

FERC Approves NY Methane Storage Project

By **Peter Manti**, on October 3rd, 2014

Natural Resources News Service | **11 Comments**

Tweet 59

Recommend 1.3k



Vineyards in the Seneca Lake (Wikipedia)

Brushing aside warnings of dangerous geological risk, federal regulators say construction can start immediately on a methane gas storage project next to Seneca Lake that has galvanized opposition from **wine and tourism businesses** across the Finger Lakes in upstate New York.

The Sept. 30 decision by the Federal Energy Regulatory Commission represents a major breakthrough for Houston-based Crestwood Midstream. The company has been waging a five-year campaign for permission to convert long-abandoned lakeside salt caverns into a regional storage hub for both methane gas and liquid petroleum gas, or LPG, from fracking operations in Pennsylvania.



FERC has jurisdiction over the methane gas storage portion of the project, while the state Department of Environmental Conservation has the final say over the storage of LPG, mostly propane and butane. The company has been trying to persuade both agencies that the old caverns are ideal storage sites for highly-pressurized, volatile hydrocarbons. **Scientists** who are not paid by the company disagree and have warned of the caverns' unstable geology.

In May, after 14 months of review, FERC granted conditional approval of Crestwood's request to expand its existing methane storage into a cavern that has a history of instability. Meanwhile, the DEC has been evaluating the LPG portion of the project since 2009. It announced in August plans to hold an "issues conference" to further weigh the evidence before ruling.

Crestwood's storage hub would be located in a cluster of several dozen salt caverns on the west shore of Seneca Lake less than three miles north of the village of Watkins Glen, population 1,859. The company continues to mine salt at the site, and it already uses a former salt cavern to store methane gas. FERC has allowed it to expand its working gas capacity from 1.45 billion cubic feet to 2.0 bcf.



Typically, methane gas is transported to the caverns by pipeline, while LPG storage would require truck and rail transport. If Crestwood wins DEC approval, it would store LPG in two other caverns less than a quarter mile away from the compressed methane.

The company has asserted that the history of the storage caverns, including details of their flaws, is a trade secret. And state and federal regulators have complied with the company's requests to keep most cavern information out of the public eye. But reports dating back decades by engineers employed by the caverns' owners — tracked down in Internet searches — candidly spell out their defects.



Watkins Glen residents protest Fagan Resolution

Opponents of Crestwood's proposed storage hub have expressed alarm over FERC's brisk dismissal of potential risks, but safety issues are not their only concern. They also fear increased air and noise pollution, a steep increase in LPG truck traffic through the village of Watkins Glen and new LPG rail traffic over a spindly 80-year-old trestle that spans the Watkins Glen gorge, one of the state's Top 10 tourist destinations.



Paul Hobbs and Johannes Selbach

In March, two internationally renowned vintners who recently purchased 65 acres directly across Seneca Lake from Crestwood's property wrote Gov. Andrew Cuomo to urge him to block the LPG portion of the plan.

"The potential for accidents, the threat to fresh water quality and the visual impact of a 60-foot flare stack with massive compressors is not compatible with developing the tremendous potential of the region," wrote Paul Hobbs, owner of the Paul Hobbs Winery in Sonoma County, California, and Johannes Selbach of the Selbach-Oster estate in Germany's Mosel Valley.

"For the past several years we have explored the vineyards and wineries of the Finger Lakes in search of an ideal parcel for growing world class Riesling," Hobbs and Selbach wrote the governor. The site chosen on

the east side of Seneca Lake just outside Watkins Glen, which features steep slopes, low-PH scale shale and slate soils and a cool growing season, "is unquestionably one of the premier places in the world for high quality winegrowing," they added.

The Seneca Lake Wine Trail already has about three dozen member wineries. Michael Warren Thomas, who helped recruit Hobbs and Selbach to join them, recently met with a top aide to Cuomo to point out that their arrival could easily stimulate significant new investment in the Finger Lakes wine industry. Already, Thomas noted, Louis Barruol of Chateau St. Cosme and Master Sommelier Christopher Bates have floated the idea of building a visitor center near Watkins Glen in a bid to draw from around the world.

"These are not bulk wine producers," Thomas said of Hobbs and Selbach. "They are people looking to make the best wine in the world in small quantities. We ought to pay attention when we have the best in the world deciding to make wine in our backyard."

While Hobbs and Selbach arrived without invitation, hoopla, political backing or government incentives, Crestwood has been backed — both overtly and quietly — by a coalition of politicians.

In July 2013, state Sen. George Maziarz, R-Newfane, the chairman of the Senate Energy and Telecommunications Committee, wrote DEC Commissioner Joseph Martens to urge him to promptly approve Crestwood's LPG proposal.



