conservation

In the Matter of the Application of

FINGER LAKES LPG STORAGE, LLC

Application Number 8-4432-00085

for a permit pursuant to the Environmental Conservation Law to construct and operate a new underground liquid petroleum gas storage facility in the Town of Reading, Schuyler County

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GAS FREE SENECA'S BRIEF IN RESPONSE TO INITIAL POST-ISSUES-CONFERENCE BRIEFS OF NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION STAFF AND FINGER LAKES LPG STORAGE, LLC AND IN FURTHER SUPPORT OF PETITION FOR FULL PARTY STATUS

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NYSDEC OHMS Document No. 201166576-00054

TABLE OF CONTENTS

TABLE OF AUTHORITIES iii

PRELIMINARY STATEMENT 1

ARGUMENT 2

I. The Analysis of Reasonable Alternatives to the Project Is Insufficient as a Matter of Law. 2

II. The Analysis of the Project's Cumulative Impacts Is Legally Insufficient. 6

III. An Adjudicatory Hearing Is Needed to Resolve Questions about Cavern Integrity. 7

A. GFS and the Parties Dispute Whether It Is Safe to Rely on Admittedly Incomplete and Inaccurate Maps and Cross-Sections. 7

B. There Is an Unresolved Dispute about the Effect on Cavern Integrity of Incompletely Characterizing and Inaccurately Portraying the Rubble Piles in the Galleries. 9

C. Additional Conditions Are Necessary, if the Permit Is Granted, to Compensate for the Parties' Refusal to Correct Inaccurate Application Materials or to Acknowledge Visible Evidence of Risk. 13

IV. There Is a Substantive and Significant Factual Question about the Risk to Public Safety Posed by the Project. 16

V. The Risk Posed by Underground LPG Storage to the Water Quality of Seneca Lake Is a Substantive and Significant Issue. 20

VI. The Adequacy of the Noise Analysis Is an Adjudicable Issue. 25

A. The Appropriate Scope of the Noise Analysis Remains a Substantive and Significant Issue. 26

B. The Parties Have Not Rebutted Key Criticisms Presented in the Sandstone Report. 31

NYSDEC OHMS Document No. 201166576-00054

VII. Community Character Impacts Can and Should Be Adjudicated.....33

A. Accurately Describing Community Character Impacts as Required by SEQRA Does Not Violate Principles of Home Rule.....33

B. The Seneca Lake Community—Including but Not Limited to the County of Schuyler and the Town of Reading—Is the Proper Focus of Community Character Impact Analysis.....35

C. The ALJ Should Reject the Applicant's Attempt to Portray Community Character Impacts as Too Subjective for Adjudication. 44

CONCLUSION.....47

NYSDEC OHMS Document No. 201166576-00054

TABLE OF AUTHORITIES

Page(s)

Cases

Action Redi-Mix Corp. v. Davison,
292 A.D.2d 448 (2d Dep't 2002) 35

Frye v. United States,
293 F. 1013 (D.C. Cir. 1923) 21

Juda Constr. Ltd. v. Spencer,
21 A.D.3d 898 (2d Dep't 2005) 34

North Shore Steak House v. Bd. of App. of Inc. Vil. of Thomaston,
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83 N.Y.2d 417 (1994) 21

Retail Prop. Trust v. Bd. of Zoning Appeals of Town of Hempstead,
98 N.Y.2d 190 195 (2002) 42

Simmons v. U.S. Army Corps of Engr's,
120 F.3d 664 (7th Cir. 1997) 3

Wallach v. Town of Dryden,
23 N.Y.3d 728 (2014) 33, 34

Webster Assocs. v. Town of Webster,
59 N.Y.2d 220 (1983) 2, 3, 5

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Matter of AKZO Nobel Salt, Inc.,
Interim Decision of the Commissioner, 1996 WL 172632 (DEC, Jan. 31, 1996) 11, 22

Matter of Berger, et al.,
Decision and Order of the Commissioner, 2010 WL 5612175 (DEC, Oct. 6, 2010) 22

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Interim Decision of the Commissioner, 1990 WL 154836 (DEC, Jun. 4, 1990) 20

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Decision of the Commissioner, 2008 WL 5955358 (DEC, Nov. 17, 2008) 11, 31, 33

NYSDEC OHMS Document No. 201166576-00054

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Interim Decision of Deputy Commissioner, 2006 WL 3873403 (DEC, Dec. 29, 2006) 3, 4

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Interim Decision of the Commissioner, 1988 WL 1095749 (DEC, Apr. 1, 1988) 22

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Interim Decision of the Commissioner, 2002 WL 974335 (DEC, May 7, 2002) 30

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Decision of the Acting Commissioner, 2005 WL 958139 (DEC, Apr. 21, 2005) 20

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Decision of the Commissioner, 1979 WL 33483 (DEC, Dec. 6, 1979) 35

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Final Decision of the Commissioner, 1981 WL 22101 (DEC, June 25, 1981) 30, 35

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Rulings of the ALJ on Issues and Party Status, 2012 WL 1384772 (DEC, Mar. 26, 2012) 32

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Supplemental Ruling on Issues, 2005 WL 336331 (DEC, Feb. 8, 2005) 29, 30

Matter of St. Lawrence Cement Co., LLC,
Second Interim Decision of the Commissioner, 2004 WL 2026420 (DEC, Sept. 8, 2004) 40, 43

Matter of Tractor Supply Co.,
Decision and Order of the Commissioner, 2008 WL 4693289 (DEC, Aug. 8, 2008) 22

Statutes and Ordinances

N.Y. Environmental Conservation Law § 8-0109(2) 3

Town of Reading Land Use Law (rev. 2009) §§ 1.6, 1.9, 1.10 ..... 41, 42

NYSDEC OHMS Document No. 201166576-00054

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6 NYCRR § 617.9(b)(5)(viii) 6

6 NYCRR § 624.9 22

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NYSDEC OHMS Document No. 201166576-00054

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NYSDEC OHMS Document No. 201166576-00054

PRELIMINARY STATEMENT

Petitioner Gas Free Seneca ("GFS") respectfully submits this brief in response to the Department of Environmental Conservation Staff Initial Post-Issues Conference Brief ("DEC Initial Br."), dated April 17, 2015, and the Finger Lakes LPG Storage, LLC's Post-Issues Conference Brief ("FLLPG Initial Br."), dated April 17, 2015, and prior submissions by the New York State Department of Environmental Conservation ("DEC" or the "Department") and Finger Lakes LPG Storage, LLC ("FLLPG" or the "Applicant") in connection with FLLPG's application for an underground storage permit. The most recent submissions by DEC and the Applicant (collectively, the "Parties"), together with earlier briefs and the materials in the record for this proceeding, fail to rebut GFS's legal claims or to resolve the disputed factual issues identified by GFS. Because those issues are both substantive and significant, they should be developed fully at an adjudicatory hearing.

The hearing would consider a proposal to store up to 4.4 billion gallons (88.2 million gallons of annual storage over 50 years) of liquid petroleum gas ("LPG") in salt caverns (the "Project") under the shoreline of Seneca Lake and to transport that toxic and flammable material through the heart of the Finger Lakes wine country. According to the Applicant, the number of railcars carrying LPG through Schuyler County would increase from *nine* in 2012 to 1,785 in the first year of Project operation. Because of concerns about Project impacts on health, safety, and the environment, including community character, more than two dozen municipalities representing hundreds of thousands of residents have expressed formal opposition to the facility. The municipalities have been joined by more than 325 businesses that share those concerns as well as an interest in protecting the region's economic drivers: agriculture (including vineyards) and tourism. Although widespread opposition is not sufficient grounds for denying a permit, the magnitude of harm that the Project could cause over its 50-year term, should those concerns be

NYSDEC OHMS Document No. 201166576-00054

inadequately addressed, most certainly is. Adjudicating the issues identified by GFS would answer crucial open questions about Project impacts—especially given its location adjacent to the drinking water supply for 100,000 people and in a mecca for millions of tourists—and ensure that no unnecessary risk is taken, if the Project is approved. GFS therefore asks that its petition be granted in its entirety.

ARGUMENT

I. The Analysis of Reasonable Alternatives to the Project Is Insufficient as a Matter of Law.

New York's State Environmental Quality Review Act ("SEQRA") requires that all reasonable alternatives, including the no action alternative, be analyzed to help the public and DEC assess the relative costs and benefits of the Project. *See Webster Assocs. v. Town of Webster*, 59 N.Y.2d 220, 228 (1983). "To be meaningful, such an assessment must be based on an awareness of all reasonable options other than the proposed action." *Id.* The record here falls far short of that requirement because it does not address alternative transportation allocations, alternative sites, or alternative Project sizes. The record also does not adequately analyze the no action alternative.[1] The post-issues-conference submissions by the Parties do not cure these defects. On the contrary, FLLPG primarily repeats the same incorrect arguments it made before and during the issues conference. DEC, for the first time, presents a cursory discussion of the alternative of locating the Project on the Applicant's Savona site. The Department's conclusory statements regarding the Savona site in a legal brief do not cure the failure to evaluate all reasonable alternatives in the record.

[1] GFS's arguments regarding the adequacy of the analysis of the no action alternative, including the two sentences in the February 12, 2012 letter from FLLPG to DEC, are laid out in detail in GFS's first post-issues-conference brief. Post-Issues Conference Closing Brief of GFS 8–9 (Apr. 17, 2015) ("GFS Initial Br.").

NYSDEC OHMS Document No. 201166576-00054

FLLPG again incorrectly asserts that it was excused from complying with a required part of SEQRA because the public did not explicitly raise a detailed list of alternatives prior to the adoption of the final scoping outline.[2] FLLPG Initial Br. at 29, 31–38. GFS already explained why the scoping process cannot be used to undermine SEQRA's basic requirements, and nothing in FLLPG's brief rebuts these arguments. *See* Tr. 498; GFS Initial Br. 3–4. The public is not in a position to provide detailed suggestions on potential alternative sites, designs, and sizes of the Project, particularly at the early stages of scoping. On the contrary, one of the basic purposes of the SEQRA process is to inform the public.

Nevertheless, FLLPG claims that requiring additional analysis of reasonable alternatives after the scoping process would "render the 'discretion' granted to Finger Lakes LPG Storage by the scoping regulations completely illusory and leave subsections (g) and (h) [of 6 N.Y. Comp. R. & Regs. ("NYCRR") § 617.8] meaningless nullities," eliminating an applicant's incentive to participate in scoping. *See* FLLPG Initial Br. at 37–38. FLLPG's concerns are misplaced, and its claim that the scoping process should be binding is contradicted by previous issues conference decisions. In *Matter of Crossroads Ventures, LLC*, the Deputy Commissioner ordered the applicant to supplement an inadequate alternatives analysis, even though a scoping process had occurred. *See* Interim Decision of Deputy Commissioner, 2006 WL 3873403, *34 (DEC, Dec. 29, 2006). The Deputy Commissioner concluded that

[2] FLLPG also seeks to avoid the obligation to analyze all reasonable alternatives by using an impermissibly narrow definition of the Project's purpose and need, which inherently rules out any alternative except the Project. *See* FLLPG Initial Br. at 37 ("[t]he objective of the Project is using existing caverns as storage to benefit New York customers"). Narrowing the Project's objective in a manner that makes all other alternatives unreasonable plainly undermines the basic purposes of conducting an environmental review under SEQRA. *See* Environmental Conservation Law ("ECL") § 8-0109(2) (stating that one of the purposes of an EIS is to "suggest alternatives to such an action so as to form the basis for a decision whether or not to undertake or approve such action"); *Webster*, 59 N.Y.2d at 228; *see also Simmons v. U.S. Army Corps of Engr's*, 120 F.3d 664, 666 (7th Cir. 1997) (cautioning agencies not to put forward a purpose and need statement under the National Environmental Policy Act that is so narrow as to "define competing 'reasonable alternatives' out of consideration (and even out of existence)").

NYSDEC OHMS Document No. 201166576-00054

> although the scoping document for the proposed project indicates that the draft environmental impact statement [("DEIS")] should include 'a discussion of a different mix of resort components and various layouts of the selected components'… [g]iven the magnitude of the proposed project… the alternatives analysis in the DEIS must include further environmental detail…to ensure a meaningful basis to compare and evaluate the environmental impacts of the proposed project.

Id. This decision was rendered almost a decade ago and after the scoping regulations had come into effect. The decision to require additional analysis of alternatives after a scoping process neither rendered 6 NYCRR § 617.8 meaningless nor created any discernible disincentive for applicants to engage in the scoping process.