Sen. George Maziarz

This past June, Dennis Fagan, the Republican chairman of the Schuyler County Legislature, drafted a resolution supporting the LPG project. Skipping the customary committee process, he pushed for a vote and won 5-3. That vote incensed many in Watkins Glen, the county seat. The town council later voted for a resolution opposing the project.

Fagan's promotional role prompted more than 400 people to mass in protest at the subsequent legislative hearing. Several local residents called for him to withdraw the resolution and recuse himself from discussion of the matter due to potential conflicts of interest. He declined both requests.

The company he had founded, Fagan Engineers, has done extensive work with companies involved in oil and gas production and pipelines. Fagan recently sold his firm to his brother and other partners, but he said he continues to receive payments from them as part of the sales agreement. Fagan Engineers is currently building a facility 15 miles south of Watkins Glen for Access Midstream, a joint venture partner with Crestwood in a Wyoming project valued at well over \$100 million.



Dennis Fagan

Fagan has long touted Crestwood's planned storage hub. In an October 2011 letter of support to the DEC, he predicted that the LPG project would expand Schuyler County's tax base by \$20-30 million. Two years later, he announced that the property Crestwood plans to use for its methane gas storage would have its assessed value *reduced* from \$29 million to \$22 million by 2015, despite plans for extensive development.

Inergy, Crestwood’s predecessor company, negotiated the assessment cut with Schuyler County’s Town of Reading, where the Crestwood property is located. Inergy and Crestwood merged in 2013.

State Supreme Court records show that Congressman Tom Reed, R-Corning, had a hand in the court case that led to the company’s slashed assessment. Reed had served as Reading’s attorney for several years before being elected to Congress in 2010, and he was not officially replaced as the town’s lawyer until January 2012, according to Rita Osborne, Reading’s deputy clerk. Reed’s replacement, Thomas Bowes, had worked in Reed’s Corning law office for four years before leaving in December 2011.



Congressman Tom Reed

In 2012 — after Reed had officially been replaced by Bowes — Inergy petitioned in the State Supreme Court for the assessment cut. However, a State Supreme Court filing dated July 12, 2012 lists “Thomas Reed II, Esq.” — not Bowes — as “attorney for the respondents,” which included the town, its assessor and its board of assessment review.

In an interview with **DCBureau.org** last August, Reed acknowledged his past role as Reading’s attorney, but denied any role in the Inergy/Crestwood assessment case. Reed said his name may have been placed on the court document by mistake. Fagan, the county chairman, said in a more recent interview that he was not aware of any role Reed had in cutting the tax assessment for the methane storage property.

Form 301 (04) NOTE OF ISSUE INDEX NO. 13-131	
SECTION 1308 - SCHUYLER COUNTY MOTION RETURNABLE: SEPTEMBER 29, 2012 SUPREME COURT, SCHUYLER COUNTY	
PETITIONER: INERGY SUPREME COURT COUNTY OF SCHUYLER In the Matter of the Application for a Reassessment of the Value of the Real Property Tax Law of	DEFENDANT: ASSESSOR FOR THE TOWN OF READING, THE BOARD OF ASSESSMENT REVIEW FOR THE TOWN OF READING, AND THE TOWN OF READING, IN THE COUNTY OF SCHUYLER, NEW YORK.
REED II - ASQ, LLC Address: 1000 ... Phone: ...	Address for Petitioner Address: ... Phone: ...
Chapter of Matter Chapter of Matter Chapter of Matter	Chapter of Matter Chapter of Matter Chapter of Matter
Adjudged by _____ Adjudged by _____ Adjudged by _____ Adjudged by _____ Adjudged by _____ Adjudged by _____ Justice's Recommendation:	
Reed Represents Reading	

FERC’s decision to grant a green light for construction on the methane storage cavern preceded any public announcements of approval from the state. By law, the DEC must agree to modify Crestwood’s current underground storage permit for methane gas, and the state geologist must certify that the storage cavern is safe. However, as a practical matter, the state does not have the legal authority to block the methane storage project, if legal precedents involving federal-state jurisdiction are any gauge.

The best the public can hope for in the future is diligent monitoring of the methane storage facility for leaks and roof and wall collapses, said H.C. Clark, a Houston geologist who has sharply criticized FERC’s analysis of the cavern.

Clark pointed out in January that FERC had neglected to assess the safety implications of a massive roof collapse in the cavern. He learned about the event in a detailed report written in the late 1960s by Charles Jacoby, an engineer who worked for the cavern’s owner at the time.



H.C. Clark

During its analysis of the project, FERC had pointedly asked Crestwood if it knew of any cavern roof or wall collapses anywhere within its Seneca Lake cavern field. The company issued a qualified denial. If fact, a 400,000-ton chunk of rock — roughly the size of an aircraft carrier — had given way in the very cavern that the company proposed to use for methane storage.

After Clark disclosed the roof collapse to the public and **DCBureau.org** and other media outlets publicized it, FERC addressed the issue. It attributed the roof collapse to the fact that LPG and brine had been cycled in and out of the cavern at the time, eating away at its salt walls and weakening its structure. LPG has not been stored in the cavern since 1984, and it is now mostly filled with brine.

In its May 15 order conditionally approving the reopening of the cavern for methane storage, FERC concluded that after all brine has been removed and methane gas is added, “dissolution of the salt in the gallery will not occur.”

But Clark, who holds a Ph.D. in geophysics from Stanford and taught the subject for many years at Rice University, said an interview Oct. 1 that it would be “absurd” for FERC to imply that removing brine from the cavern removes all risk of further collapse. “This is an old — ancient by now — cavern sitting there with a broad, flat rock top, which is not what salt cavern folks want to hear,” he added. “The compressed natural gas will work its way up through any kind of abnormality.”

FERC attached several conditions to the methane storage expansion permit. One requires the company to provide fresh data on the current dimensions of the cavern and the volume of the huge rubble pile on its floor. But Clark said the results will probably never reach the public or independent scientists qualified to evaluate them. That is due, he said, to the understanding between the company and its regulators that flaws in caverns used to store volatile hydrocarbons are not to be disclosed to the public.

That policy may increase risks of catastrophic events, he added. “Bayou Come illustrates the folly of trying to keep this stuff secret,” Clark said in reference to the Louisiana salt dome collapse in 2012 that has created a giant sinkhole about 30 miles south of Baton Rouge. Hundreds of residents have been evacuated and the state’s top natural resources official was forced to resign.



Assumption Parish, OHSEP, 08/21/2012

Bayou Corne sinkhole (Assumption Parish Police Flickr)

“By keeping it secret, look what happened in Louisiana,” Clark said. “(Gov. Bobby) Jindal is trying to figure it out after the fact. The state has had to spend a fortune ... and the sinkhole’s getting larger.”

Both methane gas storage and LPG storage in salt caverns have been prone to severe accidents. Major fires and explosions struck at salt caverns holding compressed natural gas in 2001, 2003 and 2004. Catastrophic accidents hit LPG storage caverns in 1980, 1984, 1985 and 1992, killing or seriously injuring people in three of those cases.

In August, Dr. Rob Mackenzie, a retired CEO of the Cayuga Medical Center, a hospital about 20 miles east of Watkins Glen, sought to quantify the safety risk of Crestwood’s methane gas storage operation to Schuyler County residents. An experienced risk analyst, Mackenzie prepared a formal quantitative risk analysis of the Crestwood methane gas proposal.



Dr. Rob Mackenzie

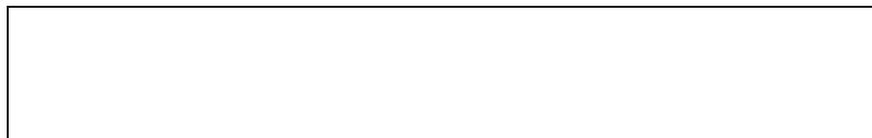
Mackenzie analyzed accident events — major fires, explosions, collapses, catastrophic loss of product, evacuations — at salt cavern storage facilities in the United States dating back to 1972. He concluded that the risk of an “extremely serious” salt cavern event within Schuyler County over the next 25 years is more than 35%.

Citing data from the Energy Information Administration, Mackenzie noted that in 2012 there were 414 underground gas storage facilities in the United States, including 40 in salt caverns. Aquifers and depleted oil and gas reservoirs are much more commonly used for hydrocarbon storage, and they have dramatically better safety records than salt caverns. “Worldwide, the percentage of incidents involving casualties at salt cavern facilities as a percentage of facilities in operation in 2005 was 13.6%, compared to 0.63% for depleted reservoirs and 2.5% for aquifers,” Mackenzie reported, citing a 2008 study by British health officials.

Between 1972 and 2012, there have been 18 “serious or extremely serious incidents” at U.S. salt cavern storage facilities, Mackenzie wrote, citing EIA data. “With the average number of (salt cavern) facilities in operation through most of the last two decades at close to 30, the U.S. incidence is about 60% (compared to 40% worldwide), and the frequency is about 1.4% per year,” he said. “Most other regulated industry sub-segments with a persistent serious to extremely serious facility incident rate of over 30% would be shut down or else voluntarily discontinued, except in wartime.”