It is plain from the record that the alternatives analysis is inadequate. Even according to the much-cited scoping outline, the Draft Supplemental Environmental Impact Statement ("DSEIS") should have discussed the "alternatives to the Project." 2011-02-15, DEC to BSK – Final Scope § 3.1.2. Analyzing alternative designs for one element of a much larger project (the brine ponds) plainly falls short of what is called for in the scoping outline. In addition, as GFS has discussed in its petition for full party status, during the issues conference, and it its initial post-issues-conference brief, FLLPG identified but did not analyze a reasonable alternative when it purported to adopt a different transportation allocation than was contemplated by the DSEIS. The possibility of not using trucks to transport LPG is not a mitigation measure—there is nothing in the draft permit that requires FLLPG to use only trains and pipelines, and FLLPG told DEC that it still will build a truck depot because it wants to retain the option of using trucks. Tr. 81. The alternative transportation allocation should have been analyzed as part of the evaluation of the Project under SEQRA. The failure to evaluate this alternative, other potential transportation allocations, and other design alternatives renders the DSEIS and the SEQRA analysis for this Project invalid as a matter of law.

NYSDEC OHMS Document No. 201166576-00054

The SEQRA analysis also is defective as a matter of law because it failed to consider alternative sites for the Project. Despite FLLPG's confusing statements to the contrary, the Department has recognized that the Applicant owns another property in Savona that potentially is suitable for LPG storage. *Compare* DEC Initial Br. at 94 ("the Savona LPG facility, also owned by Finger Lakes LPG Storage, LLC") *with* Tr. at 469–71. Rather than analyze this alternative in the DSEIS, DEC staff apparently conducted a behind-closed-doors assessment and rejected this site. The public did not even know that the Savona site was an option, until Department counsel disclosed at the issues conference that the idea had been rejected. Tr. 483–85. The curt explanation that the "[e]xpansion of the Savona LPG caverns for additional LPG storage is constrained by the rate at which the facility can dispose of its excess brine, primarily into the Cohocton River," DEC Initial Br. at 94, is too limited and conclusory to justify the omission of this alternative from the DSEIS. The public should know, for example, why expansion could not proceed at a slower rate, whether other methods of disposal were considered, or whether the Project could be developed on a smaller scale. Moreover, although the Department concluded without analysis that "Savona would not reduce or avoid adverse environmental impacts," *id.* at 95, the relative environmental impacts of the Project compared with those of an expanded facility at the Savona site are precisely what should have analyzed in the DSEIS.

The alternatives analysis in the DSEIS, even as supplemented by the issues conference record, does not comply with SEQRA's requirement that all reasonable alternatives to the Project be analyzed. The deficiencies of the analysis cannot be cured merely through a response to comment document in the final SEIS but rather should be addressed publicly before the Department finalizes its SEQRA analysis. *See Webster*, 59 N.Y.2d at 228. Because the public

never has been provided with information affording a basis for comparison of the full breadth of reasonable alternatives, a new draft of the DSEIS should be published for public and comment, or, at a minimum, a supplemental analysis should be submitted and made available for public comment prior to the adjudicatory hearing.

II. The Analysis of the Project's Cumulative Impacts Is Legally Insufficient.

Most of the arguments raised by the Parties regarding the failure to adequately evaluate the cumulative impacts of the Arlington facility and the Project have been addressed in GFS's previous submissions. GFS Initial Br. at 9–11; Petition for Full Party Status by GFS 19–20 (Jan. 16, 2015). The cumulative impacts of these two adjacent facilities cannot be ignored, given the projects' location on the shore of Seneca Lake and impacts on the wine country. The development of both of these projects clearly is part of Crestwood's announced plan to create a gas storage hub in the Finger Lakes, including through increased usage of the salt caverns along Seneca Lake.[3] The two projects clearly will have combined noise impacts, combined effects on community character, and combined impacts on public safety. That the Department worked with the Federal Energy Regulatory Commission ("FERC") on the NEPA analysis of the Arlington project does not absolve DEC of its responsibility to evaluate cumulative impacts under SEQRA. In fact, except in issues conference briefing, the Department has not clearly stated that it is relying on FERC's analysis, as required by DEC's regulations. *See* 6 NYCRR §617.9(b)(5)(viii). An explicit analysis of the cumulative impacts of the Project and Arlington facility must be conducted.

[3] *See* Inergy Midstream, L.P., Form 10-K, 6 (Nov. 20, 2012), https://www.sec.gov/Archives/edgar/data/1304464/000144530512003721/nrgm-10kx9302012.htm.

NYSDEC OHMS Document No. 201166576-00054

III. An Adjudicatory Hearing Is Needed to Resolve Questions about Cavern Integrity.

The Parties have portrayed the very serious cavern integrity issues raised by GFS as academic debates about the minutiae of technical matters best left to agency discretion. The concerns that GFS has identified, however, all raise a straightforward but critical question: Has the current record eliminated disputes about the suitability of the Applicant's Galleries for LPG storage? As is explained below, the Parties' efforts to rebut GFS's claims have not allayed doubt about the risk of placing the caverns into service but rather have confirmed the presence of contested facts that should be resolved at an adjudicatory hearing.

A. GFS and the Parties Dispute Whether It Is Safe to Rely on Admittedly Incomplete and Inaccurate Maps and Cross-Sections.

Understanding points of agreement among the Parties and petitioners is useful to illuminate the issues that still remain in dispute and require adjudication. The Parties have not contested Dr. Clark's assertion that the first documents that an analyst will consult to diagnose a problem arising in the future are the Brinefield Map and cross-sections of the FLLPG Galleries, which are supposed to bring together the facts underlying the application and present them in a clear graphic display. *See* H.C. Clark, *Cavern Integrity Report* 2 ("Clark Report," attached as Exhibit 1 to the GFS Petition). The Parties also have not attempted to show that the map and cross-sections so central to the Project are complete and accurate. [redacted] DEC has admitted with respect to both Galleries that "the bottom of the most recent sonar is a reflection off of the top of the rubble

NYSDEC OHMS Document No. 201166576-00054

pile," DEC Initial Br. at 59, [redacted].[4] Consequently, if a problem develops after current DEC staff have left the Department—a serious risk for a Project with a proposed 50-year life—the personnel charged with response either will have to rely on inaccurate depictions of the caverns and their geologic context or will have to comb through thousands of pages of an unfamiliar application to piece together the description of baseline conditions that should have been portrayed on the Brinefield Map and cross-sections.[5]

In defense of its decision to accept admittedly inaccurate application materials, DEC argues that there is no statutory or regulatory standard requiring complete and correct graphic depictions of the storage facility. *See* DEC Initial Br. at 55, 59. The idea that the public cannot complain about admitted errors and omissions—including the Department's failure to enforce its own demands for information—unless a statute or regulation specifically bars submission of misleading documents, should be rejected on its face. Moreover, DEC's failure to promulgate the regulations promised in the 1992 Final Generic Environmental Impact Statement for the Oil, Gas and Solution Mining Regulatory Program, or even to issue guidance with transparent

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[redacted]

[5] DEC contends that the misleading graphics are not a problem, because the Department relies on the entire application to evaluate cavern integrity. *See* DEC Initial Br. at 27–29, 36. [redacted] Moreover, future staff responding to a problem should not be forced to waste precious time figuring out that the fundamental graphic documents are unreliable and then wading through the voluminous application to ascertain crucial facts.

NYSDEC OHMS Document No. 201166576-00054

standards for underground storage permit applications, cries out for especially careful scrutiny of DEC's otherwise unfettered discretion. At the very least, the ALJ should hear Dr. Clark's testimony, based on years of experience with responses to cavern failure, about the risk presented over the next 50 years by the Parties' steadfast refusal to ensure ready access to reliable maps and cross-sections.[6] Understanding the extent of that risk is crucial to any determination whether the draft permit conditions will be adequate over the long term.

B. There Is an Unresolved Dispute about the Effect on Cavern Integrity of Incompletely Characterizing and Inaccurately Portraying the Rubble Piles in the Galleries.

The [redacted] cross-sections of the Galleries do not depict the rubble piles that form at the bottom of bedded salt caverns, *see* DEC Initial Br. at 59; [redacted], and they have identified nothing else in the record that establishes the volume or shape of the rubble in either Gallery. That information is missing even though DEC ostensibly set limits on both the total storage capacity of the Galleries over their 50-year life and annual increases over current capacity, including capacity within the rubble piles. *See* 2014-11-10, DEC Staff Draft Permit Conditions ("Draft Permit") Att. 1, ¶ 1(c)–(d). As Dr. Clark is prepared to testify, without that information, DEC cannot enforce its own permit requirements and thus cannot assure cavern integrity.

DEC has defined "storage capacity" as the "total volume of void space that exists within the cavern and any rubble pile above the cavern bottom, determined by the most recent sonar survey as of the issuance date of this permit, regardless of well or tubing configuration and accessibility or use of such void space for product storage and/or monitoring." *Id.* ¶ 1(d). Sonar cannot penetrate a rubble pile, however, and therefore is useless as a mechanism to measure the

[6] As is explained below, the inaccurate maps and cross-sections also make it impossible to determine whether the Project is in compliance with permit conditions.

NYSDEC OHMS Document No. 201166576-00054

volume of void space that exists within any rubble pile above the cavern bottom.[7] *See* Clark Report at 32; DEC Initial Br. at 59 (admitting that the bottom of a sonar survey is not the cavern bottom but rather "is a reflection off of the top of the rubble pile"). The Parties therefore have failed to rebut Dr. Clark's proffered testimony that the volume of the rubble (and the void space in it) is unknown. Having failed to include the volume of the rubble, the total storage capacity is unquestionably much larger than the Parties have claimed. The risk presented by storing LPG in caverns that have never been correctly characterized is a substantive and significant issue. Moreover, there are adjudicable issues about (i) whether the *current* storage capacity of either Gallery satisfies the Maximum Capacity limit in the draft permit conditions, *see* Draft Permit, Att. 1, ¶ 1(d); Att. 2, col. B; (ii) how DEC will enforce the two percent annual cap in the absence of reliable baseline information from which to measure increases in storage capacity, *see id.* at Att. 1, ¶ 1(c); and (iii) whether a two percent limit is an adequate permit condition when the caverns are much larger than the record shows.

A similar problem arises with respect to the permit condition limiting "cavern span." Cavern span is "measured from the centerline of each well's casing shoe, *at any depth in the cavern*." *Id.* at Att. 1, ¶ 1(e); Att. 2, n. 4 (emphasis added). Dr. Clark has shown that, without information about the horizontal dimensions of the rubble piles at the bottom of the Galleries—which cannot be determined by means of sonar surveys—it is not possible to know whether the *current* cavern spans comply with the Maximum Span limits in the draft permit, *see id.* at Att. 2, col. C, [redacted]

[7] [redacted]

NYSDEC OHMS Document No. 201166576-00054

[redacted].[8] In addition, neither DEC nor FLLPG so much as addressed Dr. Clark's concern that [redacted]. Because the Parties have not rebutted those claims, an adjudicable dispute exists about whether DEC has a sufficient understanding of the caverns to assess their adaptability for LPG storage or to enforce the permit conditions that are supposed to ensure their integrity over the next 50 years.

GFS does not maintain that "the existence of rubble in a solution-mined cavern, in itself, is a substantive and significant issue," as DEC suggests. DEC Initial Br. at 59. If the Applicant had accurately recorded the presence of rubble on its cross-sections, and if the record included reliable measurements supporting those representations, Dr. Clark would have expressed no concern about the depiction of the rubble. But none of that information is available, and all of it is relevant to the suitability of the caverns for LPG storage and the adequacy of the permit conditions.[9] At this point, we have only published papers by Jacoby and others that provide some information about the early history of Gallery 1 and its rubble pile and data from Larry Sevenker and William Glynn about the collapse and rubble pile in Gallery 2. For that reason, Dr. Clark recommended that seismic surveys be performed and considered in conjunction with other

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[8] [redacted]

[9] Unlike the petitioner in *Matter of AKZO Nobel Salt, Inc.*, Interim Decision of the Commissioner, 1996 WL 172632, *8 (DEC, Jan. 31, 1996), GFS has pointed out a specific omission that makes further inquiry reasonable. *See Buffalo Crushed Stone, Inc.*, Decision of the Commissioner, 2008 WL 5955358, *4 (DEC, Nov. 17, 2008) ("Offers of proof may take the form of proposed testimony, usually that of an expert, or the identification of some defect or omission in the application.") (internal citation omitted).

NYSDEC OHMS Document No. 201166576-00054

available data, to establish "the shape and volume of rubble-filled portions of all caverns."[10] Clark Report at 32.

Instead of conducting the seismic surveys, the Parties claim that no further investigation is necessary. The Department claims that pressure tests show the integrity of the rubble-filled portions of the Galleries. *See* DEC Initial Br. at 58. Those tests do not address the issues described above, potential changes to the caverns at the rubble level once unsaturated brine is introduced into the cavern, or the Applicant's admission that the revised finite element analysis ("FEA") did not take into account the rubble-filled areas beneath the area currently proposed for LPG storage.[11] *See* FLLPG Initial Br. at 72; [redacted].[12]

To avoid further investigation, the Applicant relies heavily on the decision of FERC to approve Arlington's expanded gas storage. *See* FLLPG Initial Br. at 59–64. FERC did not evaluate the integrity of the proposed FLLPG Galleries, however, and did not have before it all of the documents that have been produced in this proceeding. More importantly, the Applicant conveniently ignored the fact that FERC included an express condition in its order, requiring that Arlington determine the volume of the rubble piles and identify the methodology used to make

[10] DEC provides a laundry list of tests it considered, *see* DEC Initial Br. at 29–31, but there is no evidence of seismic surveys or any other effort to obtain meaningful data about the volume and shape of rubble piles.

[11] FLLPG claims that the introduction of fresh water or unsaturated brine will not affect the cavern at the level of the rubble because those fluids will be injected above the rubble pile, which is filled with saturated brine that will stay in the cavern bottom. *See* FLLPG Initial Br. at 73. The brine in the rubble cannot be fully saturated, however, because fully saturated brine would crystalize, depositing a salt layer topped by unsaturated brine. *See* DEC Initial Br. at 56 (noting that under-saturated brine must be injected "to prevent 'salting' which could result in complete blockage or obstruction for the product displacement tubing"). Moreover, the brine in the rubble piles must be mobile or it could not be removed for the Arlington storage expansion, as is currently planned. The claim that the rubble piles are filled with saturated brine thus raises more questions than it answers—questions that should be resolved at an adjudicatory hearing.

[12] Because the Applicant did not produce a copy of the revised FEA until after the initial post-issues-conference briefs were filed, GFS has attached it as Exhibit A hereto. [redacted]

NYSDEC OHMS Document No. 201166576-00054

the determination. Arlington Storage Company, LLC, No. CP13-83-000, 147 FERC ¶ 61,120 ("Certificate Order") App. A (Engineering Condition 3(f)) (May 15, 2014) (annexed as Exhibit 1 to the FLLPG Initial Br.). FERC evidently agreed with Dr. Clark that a full and accurate characterization of the rubble pile in a cavern is necessary. The risk presented by the Parties' failure to characterize the rubble piles in either FLLPG Gallery thus remains a substantive and significant issue.

C. Additional Conditions Are Necessary, if the Permit Is Granted, to Compensate for the Parties' Refusal to Correct Inaccurate Application Materials or to Acknowledge Visible Evidence of Risk.

In addition to the issues discussed above, GFS has identified two clear and present cavern integrity risks related to the roofs of the Galleries: the hanging ledge in Gallery 1 and the sagging roof in Gallery 2. *See* Clark Report at 20, 21, 26. To date, FLLPG has offered no response whatsoever to Dr. Clark's proffered testimony about the potential instability of the hanging ledge. DEC has acknowledged the existence of the hanging ledge, but claims that it is "speculation" to suggest that it is about to fall. DEC Initial Br. at 66. As Dr. Clark can explain in further detail, however, the hanging ledge is a stage in inevitable rock fall, it is the result of dissolution that left the cavern span too large and flat, and the unsaturated brine that will flow into Cavern 44 will speed that process.[13] It therefore is just a question of when and how much of the roof will fall.

GFS already has demonstrated that the Applicant's attempts to explain away the visible evidence of roof sag in Cavern 58 are inconsistent, implausible, and self-defeating. *See* GFS Initial Br. at 30–31. The Parties' repetition of those contradictory explanations in their post-

[13] The Parties make much of the permit condition requiring a hydrocarbon or nitrogen "blanket" to protect the Gallery roofs, FLLPG Initial Br. at 73; DEC Initial Br. at 54, 66, 67, but the Gallery 1 blanket is required only at Well FL1 in Cavern 34 (and any future replacement for Well 33), *see* Draft Permit, Att, 1, ¶ 1(f), while Cavern 44 is supposed to contain only brine.

NYSDEC OHMS Document No. 201166576-00054

issues-conference briefs, *see* FLLPG Initial Br. at 73; DEC Initial Br. at 54, adds nothing to their merit. The instability of a roof that admittedly has reached the Camillus Formation and therefore is unsupported by salt, [redacted] that tripled in diameter over a period of two years, *see* Clark Report at 18, Fig. 7; and that the most recent sonar shows to be sagging downward, *see id.* at 20, [redacted], is a substantive and significant issue.[14] It goes directly to the statutory requirement that the reservoir be adaptable for LPG storage, because if the roof falls, the Gallery will extend beyond the dimensions approved in the draft permit.

DEC fails in its various attempts to show that the Cavern 58 roof will not fall. *See* DEC Initial Br. at 54. [redacted] Second, the mechanical integrity test required before first injection of LPG into Cavern 58, *see* DEC Initial Br. at 54, is designed to ensure that the Gallery holds pressure at that moment, but it cannot predict roof stability over time. Finally, the hydrocarbon or nitrogen blanket required under the draft permit might prevent "*further* solutioning of the Well 58 roof," *id.* (emphasis added), but it cannot defeat the effect of

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[14] [redacted] Even if the roof were merely flat, and not visibly sagging, [redacted] there would have been a marked change in the roof configuration in a period of just four years. The Parties' insistence that the exposed, expansive, and evolving rock roof presents no risk of collapse cannot be reconciled with the great pains they have taken to point out that "[r]ubble piles are expected in solution-mined interbedded salt caverns," DEC Initial Br. at 58; *see* FLLPG Initial Br. at 72, because insolubles that are unsupported by salt invariably succumb to gravity and amass at the bottom of the cavern.

[15] [redacted]

NYSDEC OHMS Document No. 201166576-00054

gravity on the already expansive and sagging area no longer supported by salt. The draft permit condition requiring the blanket also will be meaningless once the roof falls, because to maintain the proper blanket, the operator must have an accurate understanding of its top, bottom, and sides as well as a timely idea of the changes in those elements.

The draft permit provides: "Construction and operation of the storage facility must be conducted in accordance with the . . . application . . . and all subsequent supporting information . . . provided to the Department by the Permittee . . . ." Draft Permit, Att. 1, ¶ 1. In its response to the second NOIA, the Applicant stated: [redacted] The most recent cross-sections (incorporated by reference into the permit) showing the "ultimate cavern dimensions" of Caverns [redacted] 58 provide no room whatsoever for vertical growth. [redacted] Cavern 58 is not permitted to expand upward because it already has reached the Camillus Formation.[16] Therefore, as soon as [redacted] the Gallery 2 roof falls, the caverns will exceed the promised vertical limit and thus violate the permit. Under the Parties' 10-year sonar survey program, however, DEC may not learn of the violation and any associated cavern integrity risks for nearly a decade.

Because the Parties have refused to correct admittedly incorrect maps and cross-sections, to investigate the true extent of the Galleries (including the rubble-filled cavern bottoms), or to acknowledge that an exposed rock roof or hanging ledge presents any risk of instability, the permit should be denied; if it is granted, the extent of monitoring that should be required in the future is an adjudicable issue. Dr. Clark is prepared to elaborate on the reasons that the draft

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[16] [redacted]. By refusing to ensure that the maps and cross-sections accurately reflect both current and predicted conditions, and then incorporating those documents into permit terms, the Parties have ensured that the permit will be violated. The inadequate monitoring program ensures that the violations also may go undetected for many years.

permit conditions are inadequate to ensure prompt diagnosis of an emerging problem over the Project's 50-year life, including: information needed for their enforcement is missing, they inadequately specify testing methodologies, and the testing that is required will occur too infrequently. *See* GFS Initial Br. at 26–28, 32, 34–35. An adjudicatory hearing will enable the Department to decide whether some of the enormous sums that FLLPG will save by re-using old salt caverns instead of building modern engineered storage facilities should be dedicated to state-of-the-art monitoring systems designed to minimize long-term risks to the Finger Lakes community.[17]

IV. There Is a Substantive and Significant Factual Question about the Risk to Public Safety Posed by the Project.

There is a fundamental factual question about the Project's potential impacts to public safety that requires adjudication. FLLPG proposes to transport LPG through the communities surrounding the Project and to store this hazardous material in unlined underground salt caverns. The only analysis of the safety impacts of the Project conducted prior to the issues conference was limited to releases from the Project site. Just three days before the issues conference, FLLPG provided another document purporting to assess the risks of the Project, this time focusing on the dangers posed by transporting the LPG to and from the storage facility.

GFS has submitted materials that demonstrate the inadequacy of both risk assessments. Rob Mackenzie, *Independent High-Level Quantitative Risk Analysis Schuyler County Liquid Petroleum Gas Storage Proposal* (attached as Exhibit 2 to the GFS Petition) ("Mackenzie Report"); GFS Initial Br. at 43–46. In particular, the methodology chosen by FLLPG's consultant ignores

[17] Bill Gautreaux, president of Crestwood's liquids and crude business unit, reportedly stated: "Certainly if we were starting from scratch and saying, 'Where would you build a liquefied petroleum gas storage facility?' you probably wouldn't put it right there over Seneca Lake, near the wine country." Jess McKinley, *What Pairs Well With a Finger Lakes White? Not Propane, Vintners Say*, NY Times, Dec. 25, 2014, http://www nytimes.com/2014/12/26/nyregion/new-york-winemakers-fight-gas-storage-plan-near-seneca-lake.html?_r=0. If the Project is allowed to proceed, notwithstanding its location adjacent to the drinking water supply for 100,000 people and in the heart of a region that draws millions of visitors, the facility should not be operated on the cheap.

the historical risks associated with storing hydrocarbons in salt formations. The two risk assessments also contain numerous other errors and inadequacies and seriously underestimate the risks associated with the Project. GFS Initial Br. 44–46. An adjudicatory hearing therefore is required to determine (1) what methodology is most appropriate to use to evaluate the Project's risks and (2) based on the appropriate methodology, what public safety risks are posed by the Project. Only after that information is obtained can DEC make a determination under SEQRA and the ECL as to whether the Project should be allowed to move forward, including whether substantial new conditions should be added to the Draft Permit.

Rather than address the major deficiencies in the record, the Parties presuppose that the only way to conduct a risk assessment or analysis is to use a highly complex proprietary modeling method such as the one employed by FLLPG's consultant—a methodology known as "PEM." Because PEM uses detailed calculations, based on principles from petrochemical engineering, FLLPG and DEC also argue that Dr. Mackenzie, GFS's expert, is not qualified to conduct *any* risk assessment of a non-medical facility.[18] *See* DEC Initial Br. at 84–86; FLLPG

[18] During the issues conference and in its initial post-issues-conference brief, GFS addressed at length the claims made by FLLPG and DEC regarding Dr. Mackenzie's expertise. Tr. 103–05, 185–86; GFS Initial Br. at 37–39. GFS did not concede at the issues conference that Dr. Mackenzie lacked the training or credentials to perform a risk assessment, as FLLPG claims. *See* FLLPG Initial Br. at 88 (misrepresenting Tr. 103). GFS has maintained throughout this proceeding that the on-the-job experience and training Dr. Mackenzie received as a leader at a major regional medical center responsible for assessing and managing risk make him more than qualified to evaluate the risks posed by the Project. Moreover, that Dr. Mackenzie chose to present his risk analysis at a top-event level that is accessible to laypersons does not disqualify him or his conclusions. *Cf.* FLLPG Initial Br. at 89–90.
DEC also claims in its brief that Dr. Mackenzie cannot be qualified as an expert because "[h]is resume didn't identify whether he has ever testified as an expert in the relevant fields of LPG/natural gas storage, pipeline or rail safety before." DEC Initial Br. at 85. FLLPG's submissions, however, also fail to indicate whether the purported experts have experience testifying. For example, Dr. Siegel's submission does not attach any resume or curriculum vitae and Mr. Istvan's "CV" is a one-page document with no indication that he has testified as an expert. Moreover, experience testifying cannot be a requirement, because everyone lacks it when qualified as an expert for the first time. DEC also complains that Dr. Mackenzie's resume does not "indicate that he ever received any formal training in preparing risks assessments." *Id.* Dr. Mackenzie's C.V. specifically provides that he has received training in high-reliability science (which is the study of organizations in industries, such as commercial aviation and nuclear power, that operate under hazardous conditions while maintaining high safety levels). Mackenzie C.V. at 1. His C.V. also lists his roles in professional associations, which include acting as Chair of the VHA CEO Safety Network, an organization dedicated to training hospital CEOs to evaluate and prioritize risk. *Id.* at 1–2.