Mackenzie also found that nine of the 18 salt cavern incidents involved large fires and/or explosions; six involved loss of life or serious injury; eight involved evacuations of between 30 and 2,000 residents; and 13 involved extremely serious property losses.

FERC, the regulatory agency, saw no need to further question the suitability of Crestwood’s salt cavern storage.





Independent High-Level Quantitative Risk Analysis

SHOW ME MORE LIKE INDEPENDENT HIGH-LEVEL QUANTITATIVE RISK ANALYSIS
SIMILAR TO INDEPENDENT HIGH-LEVEL QUANTITATIVE RISK ANALYSIS

BACK TO DOC

More from [Washington Bureau](#)

[Previous](#) | [Next](#)

[Seneca Lake Hydrology Report](#)

[Washington Bureau](#)

[Request for Proposals: Exposure Assessment and Epidemiology Studies in the Area of Unconventional Resource Development](#)

[Washington Bureau](#)

[Report of the Plutonium Disposition Working Group: Analysis of Surplus Weapon-Grade Plutonium Disposition Options April 2014](#)

[Washington Bureau](#)

[Accident Investigation Report: Phase 1 Radiological Release Event at the Waste Isolation Pilot Plant on February 14, 2014](#)

[Washington Bureau](#)

[Chanutte 1983 Study](#)

[Washington Bureau](#)

[Final Focused Feasibility Study Landfills Nov 1999](#)

[Washington Bureau](#)

[Chanutte ar Dec. 10 1998 Rab](#)

[Washington Bureau](#)

[Chanutte Rab Oct 1998 Herbicides](#)

[Washington Bureau](#)

[AF Letter 3.13.84](#)

[Washington Bureau](#)

[AF Doc 7.14.83](#)



Peter Mantius

Peter Mantius is a reporter in New York. He covered business, law and politics at *The Atlanta Constitution* from 1983-2000. He has also



served as the editor of business weeklies in Hartford, CT, and Long Island. He is the author of *Shell Game* (St. Martin's Press 1995), a nonfiction book on Saddam Hussein's secret use of a bank office in Atlanta to finance billions of dollars in arms purchases from Western countries before the 1991 Persian Gulf War.

More Posts

Like 1.3k +1 1

[Natural Resources News Service](#) Tags: [Access Midstream](#), [Bayou Corne](#), [Butane](#), [Chateau St. Cosme](#), [Christopher Bates](#), [Congressman Tom Reed](#), [Crestwood Midstream](#), [Dennis Fagan](#), [Department of Environmental Conservation](#), [Dr. Rob Mackenzie](#), [Fagan Engineers](#), [Federal Energy Regulatory Commission](#), [FERC](#), [Finger Lakes](#), [fracking](#), [Gas Storage](#), [H.C. Clark](#), [Johannes Selbach](#), [Joseph Martens](#), [liquid petroleum gas](#), [Louis Barruol](#), [lpg](#), [Methane gas](#), [Michael Warren Thomas](#), [new york](#), [NY](#), [ny dec](#), [Paul Hobbs](#), [Paul Hobbs Winery](#), [pennsylvania](#), [propane](#), [reading](#), [Salt caverns](#), [Schuyler County Legislature](#), [Selbach-Oster estate](#), [Sen. George Maziarz](#), [Seneca Lake](#), [Seneca Lake Wine Trail](#), [Thomas Bowes](#), [upstate new york](#), [Watkins Glen](#) —

11 Comments

DC Bureau

Login

Sort by Best

Share Favorite

Join the discussion...

Sheila Cohen · 4 months ago
Very thorough coverage!
3 ^ | v · Reply · Share

William Huston · 4 months ago
Peter, I'm already a big fan of your work.
But this is an outstanding piece. Thank you.
2 ^ | v · Reply · Share

Bart Schoenfeld · 4 months ago
This can't be allowed to happen! Who owns FERC????
2 ^ | v · Reply · Share

Joseph → [Bart Schoenfeld](#) · 4 months ago
The gas companies own FERC
5 ^ | v · Reply · Share

Anna Kelles · 4 months ago
Thank you for this article. It breaks my heart and makes me feel a bit helpless. I live here in Ithaca, NY and grew up playing in Seneca lake. This is my home and I am distraught. We have a rally on friday morning outside of the construction site for Crestwood. We will see what we as citizens can do but our broken government, failing to support us once again is a huge blow. I wish the people who have the intelligence and courage to stand up for what is right could start winning some elections. Zephyr Teachout would have been the best solution for this state. To everyone not in this area please share this article and hope for as much national coverage as possible. I have heard that this is one of the only ways to truly make a difference - we must make as much noise as possible.
1 ^ | v · Reply · Share