Initial Br. at 88–91. But, as DEC concedes, PEM is not the only tool that can be employed to conduct a risk assessment. *See* DEC Initial Br. at 82. In fact, the International Organization for Standardization ("ISO"), an independent body and the largest developer of voluntary standards, instructs that PEM should be used for hazard identification and risk assessment in the petroleum and natural gas industries *only* when historical data and background information is *not* available.[19] Dr. Mackenzie's report and the peer-reviewed literature it cites demonstrate that there is ample historical data available with which to evaluate the risks associated with hydrocarbon storage in salt formations.[20] *See* GFS Initial Br. at 43. Other peer-reviewed literature assessing the risks associated with storage of hydrocarbons in salt formations uses the approach adopted by Dr. Mackenzie.[21]

The critiques that DEC provides do not go to the substance of Dr. Mackenzie's conclusions and often mischaracterize his report. First, DEC states that Dr. Mackenzie merely repeats the conclusions of other experts proffered by GFS. DEC Initial Br. at 86–87. An

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[19] ISO, ISO 17776:2000, Petroleum and natural gas industries – Offshore production installations – Guidelines on tools and techniques for hazard identification and risk assessment, Section B12 at 27 (Oct. 15, 2000). FLLPG contends that the DSEIS differentiates between the Project and "circumstances underlying potential accidents which have occurred at other facilities." FLLPG Br. at 90. However, as Dr. Mackenzie stated in his report, "[t]he available literature provides no good reason to assume that regulation, testing, or oversight in today's resource-constrained environment will be more successful in preventing such incidents tomorrow than it was in preventing them yesterday." Mackenzie Report at 11. Likewise, FLLPG has not provided any evidence that a statistically significant number of the historical accidents recorded in the literature and used as the basis of Dr. Mackenzie's risk analysis would have been prevented by any of the mitigation measures proposed in the DSEIS.

[20] By contrast, Quest struggled to find relevant frequency data to use as inputs for its PEM calculations and therefore used data from offshore gas production facilities, rather than underground storage facilities, in its model. The use of frequency data from a completely different segment of the petroleum industry casts serious doubts on the validity of Quest's calculations, particularly when historical frequency data is available for adverse events connected with the storage of hydrocarbons in salt formations. *See* GFS Initial Br. at 44. DEC criticizes Dr. Mackenzie for relying on ISO 17776, a set of guidelines on tools and techniques for hazard identification and risk assessment for petroleum and natural gas offshore production installations. *See* DEC Initial Br. at 87. However, the tool from ISO 17776 that Dr. Mackenzie used was designed for ranking and evaluating aggregated risks across all petroleum and natural gas industries, not just offshore production installations. *See* Arben Mullai, *Risk Management System, Risk assessment Frameworks and Techniques*, DaGoB Publication Series 37 (May 2006), *available at* http://www rop.lv/ru/smi/zagruzki/doc_download/42-risk-management-system-risk-assessment-frameworks-and-techniques html.

[21] *See* C. Yang *et al*., *Analysis of major risk associated with hydrocarbon caverns in bedded salt rock*, 113 Reliability Engineering and System Safety 94–111 (2013); *see also* GFS Initial Br. at 43.

accurate reading of his report reveals, however, that Dr. Mackenzie cited the work of other GFS experts only at the end of his independent analysis, to show that the Project's risk may be even higher than his calculations show. *See* Mackenzie Report at 9–12. The calculated risk values that form the basis of his report were not based on the works of any GFS expert. *Id.* at 2–9.

Second, DEC objects to the use of the term "extensive" to describe Dr. Mackenzie's literature review, when "note 32 of his report, suggests that the accidents he reviewed came from just two sources, aside from the Energy Information Administration website." DEC Initial Br. at 87. DEC does not suggest, nor could it, that Dr. Mackenzie's sources are unreliable or inaccurate. Moreover, the two citations in note 32 are summary references that aggregate the entire history of underground storage risk. In total, Dr. Mackenzie has reviewed and catalogued over 200 references in preparing his report.[22]

In sum, the materials submitted by the Parties have not "negated" Dr. Mackenzie's report. *See* FLLPG Initial Br at 90. Instead, they misleadingly portray the risk assessment process as a hyper-technical endeavor that only those with advanced training in a field related to LPG or natural gas storage can undertake. *See* DEC Initial Br. at 85. GFS has presented unrebutted evidence that the PEM approach taken by FLLPG's consultant is neither necessary nor appropriate for evaluating the risks of the Project. A factual question therefore exists about the appropriate methodology that should be used to assess the risks of the Project, which requires adjudication to resolve. This factual question is both substantive and significant because GFS has shown that the use of the inappropriate methodology, as well as the many other errors

[22] DEC also complains about an inaccurate citation for the risk matrix that Dr. Mackenzie uses as a general example of such matrices. *See* DEC Initial Br. at 87. Based on a simple Google search, it is clear that the risk matrix he cites can be found on many publicly available sources, including http://www.chemeng.ntnu.no/info/studentinfo/HMS/Risk%20assessment%20and%20risk%20management.pdf.

NYSDEC OHMS Document No. 201166576-00054

outlined in previous submissions resulted in a serious undervaluing of the Project's threat to public safety by both FLLPG and DEC.[23]

V. The Risk Posed by Underground LPG Storage to the Water Quality of Seneca Lake Is a Substantive and Significant Issue.

As GFS's previous submissions explain, Dr. Myers examined a recorded phenomenon, looked for satisfactory explanations in the literature, and finding none, proffered an expert opinion why the chloride levels in Seneca Lake rose 50 percent, starting around 1965, at the same time that LPG was being stored in underground caverns on the U.S. Salt property. *See* Tom Myers, *Technical Memorandum—Review of Finger Lakes LPG Storage, LLC, Proposed LPG Storage Facility* ("Myers Report," attached as Exhibit 3 to the GFS Petition); GFS Initial Br. at 48–52. FLLPG and DEC have not rebutted Dr. Myers' opinion. They instead have proffered alternative explanations that are unsupported by the evidence, have insisted that Dr. Myers' opinion "is not science," and have tried to downplay the potential risk the Project poses to the water quality of Seneca Lake with arguments that display a fundamental misunderstanding of the contents of Dr. Myers' report. *See, e.g.*, DEC Initial Br. at 76; FLLPG Initial Br. at 80. None of those attempts at rebuttal is sufficient to eliminate the need for an adjudicatory hearing. *See, e.g.*, *Matter of Metro Recycling & Crushing, Inc.*, Decision of the Acting Commissioner, 2005 WL 958139, *3 (DEC, Apr. 21, 2005) (finding that a petitioner's offer of proof may be rebutted, but only by reference to "the application, its supporting documents, the analysis of Department staff, and responses provided by [the] applicant") (citing to *Matter of Bonded Concrete, Inc.*, Interim Decision of the Commissioner, 1990 WL 154836 (DEC, Jun. 4, 1990)).

[23] As discussed in GFS's first post-issues conference brief, the existence of an emergency preparedness plan does not remove the risk the Project poses to the public because the only response to any large-scale accident involving an LPG release is to provide for evacuation. GFS Initial Br. at 46–47.

In their initial briefs, FLLPG and DEC again claim that the 50 percent increase in chloride recorded in Seneca Lake in the late 1960s more likely was caused by sources that later were regulated under the Clean Water Act and Safe Drinking Water Act. FLLPG Initial Br. at 79; *see* DEC Initial Br. at 73; Tr. 357. Neither party has presented any evidence, however, of any discharges or leaks that would have occurred at the right time and in a sufficient volume to explain the extremely significant rise in salinity in Seneca Lake. *See* GFS Initial Br. at 54. The numbers DEC presents while arguing that Dr. Halfman underestimated the amount of salt going into the Lake from mining operations, *see* DEC Initial Br. at 72, actually are of the same order of magnitude as those discussed by Dr. Halfman, *see* GFS Initial Br. at 50, Table 1. DEC's suggestion that salt mine waste might be a significant contributing factor to the salinity spike similarly fails to rebut Dr. Myers' report, because it is not based on any evidence that discharges from that facility in the late 1960s were sufficiently high to account for the 50 percent increase in chloride. *See* DEC Initial Br. at 72. While salt mines may have more waste streams than Dr. Myers' report discusses, there is nothing in the record or in any of the records surveyed by scientists studying the water quality of Seneca Lake indicating that any combination of salt mines contributed the huge amount of salt necessary to cause the chloride levels recorded in the late 1960s. The attempts to rebut Dr. Myers' opinion with alternative causal theories of the salinity spike in Seneca Lake therefore remain unsuccessful.

FLLPG dismisses Dr. Myers' conclusions with the claim that his report is "not science." FLLPG Initial Br. at 80. The Parties invoke *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923), and *People v. Wesley*, 83 N.Y.2d 417 (1994), to argue that Dr. Myers' expert testimony should not be considered because it has not gained general acceptance in the scientific community. *See id.*; DEC Initial Br. at 77. Both *Frye* and *Wesley* apply, however, to the rules of evidence for

civil and criminal courts, not to administrative hearings, and certainly not at the issues conference stage. *See, e.g.*, *Matter of Berger, et al.*, Decision and Order of the Commissioner, 2010 WL 5612175, *3 (DEC, Oct. 6, 2010) ("The rules of evidence observed by civil courts are not strictly applied in administrative hearings before the Department . . . ."); *Matter of Tractor Supply Co.*, Decision and Order of the Commissioner, 2008 WL 4693289, *2 (DEC, Aug. 8, 2008) (distinguishing between evidentiary standards for civil court proceedings and those applicable in an administrative adjudicatory proceeding); *see also* 6 NYCRR § 624.9 (all evidence submitted must be relevant, but "other rules of evidence need not be strictly applied.").

Moreover, Dr. Myers grounds his opinion in scientific principles and uses peer-reviewed scientific literature to analogize the local conditions around Seneca Lake to similar observed phenomena elsewhere. His results can be replicated mathematically using known geologic parameters from peer-reviewed literature. *See* Myers Report at App. F. While the site-specific data currently does not exist to complete those calculations for these exact circumstances, GFS does not need to prove with total certainty that the storage of LPG in the caverns will cause an increase in the salinity of Seneca Lake. *See* DEC Initial Br. at 74–75 (incorrectly suggesting that Dr. Myers must but cannot establish the reliability of his opinion by testing it).

> [A]n adjudicable issue exists only where there are sufficient doubts about the applicant's ability to meet all statutory and regulatory criteria such that reasonable minds would inquire further. Requiring a greater showing would effect an unfair burden on intervening parties; requiring a lesser showing would over-burden the adjudicatory system with issues of dubious merit.

AKZO Nobel Salt, 1996 WL 172632, at *2 (citing *Matter of Hydra-Co. Generations, Inc.*, Interim Decision of the Commissioner, 1988 WL 1095749 (DEC, Apr. 1, 1988)). Dr. Myers' report shows how a relatively small pressure signal in the salt beds could cause a surge of groundwater through the salty sediments and provides calculations to show the veracity of his

theory. Myers Report at App. F. GFS thus has established that there is a substantive and significant issue that requires adjudication.

In addition, the Parties' efforts to rebut Dr. Myers' report demonstrate fundamental misunderstandings of the substance of his opinions. Some of the errors made by FLLPG and DEC, particularly those contained in the reports submitted by FLLPG's experts, were addressed in GFS's Initial Brief. *See* GFS Initial Br. at 54–57. DEC's Initial Brief also contains numerous errors and misstatements illustrating that the Department has not grasped the science underlying Dr. Myers' opinion.

For example, DEC complains that Glen Jolly, who compiled the data Dr. Halfman used in his peer-reviewed articles on the historical chloride levels in Seneca Lake, indicated in a conference abstract that the increase in chlorides in Seneca Lake occurred in 1967. DEC Initial Br. at 70. DEC argues that this is significant because "petitioners claim that the increase coincided with the start of LPG storage operations by TEPPCO…[and] what a review of the data indicates is that LPG storage operations beginning in 1964 did not coincide or correlate with the increase in chloride levels in Seneca Lake." *Id.* at 71. First, the "data" DEC refers to is a mere suggestion in a three-paragraph abstract from a talk given at a conference. Unlike the data reported in Dr. Halfman's articles showing increases in chloride levels before 1967, the statements in the abstract have not been subjected to peer review. Second, the abstract merely states that there was a "peak" in salinity in 1967, which does not contradict the data from Dr. Halfman that a spike in the salinity began in 1964–65 and peaked in 1967.[24] Third, DEC wrongly assumes that because the pressure signal from cycling LPG and brine in the caverns transmits down the salt beds instantaneously, the effect on Seneca Lake's salinity levels also

[24] *Compare* Myers Report at 6 *with* Glen Jolly, Abstract, *Did a Mid-Century Pulse of Groundwater Control Cayuga and Seneca Lakes Water Quality?* (Nov. 2012), available at https://gsa.confex.com/gsa/2012AM/webprogram/Paper211940.html.

must have been immediate. *See* DEC Initial Br. at 75. As GFS explained in its Initial Brief, there likely would be a lag between when LPG storage began and the pressure signals through the salt beds started and when chloride levels in the lake began to rise. *See* GFS Initial Br. at 52 n.59.[25]

DEC also mistakenly dismisses Dr. Myers' report because "[t]here is no literature in the record that supports it and the literature relied on by Dr. Myers involve[s] groundwater systems that are not present here." DEC Initial Br. at 74. To the extent that Dr. Myers cites to literature involving groundwater systems, he does so to draw analogies between the pressure signal movement through the salt beds and more familiar phenomena where pressure flows through geologic structures. Moreover, Dr. Myers looked at phenomena that do not involve groundwater, including seismic wave propagation and earth tides. Myers Report at App. F, 5. He also does not assume that groundwater is present in the salt beds under Seneca Lake and does not rely on the presence of groundwater to explain his theory.[26] For those reasons, DEC's statement that "[p]oroelasticity depends on a fluid-filled porous medium which the salt zones below the proposed facility are not," is unsupported; it also is untrue that "Dr. Myers' theory depends on the assumption that the salt layers at issue beneath the proposed project contain brine." *See* DEC Initial Br. at 75. Moreover, poroelasticity does not depend on a fluid-filled

[25] GFS also addressed the mistaken assumption both DEC and FLLPG have made regarding the effect of pressure differentials from storing natural gas and the potential for any pressure changes to exist when conducting solution salt mining. *See* GFS Initial Br. at 56–57. In DEC's Initial Brief, counsel also claimed that "hydraulic fracturing had been taking place for years in the Watkins Glen Brine Field, at pressures that far exceed the pressure gradient of a typical LPG storage operation." DEC Initial Br. at 71. But the hydraulic fracturing that took place was extremely targeted and occurred over much shorter time frames than the LPG storage. It therefore would not have created the same pressure field that is caused by cycling brine and LPG in massive caverns. The pressure changes caused by the fracking would not have acted on a sufficiently large area to cause the advection phenomena described by Dr. Myers.

[26] DEC counsel incorrectly assumes that the failure to find brine when drilling into the salt beds means that the beds are not saturated and contain absolutely no moisture. *See* DEC Initial Br. at 76. Salt beds can be wet without water running out of them. John D. Bredehoeft, *Will salt repositories be dry?*, 69(9) EOS, Transactions American Geophysical Union, 121–31 (1988).

medium, although the sediment layers directly under the lake certainly are saturated. The pressure signal from the salt beds causes additional water to flow through those sediments, causing more salt to enter the lake.[27] Myers Report at 2.

Finally, without citing to any authority, DEC argues that "the pressure applied would have to overcome the lithostatic pressure of the overlying formations, the hydrostatic pressure of the lake and the friction due to salt movement along the way, among other conditions. Common sense dictates that this is a ridiculous notion." DEC Initial Br. at 77. But DEC counsel fails to understand that the lithostatic pressure being exerted on the top and bottom of the salt layers is exactly what makes the phenomena described in Dr. Myers' report possible. The rock layers that contain the salt beds also contain the pressure signal and allow it to be transmitted through the salt. *See* Myers Report at 12.

Taken together, the arguments of FLLPG and DEC regarding the Project's potential impacts on the water quality of Seneca Lake do not rebut the opinion provided by Dr. Myers. This issue requires adjudication. Even a remote chance that that the Project could contaminate the drinking water supply for 100,000 people should not be taken lightly.

VI. The Adequacy of the Noise Analysis Is an Adjudicable Issue.

GFS has identified a number of unresolved factual disputes about the Project's noise impacts that demand further inquiry at an adjudicatory hearing. The Parties have responded to GFS and the noise analysis prepared by Sandstone Environmental Associates, Inc. ("Sandstone

[27] GFS addressed the unsupported assumptions by FLLPG's experts that the sediments under Seneca Lake entirely consist of varved clay. *See* GFS Initial Br. at 54–55. The FLLPG Initial Brief cites to the opinion of Dr. Siegel, which is based on the assumption that the bottom of Seneca Lake is composed of varved clay. FLLPG Initial Br. at 83. In fact, the only reference Dr. Siegel uses in the section of his report that purports to rebut Dr. Myers' report discusses varved clay deposits in northern Ontario and southern Saskatchewan and provides no evidence that varved clay is present at the bottom of Seneca Lake. *See* Donald I. Siegel, *Evaluating the Scientific Plausibility of "Salting" Seneca Lake by Storing Liquefied Propane in a Brine Filled Salt Mine, Watkins Glen, New York* 8 ("Siegel Report," submitted with the FLLPG Response) (citing to V.H. Remenda et al., *Isotopic Composition of Old Ground Water from Lake Agassiz: Implications for Late Pleistocene Climate*, 266 Science 1975–78 (1994)).

Report") principally by invoking DEC's Program Policy on Assessing and Mitigating Noise Impacts (DEP-00-1) ("Noise Policy") (2001), *available at* http://www.dec.ny.gov/docs/permits_ej_operations_pdf/noise2000.pdf. *See* DEC Initial Br. at 22; Affidavit of Scott E. Sheeley, sworn to on April 17, 2015 ("Sheeley Aff."), ¶¶ 6, 8, 9, 11, 12, 17, 26, 27, 28, 31, 32, 33 (invoking Noise Policy as sufficient support for the Applicant's noise study); FLLPG Initial Br. at 109–11.[28] The Parties treat the guidance document as a rigid rule, contrary to its expressed intent, and fail to take into consideration the special circumstances of this case, where a heavy industrial facility is proposed for the shoreline of Seneca Lake.[29]

A. The Appropriate Scope of the Noise Analysis Remains a Substantive and Significant Issue.

In its response to GFS, the Department has described the methods used by the Applicant's consultant, Hunt Engineers, Architects & Land Surveyors ("Hunt") to evaluate potential noise impacts of the Project. *See* Sheeley Aff. ¶¶ 11–18. The description has confirmed that Hunt estimated only noise that would originate from within the four corners of the Project site, and therefore ignored off-site noise that would be produced not only from rail traffic but also from "train horns or crossing signals."[30] *Id.* ¶¶ 11, 36. DEC excuses Hunt from studying off-site rail noise, even though the Project could require dedicated trains, and even though the impact of train noise cannot be evaluated accurately without the baseline train data

[28] The Parties take a more flexible approach to the Noise Policy, when it suits them. For example, Hunt did not provide L_{min} values, even though the guidance document states that they "should be given." Noise Policy at 7.

[29] Contrary to the Applicant's suggestion, *see* FLLPG Initial Br. at 110, GFS is not arguing that the Noise Policy is inapplicable to the Project. The Noise Policy does apply, but it expressly recognizes that the guidance is "not a fixed rule," and its purpose is "to ensure compliance with statutory and regulatory requirements," especially SEQRA. Noise Policy at 1 n.1. "Nothing set forth in [the Noise Policy] prevents DEC staff from varying from that guidance as specific circumstances may dictate." *Id.* As GFS previously demonstrated, the specific circumstances of this case warrant departures. *See* GFS Initial Br. at 61–62 (discussing locations of receptors). As the Applicant admits, "any examination of noise impacts is to be made in the context of the environmental setting of the proposed project." FLLPG Initial Br. at 112.

[30] The Applicant's assumption that "if no adverse impacts were found at [nearby] locations it could be assumed that there would be no adverse impacts beyond these receptors," FLLPG Initial Br. at 114, plainly does not hold if off-site Project-related noise sources are included in the environmental impact analysis.

missing from Hunt's study. *See* Sandstone Report at 13 (noting the need for information about train frequency, number of cars, and time of passage). Moreover, train horns or whistles would be much louder than the rail noise that Hunt chose to measure, and trains could sound their whistles during quiet night-time hours. *See* Sandstone Report at 8 (reporting L_{max} of train whistle as 112 dBA); *id.* at 10 (noting that "whistle noise is the peak noise").

DEC's description also confirmed that Hunt ignored off-site truck noise. *See* Sheeley Aff. ¶ 11. Without baseline vehicular counts, it is impossible to evaluate impacts of that noise, including noise generated by trucks traveling uphill to the Project, which will be louder than the noise Hunt chose to measure and also may operate at night. *See* Sandstone Report at 8, 11 (noting absence of traffic counts). Neither the draft permit nor the newly proposed permit condition places any time limit on the operation of trucks or trains serving the Project.

To justify the narrow range of noise sources examined for the Project, the Department states that "the evaluation of off-site truck traffic and train noise is beyond the scope of the action under review, and need not be addressed." Sheeley Aff. ¶ 23; *see id.* ¶ 25 ("As with truck traffic, the evaluation of train noise on an existing rail line beyond the Project site is outside the scope of the proposed action."). That defense begs the very question that is presented for adjudication. GFS already has explained why the prior existence of truck and rail traffic—also invoked as a defense by the Department, *see id.* ¶¶ 24–25—does not excuse a lead agency from taking a hard look at off-site Project-generated traffic, especially when that traffic may generate noise at night or on weekends.[31] *See* GFS Initial Br. at 61–64 (citing the Sterling Forest DEIS). If permitted to testify, Dr. Brook Crossan, GFS's noise expert, will explain why the admitted doubling of the typical number of freight cars or the addition of an entirely separate local run, *see*

[31] Moreover, the LPG deliveries will occur principally during the summertime vacation season, exacerbating noise impacts during the height of the tourist season. *See* GFS Initial Br. at 63 (citing DSEIS at 33).

DSEIS at 125–27, will have significant noise impacts, as trains well over a quarter-mile long pass sensitive receptors from Corning to Watkins Glen, over the Watkins Glen Gorge, and up to the Project site.[32]

DEC also confirmed that Hunt examined the impact of on-site Project noise only on seven "nearby receptors" on the west side of Seneca Lake.[33] Sheeley Aff. ¶¶ 9–10. Had Hunt properly determined late-night background noise, *see* Sandstone Report at 12 (noting that late-night background should be 30–36.3 dBA), far more than seven receptors would be subject to noise increases of more than 6 dBA, and more mitigation would have been required. Hunt disregarded off-site Project-generated truck and train noise—including at night—on homes and other sensitive receptors along Route 14 and the rail corridor.[34] Hunt also ignored potential impacts of both on- and off-site noise on receptors on the east side of Seneca Lake.

The Department again uses a circular argument to defend the constrained study area, stating: "No information provided in the Hunt Sound Study suggests that there is a potential for adverse noise impacts to properties located on the east side of the lake." Sheeley Aff. ¶ 22. Of

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[32] Track noise alone from trains traveling just a few miles per hour had an L_{eq} of 75–76 dBA. *See* Sandstone Report at 8. The noise will be louder when trains travel up to the maximum 25 miles per hour, *see* DSEIS at 125 (noting speed limit), and longer trains mean that noise will persist for a longer period of time.

[33] FLLPG admits that "in non-industrial settings, the sound pressure level should probably not exceed ambient noise at any receptor by more than 6 dB(A)," but incorrectly claims that it "will comply with" that standard. FLLPG Initial Br. at 111. As DEC notes, even under Hunt's flawed analysis, the Project will cause a 7.9 dBA daytime noise increase at the motel. *See* Sheeley Aff. ¶ 16. Once the baseline night-time noise level is corrected for Hunt's failure to correct for cicada noise and its failure to measure true night-time noise, the Project could cause a 14–20 dBA night-time noise increase—certainly a significant impact on tourists trying to sleep. *See* Sandstone Report at 12.