Glenn E. Sohm → [Anna Kelles](#) · 2 months ago
The people of Staten Island fought the gas industry and prevented storage of compressed natural gas in massive above ground storage tanks. It was only after an unfortunate explosive accident that killed many workers was the project cancelled. It was a long and hard fight, but they did eventually send Texas Eastern packing. You in Schuyler County can do likewise, but it will probably be a long fight for you. Continue to fight them with a multipronged approach; fight them in court, continue to fight them with increased numbers in opposition, continue to educate those who no nothing about the threat. Support for your

actions is growing. You were committed to nonviolent civil disobedience and you are following through with your commitments. God Bless you All!

^ | v · Reply · Share ›



paulroden · 4 months ago

The geologists, engineers and scientists of FERC, the gas company executives and the politicians in their willful blindness and greed are mad, crazy and stupid to make this decision and move forward on using salt caverns to store liquified hydrocarbons. Murphy's Law is always at work here and Murphy was an optimist. I just don't understand these people. They truly are nuts and blind.

1 ^ | v · Reply · Share ›



US Patriot · 12 days ago

As a resident in Rochester NY, who relies on LPG for energy and to heat my home in the cold cold winters, it is my i benefits me greatly that more LPG can be stored nearby. I think everyone in western NY can agree that keeping gas prices low and stable is important to the regional economy.

Moreover, I think Crestwood, undoubtably experts in LPG storage, are better suited to determine the risk of failure, as compared to a CEO of a local hospital or some reporters or some govt bureaucrat. Indeed, it is against Crestwood's interest to fail: just image the millions of dollars they would loose if the caverns where to fail or leak. We need to trust that their financial interest will guide them to make sound engineering decisions, rather than trusting the emotional and unreasoned way of Watkins Glenn and Seneca Lake locals. Besides, we live in a free America where everyone should have the right to use their private property as they please. It is what makes this country great.

I think it is unconscionable that the selfish people of Watkins Glenn would choose voodoo science and fear-tactics to protect their frivolous tourism industry over the real health and well-being of the citizens of NY. I hope the DEC uses their brains and follow the lead of FERC to approve the LPG storage right away.

^ | v · Reply · Share ›



Cynical Observer · 4 months ago

You people have to realize that "all of this science stuff" is of no interest to money grubbing politicians, Republican or Democrats, the sleazy weasels who are appointed to run the DEC, EPA, FERC, etc. or the business people who will profit from any gas, oil or mineral related activity. They don't give a hoot if anything collapses, blows up, catches on fire, kills people or poisons drinking water BECAUSE they've already got the New York and Federal judicial system wired to prevent any court interference or judgment by any court for money damages if any catastrophe happens. People's lands and lives are being stolen from them, while the thug-in-chief in Albany happily goes home to his mistress most nights. Give up New Yorkers. Mobsters have taken over, just not the mobsters the FBI went after when you were kids.

^ | v · Reply · Share ›



Suzy Farmer · 4 months ago

So sad for Seneca Lake and the many homeowners, wineries, and businesses in that area. The fact that this was approved is just atrocious. It is a tragedy just waiting to happen.

^ | v · Reply · Share ›



Taxpayer1301 · 4 months ago

Thorough and ultimately, stunning. Another chapter in the abysmal record of agencies charged to protect the public paving the way for catastrophe at the behest of those who they are supposed to regulate.

^ | v · Reply · Share ›

ALSO ON DC BUREAU

WHAT'S THIS?

Hungnam, North Korea: Delving into Pyongyang's Long Nuclear Past

9 comments • 2 years ago

Bill Streifer — So the Deseret News wasn't misquoting anyone. It was an accurate quote of a U.S. Senator's ...

Geologist Says Feds Made "Incredible Error" Ignoring Huge ...

...

5 comments • a year ago

Celeste Froehlich — Big business does not always win! Our same community of activists that just won a ban on ...

Obama's Iraq War – The Kurdish Connection

2 comments • 6 months ago

Indiana Regulators Let BP Pollute Lake Michigan

1 comment • 2 years ago

 **soran** — the map is an accurate since majority of tat areas (Kurd-Suni) are Kurds putting or writting the average ...

 **Teri Thompson Crane** — What is wrong with the people of Indiana?? Do they not care about the harm being done ...

 [Subscribe](#)

 [Add Disqus to your site](#)

 [Privacy](#)