[34] The Department's assertion that night-time noise increases will not be significant, *see* Sheeley Aff. ¶¶13–15, thus fails to rebut GFS's proffered evidence for two reasons. First, Hunt analyzed Project noise only from on-site sources. Second, Hunt examined only receptors located on land adjacent to the Project site. The impact of Project-generated noise from off-site sources on receptors located farther away but within earshot of those sources is omitted from the Applicant's noise studies. The Department apparently takes the view that an increase of more than 6 dBA should not be deemed significant in a non-industrial area as long as the absolute sound level does not reach 65 dBA. *See id.* ¶¶ 15, 17. The Noise Policy does not support such an inflexible and harsh rule; to the contrary, it requires that impact analysis take into account the "character of surrounding land use and receptors." Noise Policy at 14.

course, Hunt never looked at receptors on the eastern shore, just as it never looked at off-site noise sources. It is hardly surprising that its analysis failed to identify those potential impacts.[35]

Finally, Hunt failed altogether to evaluate construction noise impacts. Rather than analyze the noise that will be generated during construction—which is estimated to take approximately six months and will involve a period of 24-hour drilling of additional wells through approximately 2,000 feet of rock—FLLPG proposed and DEC accepted a brand new permit condition. *See* Sheeley Aff. ¶¶ 18, 26; FLLPG Initial Br., Ex. 8. The proposed condition limits construction to the *14 hours* between 6:00 A.M. and 8:00 P.M., but allows construction to proceed throughout the weekend. *See id.* The new condition also carves out an exception for drilling and other continuous well-related activities, plus unspecified additional Department-approved activities to address "unusual events"—all of which may generate noise 24 hours/day, seven days/week, with no notice to the community. *See id.*

When proposing the new permit condition and its notable exception, the Parties failed to point out that round-the-clock noise from drill rigs and the compressors needed for rotary air well drilling typically reaches 105 dBA, *see* DEC, *Final Supplemental Generic Environmental Impact Study on the Oil, Gas and Solution Mining Regulatory Program* ("FSGEIS") 6-298 (May 2015)—a sound level higher than any noise analyzed by Hunt. The noise analysis therefore never considered, and the proposed mitigation does not address, the loudest on-site noise source. *See Matter of Spring Creek Yard Waste Composting Facility*, Supplemental Ruling on Issues,

[35] DEC claims to have found a receptor site on the east side of the lake that would be less affected than the receptor selected for monitoring in the Sandstone Report. *See* Sheeley Aff. ¶ 29. That statement is untrue, because the lakeside face of the site identified by Mr. Sheeley is shielded from Route 414. It also is closer to the hill leading up to the Project and thus more susceptible to off-site Project-generated traffic noise. Moreover, DEC's critique does nothing to rebut the empirical evidence of noise traveling from the west side of the lake and recorded in Hector. *See* Sandstone Report at 6–7. The Applicant's claim that "effects of sound over water are inapplicable and speculative," FLLPG Initial Br. at 119, flies in the face of the actual measurements taken on the east side of the lake. FERC acknowledged that noise could travel across Seneca Lake, but the Commission did not have the benefit of actual measurements from the east side of the lake when it evaluated noise impacts. *See* Certificate Order, 147 FERC ¶ 61,120, ¶ 71.

2005 WL 336331, *8 (DEC, Feb. 8, 2005) ("Limiting the hours of operation of the loudest activities at a facility is a recognized method of reducing noise impacts . . . ."). Moreover, even as to noise covered by the new condition, GFS's expert will testify that the 14-hour construction workday, all week long, is excessive and should be reduced to avoid impacts on residents and tourists during early morning, dinnertime, and weekends.[36]

The failure to analyze construction noise means that there is no evaluation of construction noise impacts even on the seven receptors identified by Hunt—much less on receptors along west-side traffic corridors or on the east side of Seneca Lake—and therefore no basis for concluding that those effects will be insignificant.[37] The newly minted permit condition is an implicit admission that the Parties expect impacts to be significant, and thus to require mitigation, but there is nothing in the record to support the adequacy of the measure that FLLPG has concocted and therefore nothing to support the findings required under SEQRA. *See Matter of Pyramid Crossgates Co.*, Final Decision of the Commissioner, 1981 WL 22101, *5 (DEC, June 25, 1981) ("It is possible that further development of mitigative proposals may enable the making of the necessary SEQR findings. The burden of proof is with the Applicant."). The omission of a construction noise analysis thus leaves adjudicable issues both as to the significance of Project impacts and as to the sufficiency of the proposed mitigation. *See Spring Creek Yard Waste*, 2005 WL 336331 at *8 ("An intervenor can raise an issue for adjudication by identifying a defect or omission in the application . . . ."); *Matter of Jointa-Galusha, LLC*, Interim Decision of the Commissioner, 2002 WL 974335, *10 (DEC, May 7, 2002) (reversing

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[36] The *Community Sound Survey and Construction Noise Impact Assessment* for the Bellayre Resort at Catskill Park noted that construction would proceed 10 hours/day, six days/week. *See* Ecology & Environment, Bellayre Mountain Ski Center UMP-DEIS, App. AG (2011) (annexing the assessment), http://www.dec ny.gov/docs/permits_ej_operations_pdf/bellappag1.pdf.

[37] Construction noise should be analyzed fully in accordance with the recommendations in the Sandstone Report. *See* Sandstone Report at 13, 17.

NYSDEC OHMS Document No. 201166576-00054

the ALJ "to the extent that mitigation measures were foreclosed for adjudication on noise issues").

B. The Parties Have Not Rebutted Key Criticisms Presented in the Sandstone Report.

The Parties' assertion that the Project will not have significant noise impacts relies heavily on the very narrow scope of analysis described above, with its self-imposed limitations on the noise sources (only on-site), the noise receptors (only seven near the site on the western side of Seneca Lake), and the time period of noise generation (only during operation). The Sandstone Report identifies serious defects in Hunt's analysis even within that limited scope and also demonstrates that both off-site Project-related activities and Project construction will have significant noise impacts on additional receptors up and down both sides of the lake. The Parties' efforts to rebut that analysis fail for the reasons set forth below.[38]

DEC claims that Sandstone inaccurately measured distances between its Receptor A and the Project site. *See* Sheeley Aff. ¶ 30. Sandstone's measurements were accurate because they reflect the distance between the receptor and off-site noise sources that actually were measured, including sources directly across the lake and traffic on the hill up to the Project site. *See* Sandstone Report at 5–6. DEC inappropriately attempts to use calculations of noise from on-site sources to criticize actual measurements of noise from a difference source at a different location. Moreover, if on-site noise were measured from a receptor directly across the lake from the Project, there would be less attenuation and a still greater impact than DEC calculated for Receptor A.

[38] GFS focuses on the Department's criticisms of the Sandstone Report. Contrary to the Applicant's argument, *see* FLLPG Initial Br. at 119–20, the Sandstone Report is not required to meet the standard for full-fledged noise studies that are prepared to support an environmental impact statement. GFS merely needs to identify defects or omissions in the Applicant's noise study, *see Buffalo Crushed Stone*, 2008 WL 5955358 at *4, which the Sandstone Report repeatedly does. GFS has responded to the Applicant's remaining arguments in this brief and its prior submissions.

DEC also claims that Sandstone wrongly criticized the Hunt for failing to correct for cicada noise and thus artificially raising the background against which night-time noise was measured. *See* Sheeley Aff. ¶ 33. DEC admits that the night-time noise measurement (45 dBA) at Receptor #7 (the motel) were taken in mid-August, but claims that the artificially high level affected by cicada noise did not affect the analysis, because Hunt used the lower daytime measurement (42 dBA) as the basis for measuring noise increases. But the daytime measurement would be affected by higher traffic noise. If Hunt had corrected for cicada noise and had measured when truck traffic was at its low point (2:00–4:00 A.M.), the true night-time base would have been about 30–36.3 dBA, and the increase would have been as great as 20 dBA, *see* Sandstone Report at 12—an impact that DEC guidance describes as "very objectionable to intolerable," Noise Policy at 15.[39]

Without evidence or argument, the Department baldly states that "contrary to the Sandstone Report, noise sources associated with the operation of the proposed Project were adequately identified and quantified for purposes of the Hunt Sound Study." Sheeley Aff. ¶ 34. DEC does not even purport to address Hunt's failure to describe baseline train activity and vehicle trips, without which it is impossible to assess transportation noise impacts. *See* Sandstone Report at 13. That and other unanswered criticisms in the Sandstone Report, *see id.* at 9–15, remain issues to be resolved at an adjudicatory hearing.[40]

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[39] Hunt measured night-time noise at only three receptors (## 1, 3, and 7) and never measured later than 10:40 P.M., even though both construction and operations may continue all night long. Standard industry practice would be to conduct 24-hour monitoring, *see Matter of Seneca Meadows, Inc.*, Rulings of the ALJ on Issues and Party Status, 2012 WL 1384772, *41 (DEC, Mar. 26, 2012) (noting that "automatic noise loggers were installed at six of the locations and operated continuously for several days"), or at the very least to monitor 2:00–4:00 A.M. Moreover, Hunt provided neither the L_{min} (as the Noise Policy provides) nor the L_{90}, as is necessary fully to analyze impacts.

[40] DEC's response to Sandstone's call for octave band data, *see* Sheeley Aff. ¶ 35, suggests that Mr. Sheeley does not understand that the data is needed for proper modeling of noise on the east side of the lake. *See* Sandstone Report at 3 ("Over long distances, an octave band analysis should be conducted for both the source and the receptor, to provide an accurate quantitative analysis of noise transmission and to allow an adequate assessment of the intrusiveness of that noise into the background.").

NYSDEC OHMS Document No. 201166576-00054

VII. Community Character Impacts Can and Should Be Adjudicated.

In post-issues-conference briefing, the Parties reiterated claims they previously raised about the adjudicability of community character and socio-economic issues, *see* FLLPG Initial Br. at 6–16, DEC Initial Br. at 18 n.15, and the Parties asserted two new arguments against adjudication of those impacts.[41] The Parties' first new argument is that the petitioners' effort to obtain a serious analysis of Project impacts on the character of the Seneca Lake community is an attempt to "veto land use policies" adopted by the Town of Reading, in violation of home rule. FLLPG Initial Br. at 5; *see id.* at 24; DEC Initial Br. at 11 n.10. The second new argument is that the land use and planning documents adopted by the County of Schuyler and the Town of Reading prove that the Project is consistent with existing community character. Neither of those arguments stands up to scrutiny.

A. Accurately Describing Community Character Impacts as Required by SEQRA Does Not Violate Principles of Home Rule.

The Applicant's assertion that "petitioners are attempting to use analysis of the Project's community character impacts as a mechanism to veto local land use policies with which they disagree – in clear violation of home rule," FLLPG Initial Br. at 5 (citing *Wallach v. Town of Dryden*, 23 N.Y.3d 728 (2014)), cannot be taken seriously. The adjudication of community character issues that the petitioners seek would do nothing more than complete the record for the environmental impact evaluation required under SEQRA, which has yet to be undertaken. *See*

[41] GFS already has responded to the claims that community character and socio-economic issues cannot be adjudicated and respectfully refers the ALJ to its prior response. *See* GFS Initial Br. at 72, 75–77. DEC does not contend that the ALJ lacks the power to adjudicate community character issues but rather insists that adjudication is unnecessary because "[w]here a participant in the Part 624 hearing process seeks simply to add to information on a topic *for which the DEIS contains sufficient information*, no adjudicable issue is raised." DEC Initial Br. at 4–5 (emphasis added). That argument is irrelevant because the DSEIS has no discussion whatsoever of the Project's impacts on community character. *See* GFS Initial Br. at 12–16. The DSEIS also lacks information on many of the issues that are essential to a cultural landscape study or other analysis of Project impacts on the character of the Seneca Lake community and Finger Lakes wine country. *See id.* at 78–79. Because the community character issues warrant adjudication—unlike those in *Buffalo Crushed Stone*, 2008 WL 5955358—it would be inappropriate to have the Department do nothing more than respond to the petitioners' concerns in the FSEIS.

GFS Initial Br. at 12–16 (explaining the statutory mandate to analyze community character impacts). That evidence-based evaluation ultimately might help to persuade the DEC Commissioner to deny FLLPG an underground storage permit, which he unquestionably may do without running afoul of *Wallach v. Dryden*.

Wallach v. Dryden clarified that New York State retains the power to regulate the oil, gas, and solution mining industries—including by deciding whether or not to issue permits to particular industrial applicants—while localities retain the power to regulate land use. *See* 23 N.Y.3d at 739, 755. The decision means that, even if the State grants a permit for oil, gas, or solution mining operations, the locality still has the power to exclude the operations under its land use laws. *See id*. For example, if the DEC Commissioner grants FLLPG an underground storage permit under Title 13 of the ECL, the Town of Reading still has the power to deny FLLPG a special use permit under the Town's Land Use Law.[42] If the Commissioner *denies* FLLPG an underground storage permit, on the other hand, the Town of Reading simply has no land use decision to make. *Wallach v. Dryden* did not empower localities to compel the State to issue a permit, and neither the State nor the petitioners will "veto" any local land use policies, if the DEC Commissioner refuses to allow storage of LPG under the shores of Seneca Lake, to avoid significant and unmitigatable adverse impacts on the community's rural character.

The Department's version of FLLPG's home rule argument fares no better. *See* DEC Initial Br. at 11 n. 10. The Seneca Lake Communities are not trying to "decide the Town of Reading's zoning or land use patterns" or to "'impose [their own] zoning regulations upon lands

[42] As FLLPG notes, its application for a special use permit from the Town of Reading has been pending since September 2009. *See* FLLPG Initial Br. at 17. Unlike the applicant in *Juda Constr. Ltd. v. Spencer*, 21 A.D.3d 898 (2d Dep't 2005), FLLPG has not shown that the Project satisfies the criteria for a special use permit set forth in the Town's Land Use Law. The Town could deny FLLPG's application under the provisions of that law, and if Reading did so, *Wallach v. Dryden* would protect the decision from preemption under the state Oil, Gas and Solution Mining Law.

outside [their] territorial limits.'" *Id.* (quoting *Action Redi-Mix Corp. v. Davison*, 292 A.D.2d 448, 459 (2d Dep't 2002)). Nor are they telling Reading what uses to permit or seeking to "accomplish a rezoning" in the Town. DEC Initial Br. at 11 n. 10. There is no local land use decision at issue in this proceeding. This proceeding concerns a state LPG storage decision. The petitioners are seeking to enforce state law, including SEQRA, which requires analysis of potentially significant community character impacts before that decision is made.[43] Neither FLLPG nor the Department can invoke Reading's land use authority to avoid the requirements of SEQRA or the adjudication of substantive and significant community character issues.

B. The Seneca Lake Community—Including but Not Limited to the County of Schuyler and the Town of Reading—Is the Proper Focus of Community Character Impact Analysis.

Unresolved factual disputes exist over the appropriate definition of both the region of influence for community character impact analysis in this proceeding and the character of the relevant community. The cultural landscape study prepared by Dr. Flad demonstrated that the municipalities surrounding Seneca Lake share a history, landscape, and value system, expressed in official designations of natural assets and comprehensive planning documents—all of which unite them into a single community and help to define that community's character. *See* Harvey Flad, *Community Character Analysis* 4–34 ("Flad Report" attached as Exhibit 5 to the GFS Petition); *see also* FSGEIS at 2-168 ("Residents of a single place share their history, resources, and common concerns and have a similar way of life."). Dr. Flad's extensive "research showed

[43] Contrary to the Department's suggestion, *see* DEC Initial Br. at 7, the Department is not being asked to "'intrude its judgment in matters . . . which have properly been the subject of definitive local governmental determinations of patterns of land use.'" *Id.* at 8 (quoting *Pyramid Crossgates Co.*, 1981 WL 22101, at *5). There has been no definitive local governmental land use determination with respect to the Project. Moreover, "[t]he lead agency has the special responsibility for overseeing the adequate identification of impacts and development of associated mitigation through the EIS process for the benefit of all decision-makers." *Id.* at *2. DEC can and does carry out that responsibility while respecting the separate jurisdiction of sister agencies. *See id.*; *Matter of Miracle Mile Assocs.*, Decision of the Commissioner, 1979 WL 33483, *1 (DEC, Dec. 6, 1979). The Town of Reading will not lose its jurisdiction if community character issues are adjudicated or, alternatively, the Department complies with its duties under SEQRA and publishes an adequate community character analysis in a revised DSEIS.

that the character of the Seneca Lake community and the wider regional community is based in deeply felt connections to the region's natural beauty and the pace of small-town rural life." Flad Report at 2. The Parties contend that the county and town in which the Project would be located should define the relevant community for purposes of analysis under SEQRA and that their comprehensive plans establish the community's character. *See* FLLPG Initial Br. at 7–8, 16–25; DEC Initial Br. at 7–8, 10–17. According to the Parties, those plans "conclusively establish that the local community character includes ongoing industrial development like the Project." FLLPG Initial Br. at 16; DEC Initial Br. at 10. Because the Parties' arguments on both counts fail, the region of influence for community character impact analysis and the character of the relevant community remain adjudicable issues.

The Parties state, falsely, that the petitioners "totally ignore" the provisions of the Schuyler County Countywide Comprehensive Plan ("CWCP") (May 2014), *available at* http://www.schuylercounty.us/index.aspx?NID=566. FLLPG Initial Br. at 20; *see* DEC Initial Br. at 17 (claiming that "no mention is made" of the CWCP). In fact, Dr. Flad repeatedly refers to the CWCP in developing his cultural landscape study. *See* Flad Report at 26, 28, 30, 33–34. In view of the Parties' heavy reliance on the CWCP and the Town of Reading Comprehensive Plan ("TRCP"), *available at* http://www.schuylercounty.us/DocumentCenter/View/1380, *see* FLLPG Initial Br. at 16–20; DEC Initial Br. at 7–8, 10–17, it is worth looking at those documents in some detail.

According to the CWCP, which was adopted by Schuyler County in May 2014, a comprehensive plan is "the blueprint of a community," providing a vision of what the community wants to be. CWCP at 2. "The comprehensive plan states this vision clearly and

NYSDEC OHMS Document No. 201166576-00054

specifies the goals and strategies to make the vision a reality." *Id.* The vision that the CWCP develops starts with a characterization of the County, as follows:

> Schuyler County is located in the heart of the scenic Finger Lakes region of Upstate New York. The county is comprised of a vibrant community of small towns and villages supported by a flourishing agricultural, winery and tourist industry. Schuyler County offers a variety of landscapes, outdoor recreational activities, wildlife habitats, and economic opportunities.

Id. at 6. The CWCP then delves into the three major elements of that characterization, which also provide the core of the County's vision: natural resources, agriculture, and tourism. *See Id.* at 10–15.

The County is proud of its natural resources, scenic views, and recreational opportunities. As the CWCP states:

> Schuyler County has abundant natural resources and recreational opportunities that not only draw tourists to the area but are also irreplaceable assets to the County's residents. . . . The southern portion of Seneca Lake is located within Schuyler County. . . . The lake is home to some of the best boating and fishing in the region. . . . Throughout the County the views and vistas are attractions in themselves. In 2012, Route 414 along the east side of Seneca Lake received a Scenic Byway designation . . . . Through continued promotion and preservation of natural resources they will remain a vital part of the County's great resources and continue to be a boost to tourism and the local economies.

Id. at 10. The plan recognizes the importance of preserving natural resources to "boost . . . tourism and the local economies. *See id.*

Agriculture capitalizes on the County's natural resources and the unique micro-climate created by Seneca Lake. *See id.* at 13. The CWCP notes:

> [T]he wine industry is growing at a phenomenal pace. . . . Agriculture produces much higher economic multipliers than any other sector of the Schuyler County economy, and as a result comprises a large portion of the County's economy. . . . The wineries in Schuyler County bring in nearly a million visitors

> every year and contribute approximately $20 million to the local economy (Agricultural Development and Farmland Protection Plan 2008).

Id. Both the natural resources and agriculture, especially the wineries, support "a thriving year-round tourism industry." *Id.* at 14. "Tourism and agriculture are two of the largest sectors of the Schuyler County economy." *Id.* at 15.

Notably, the Schuyler County CWCP's 128 pages and three Appendices do not mention LPG, petroleum, or any existing or proposed hydrocarbon storage facilities. In the 40 pages focused on the County, only *one* photograph shows an industrial facility—a crane manufacturing plant more than two miles south of Seneca Lake. *See id.* at 25. *None* of the numerous views of the Seneca Lake shoreline reveals the salt plants and drill pads that mar the landscape and prevent access to the waterfront. *See id.* at 3, 7, 10, 13, 15, 16, 22, 33, 39, 43, 45, 56, 57, 82, 89. The County admits their persistence from the past, but portrays them as a problem to be solved, stating frankly that "most of the early water-related industrial development . . . can present current challenges as the push for redevelopment and community revitalization continues to grow." *Id.* at 6. The County also acknowledges that some "larger-scale industrial development" has been proposed—a wind farm is mentioned—but unequivocally states:

> Schuyler County's natural environment is its biggest asset and it is important to protect it in the best possible way. As such, currently the best bet is to err on the side of caution and put in place policies and procedures that will protect our community . . . .
>
> . . .
>
> The challenge is to ensure the continued protection of our natural resources (i.e. land, air and water), rural character and sense of place.

Id. at 23.[44] This cautious planning is not a resounding endorsement of increasing industrialization along the Seneca Lake shore.[45] Schuyler County's identity and sense of place, as expressed in its official comprehensive plan, thus is consistent with Dr. Flad's cultural landscape study and his characterization of the wider Seneca Lake community.

The CWCP devotes several pages to the Town of Reading, which expresses a similar self-image. The Town is proud of its economic success, mentioning that "US Salt, the Town's largest employer and an important source of manufacturing in the region, is located within Reading," *id.* at 68, but its principal assets are natural resources, scenic views, agriculture, and quality of life:

> The natural resources of Reading help make the Town economically successful. . . . Reading offers residents all of the benefits of living in the Finger Lakes region of New York State. Views include not only Seneca Lake, but also Hector's lakeside hills and vineyards. West of Seneca Lake, Reading's landscape is made of rolling hills and a variety of crops that also add to residents' quality of life.

Id. Being seen as part of "the Finger Lakes region" obviously is important to the Town. In addition: "The Town's citizens are aware of the value contained in the natural beauty of Reading

[44] The plan also mentions but takes no position on the possibility of natural gas extraction in the County, *see* CWCP at 23, which had not yet been foreclosed by the Governor's December 2014 announcement that no permits would be issued for high-volume hydraulic fracturing. The CWCP sought to "provide policies that can help our municipalities mitigate, to the greatest extent possible, any negative impacts of natural gas extraction." *Id.*

[45] According to the Applicant, *see* FLLPG Initial Br. at 20, Schuyler County determined that LPG storage is consistent with the community's character when it passed a resolution in favor of the Project. *See Proceedings of the County Legislature of the County of Schuyler for the Year 2014* 94–97 (Resolution No. 213), http://www.schuylercounty.us/DocumentCenter/View/2149. The resolution, passed by a 5-3 vote, instead may have reflected reports of Crestwood's threat to shut down U.S. Salt, the County's largest taxpayer and an important source of jobs, if permits were not granted for the LPG facility. *See id.* at 97 (recording the Chairman's statement that "without this project being approved, we would have significant financial difficulties if they pull out").

and are intent on preserving and protecting its rural character. . . . The people of Reading want to make sure that the rural character remains intact through any development efforts."[46] *Id.*

The Town's four-page comprehensive plan was developed in the early 1990s and has not been updated since. Although it does not fully display the sensibility that Reading expressed in the 2014 CWCP, the TRCP contains kernels of the Town's current focus on natural beauty and rural character. As the Town stated: "The challenge of implementing a community plan is to reconcile development and conservation objectives in a way that respects rural traditions." TRCP at 3. The TRCP expressed the "sense of urgency" that Town residents felt "about planning in order to make development fit into Reading's existing character." *Id.* at 2.

To address residents' concerns, the TRCP listed 15 community goals, the pertinent 11 of which reflect an abiding concern with protecting the environment and preserving the Town's rural character:

> 2. Where possible, keep agriculture economically healthy.
> 3. Preserve open space.
> 4. Allow flexibility of uses without harming neighbors.
> 5. Encourage non-polluting small business and industry growth that provides year-round employment.
> 8. Discourage large-scale development that changes the Town's character.
> 9. Protect Seneca Lake water quality and other important environmental resources.
> 10. Balance the property rights of individuals with community interests, maintaining rural traditions of freedom of land use.
> 12. Keep the Town rural, with moderate growth.

[46] Unlike in *Matter of St. Lawrence Cement Co., LLC*, where the DEIS "recognize[d] and consider[ed]" the regional trend away from industrial uses, and towards greater reliance on . . . tourism" and the parties' merely differed "about which particular community values and trends deserve protection," Second Interim Decision of the Commissioner, 2004 WL 2026420, *50 (DEC, Sept. 8, 2004), the DSEIS for the Project contains no discussion of regional trends—the region is ignored entirely. Moreover, the municipalities around Seneca Lake—including Schuyler County and the Town of Reading—all support the trend toward greater reliance on natural resources, agriculture, and tourism, as opposed to large-scale, polluting, infrastructure development.

13. Establish a flexible system to regulate development.
14. Provide better access to the lake.
15. Improve the appearance of the Town.

Id. Large-scale and polluting uses were allowed "only by special permit," which could be denied if the proposed use failed to meet a series of criteria, including its "compatibility with the town goals listed above." *Id.* at 3. In addition, the TRCP recommended that the Town "[c]reate a lake area 'overlay' with more stringent criteria for land lying within ½ mile of Seneca Lake or within 100 feet of designated major streams flowing into the lake."[47] *Id.* at 4.

To implement the TRCP, the Town of Reading enacted a Land Use Law, rather than formal zoning. *See* Land Use Law (rev. 2009) §§ 1.6, 1.9, 1.10. The law provided:

> The purpose of these regulations is to maintain not only the rural appearance and physical character of the Town, but also its rural way of life and social environment. This rural tradition is one in which landowners are free to use their property in any manner that does not harm their neighbors or the Town or *region as a whole*.

Id. § 1.2 (emphasis added). Land in Reading thus is not supposed to be used to the detriment of the *regional* community of which the Town is a part. Rather, the Town sought "to encourage the growth of small-scale businesses that provide employment without adversely impacting environmental and community resources." *Id.* § 1.3.

The Land Use Law also states: "The Town of Reading finds that Seneca Lake is a recreational and economic resource of great value to the community and desires special protection of this valuable asset." *Id.* § 4.10. In furtherance of that goal, the law created the Seneca Lake Protection Area on land east of New York State Route 14 and along certain

[47] As DEC notes, *see* DEC Initial Br. at 14, and Dr. Flad describes in detail, *see* Flad Report at 9–14, tourism and local wineries have co-existed with salt mining, railroads, and LPG storage in the past. But the region has changed dramatically since 1984, when TEPPCO last stored LPG in caverns under the Seneca Lake shore, and new heavy industrial development in open areas along the lake is not consistent with the current visions of waterfront communities. Contrary to the Department's suggestion, *see* DEC Initial Br. at 17, DEC's land use map does not reflect any official local interest in encouraging large-scale polluting business, but it does dramatize the impediment that FERC-regulated gas infrastructure development represents to implementation of Reading's comprehensive plan.

streams. "In recognition that large-scale uses and certain other uses located within the Seneca Lake Protection Area tend to have the greatest impacts on the Town and its environment," *id.* Ch. 6, the law allowed large-scale uses "only upon the granting of a Special Permit," *id.*, and prohibited a variety of polluting uses, including (with some exceptions not relevant here) treatment and storage of hazardous materials, within the Seneca Lake Protection Area, *see id.* §§ 4.10-2(b), (c).[48]

Given the express terms of the CWCP, TRCP, and Land Use Law, no credence can be given to the Applicant's claim that "the pertinent local land use plans simply provide no support whatsoever for petitioners' claims that industrial development like the Project is inconsistent with the community character in the Town of Reading or Schuyler County." FLLPG Initial Br. at 22. To the contrary, the plans provide ample evidence that neither the Town nor the County regards new large-scale, polluting development, especially on the shore of Seneca Lake, as consistent with its rural tradition, sense of place, or vision for the future. The plans also make it clear that both municipalities recognize advantages and responsibilities that come with participation in a larger Seneca Lake community and distinctive Finger Lakes region. Thus, even if those plans were "controlling," *id.* at 20,—and they are not—the Parties have failed to rebut GFS's account of the relevant region of influence for community character analysis or its description of the character of the relevant community.

[48] DEC apparently fails to recognize that the Town of Reading has *not* adopted zoning. *See* DEC Initial Br. at 10, 11, 14 (referring to the Town's "zoning"). Zoning defines separate districts for different and incompatible uses, so the availability of a special use permit in a particular zoning district "'is tantamount to a legislative finding that the permitted use is in harmony with the general zoning plan and will not adversely affect the neighborhood.'" *Retail Prop. Trust v. Bd. of Zoning Appeals of Town of Hempstead*, 98 N.Y.2d 190 195 (2002) (quoting *North Shore Steak House v. Bd. of App. of Inc. Vil. of Thomaston*, 30 N.Y.2d 238, 243 (1972)). The Town of Reading expressly rejected zoning in favor of special use permit determinations based on criteria specified in the Land Use Law. In Reading, there are no legally defined neighborhoods with which specially permitted uses can be presumed consistent.

NYSDEC OHMS Document No. 201166576-00054

Even the cases cited by the Parties make it clear that the municipalities in which a proposed project will be located do not define the region of influence for community character analysis and their plans do not "control" how community character is defined. In *St. Lawrence Cement*, 2004 WL 2026420, the geographic scope of the community character analysis included the Town of Greenport and City of Hudson, where the applicant's mine and dock would be located, and the Village of Athens, which was located *across the Hudson River* with views of the proposed industrial site. *See id.* at *48, *52.[49] The region of influence was enlarged because "the geographic scope of the inquiry depends upon the nature of the impact." *Id.* at *51. The Commissioner also held that "local land use plans are not the only evidence of community character . . . ." *Id.* at *49. Rather, "[e]nvironmental considerations such as scenic views and vistas, absence of pollution-created haze, or water resources may be components, where appropriate, of the character of a community." *Id.* *St. Lawrence Cement* thus provides precedent directly on point for including the municipalities around Seneca Lake—all of which share an interest in protecting the water resource, scenic views, and tranquil lakeside environment—within the scope of the community character inquiry. That decision also rejects the Parties' claim that, in conducting the inquiry with respect to the Project, nothing matters but the host communities' plans. Because GFS's claims have not been rebutted by the Parties, the community character issues should be adjudicated.

[49] The Applicant stated that the region of influence included only the host communities and an "adjacent" village. FLLPG Initial Br. at 7. Regardless whether the village across the river is "adjacent" to the host municipalities, the municipalities around Seneca Lake—especially those bordering Schuyler County and Reading—should be included in the Project's region of influence for purposes of both the community character impact analysis and the noise study. The Town of Hector across the lake actually is adjacent to the Town of Reading, as DEC's map shows, *see* Affidavit of Eric Rodriguez, sworn to on April 16, 2015 (showing that the western lakeshore is the border between Reading and Hector). The Applicant's Visual Impact Assessment already considers views from Hector, although it fails to consider impacts on the publicly accessible and governmentally designated park site of Hector Falls. The Village of Watkins Glen (which extends into the Town of Reading to its south) and the Counties of Yates and Seneca (which border Schuyler County to the north) all have adopted formal resolutions in opposition to the Project, as have numerous other lakeside municipalities. *See* Flad Report at 31–32.

NYSDEC OHMS Document No. 201166576-00054

C. The ALJ Should Reject the Applicant's Attempt to Portray Community Character Impacts as Too Subjective for Adjudication.

FLLPG ridicules the petitioners' community character claims as "subjective, nebulous, and unverifiable assertions regarding the Project's alleged inconsistency with a regional 'sense of place.'" FLLPG Initial Br. at 5. The scare quotes with which FLLPG derides the idea of a "sense of place" might carry more dismissive impact if both DEC and Schuyler County had not recognized the concept's key role in defining community character. As the Department stated in the FSGEIS (and the revised draft previously cited, *see* GFS Initial Br. at 13, 81):

> A sense of place also is central to community character or identity. 'Sense of place' can be described as those tangible and intangible characteristics which, over a period of time, have given a place its distinctiveness, identity, and authenticity (Robinson 2005). Distinctiveness can be globally, nationally, or regionally important, as well as locally or personally important. The various elements that comprise sense of place include, but are not limited to, regional and local planning, population density, transportation and access, and services and amenities.

FSGEIS at 2-168; *see also id.*, Response to Comments at RTC-279 ("[C]ommunity character is defined as a combination of several factors that contribute to an area's sense of place . . . ."). The sense of place shared by the municipalities around Seneca Lake has been described by Dr. Flad, whose analysis integrated a wide array of relevant documents and websites, including municipal government publications and economic development plans. *See* Flad Report at 2; *see also* FSGEIS at 2-168–69 ("For the purposes of this analysis, the sense of place for a county or region was described utilizing regional, county, and local comprehensive plans, economic development plans, and Web sites.").

Schuyler County has recognized that its "unique sense of place" comes in part "from its long and rich history." CWCP at 9. Like Dr. Flad, the County understands that "[t]he area's early development as a tourist location was due in part to the many gorges and waterfalls that

grace the County." *Id.* at 6; Flad Report at 10 (noting that 19th century "guidebooks dramatized the attractions of the [Watkins Glen] gorge"). As is explained above, the County's comprehensive plan now emphasizes its natural resources, agriculture, and tourism. *See* CWCP at 10–15, 23. Its heavy industrial past is a problem for its sustainable future. *See id.* at 6 (noting the challenges presented by legacy industries); 38–39 (providing the County's environmental health and sustainability policy).

The Applicant belittles the concern about the industrialization of Seneca Lake's western shore as nothing more than a "disturbing psychological 'perception.'" FLLPG Initial Br. at 5. But perceptions are a crucial part of community character.[50] As DEC recognizes: "Community character relates not only to the built and natural environments of a community, but also to how people function within, *and perceive*, that community."[51] DEC, *The SEQR Handbook* 87 (3d ed. 2010) (emphasis added), *available at* http://www.dec.ny.gov/docs/permits_ej_operations_pdf/seqrhandbook.pdf ("SEQR Handbook") (emphasis added). Schuyler County also understood this when it described its comprehensive plan as a means to attain "the long range *vision* of a community." CWCP at iii (emphasis added); *see id.* at 2 ("The CWCP will articulate the overall shared vision for the Villages, Towns and the County, and the means to achieve that vision.").

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[50] Moreover, the perception reflects the reality. Between 2009 and 2013, Crestwood (then Inergy) subsidiaries submitted applications for a 33 percent expansion of a 1.5-billion-cubic-foot natural gas storage facility and for creation of a new 88.2-million-gallon LPG facility on lakeside sites directly north of the company's U.S. Salt Plant. During the same period, Crestwood also attempted to locate a compressed air energy storage facility on the property, but NYSEG found the salt cavern offered for that purpose too risky. *See* GFS Initial Br. at 32. Against these incontrovertible facts, the adverse impacts of increased heavy industry on rural community character cannot be discounted as "fantastically speculative and baseless." FLLPG Initial Br. at 5.

[51] The Department's insistence that visual impact analysis requires nothing more than line-of-sight studies, *see* DEC Initial Br. at 18, thus misses the role of aesthetics in *community character* impact analysis. As Dr. Flad will testify, such a simplistic approach cannot accommodate the complex role of visual imagery. The science of how and what we see and then translate what is seen into meaning has been thoroughly examined by scientists from many different disciplines, including physics, philosophy, psychology, sociology, art history, and geography. Cultural landscape analysis examines what is seen through lenses used by landscape architects, environmental psychologists and geographers. The analysis helps to explain why the same sight may have a different impact on communities with different characters.

That the self-perception, vision, and other intangible characteristics of a community cannot be "determined by a precise formula," SEQR Handbook at 86, does not mean that they elude meaningful analysis under SEQRA or that disputes about them are not adjudicable. The methodology of cultural landscape study allows analysts to develop an objective account of community character. *See* FSGEIS at 2-167 (citing Emma-Jane Robinson, *A Sense of Place—a Model to Compare Places, Peoples and Their Relationships over Time—Salisbury Plain Revisited* (2006) (presented at the Forum UNESCO University and Heritage 10th International Seminar *Cultural Landscapes in the 21st Century* (2005)); *cf.* SEQR Handbook at 86 (explaining that "objective decision-making" about aesthetics is possible even though "opinions may vary concerning the evaluation of visual impacts"). Using that methodology, Dr. Flad has explained—and will explain in greater detail, if allowed to testify at an adjudicatory hearing—why the relevant study area for community character analysis includes the municipalities surrounding Seneca Lake, how the character of that community is properly described, and what the impacts of the Project will be on that character.[52] Flad Report at 4–40. Because all of those issues remain unresolved, the sufficiency of the community character analysis should be adjudicated.

[52] DEC claims that Dr. Flad is not qualified to opine on visual, traffic, and noise impacts. *See* DEC Initial Br. at 18. Dr. Flad's credentials are evident from his C.V., and, as GFS has shown previously, he does not have to qualify as an expert on history, culture, natural landscapes, aesthetics, noise, land use planning, socio-economics, and traffic to present expert testimony on a cultural landscape study showing how those subjects interact dynamically to shape a community's character. *See* GFS Initial Br. at 71, 80–82; Flad Report, Ex. A. For the reasons explained above, the Department's specific criticisms of his impact analysis also fail to rebut the issues he raises.

NYSDEC OHMS Document No. 201166576-00054

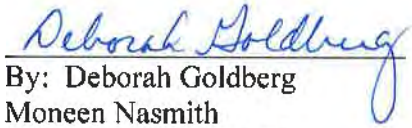
CONCLUSION

For the foregoing reasons, and the reasons stated in its prior submissions, GFS's petition for full party status should be granted in its entirety.

Dated: New York, NY
May 29, 2015

Respectfully submitted,

EARTHJUSTICE



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NYSDEC OHMS Document No. 201166576-00054

Exhibit A

(Redacted)

NYSDEC OHMS Document No. 201166576-00054

New York State Department of Environmental Conservation

In the Matter of the Application of

FINGER LAKES LPG STORAGE, LLC

for a permit pursuant to the Environmental Conservation Law to construct and operate a new underground liquid petroleum gas storage facility in the Town of Reading, Schuyler County
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Application Number 8-4432-00085

AFFIRMATION OF SERVICE

I, Deborah Goldberg, an attorney duly admitted to practice law before the courts of the State of New York, affirm under penalty of perjury:

I am a person over the age of eighteen and am lead counsel for Gas Free Seneca. On Friday, May 29, 2015, on or before 4:00 P.M., I served the confidential and public versions of Gas Free Seneca's Brief in Response to Initial Post-Issues-Conference Briefs of New York State Department of Environmental Protection Staff and Finger Lakes LPG Storage, LLC and in Further Support of Petition for Full Party Status, with Exhibit A (confidential version only), on the following individuals by electronic mail, and thereafter on the same day I caused hard copies to be mailed to counsel for the Applicant via Priority Mail.

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NYSDEC OHMS Document No. 201166576-00054

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