

Susquehanna *Sierran* March 2021



Founded 1892

EXPLORE, ENJOY, PROTECT THE PLANET

Express Natural Gas (XNG) Trucks Among Us

– Doug Gausman

Some may have noticed a number of tractor trailer trucks marked 'XNG' driving through Vestal, Binghamton, and east on I-88. They are operated by XNG (Express Natural Gas) of Andover MA, and make up a virtual pipeline from the Pennsylvania fracked natural gas fields to businesses and pipelines throughout New York State. There are perhaps 80 shipments per day. They carry natural gas compressed to less than 1 per cent of its volume (CNG) in cylinders loaded into semi-trailers. CNG is mostly methane used for power generation and industrial processes. It is lighter than air, and in the event of a spill tends to rapidly dissipate. In the atmosphere it is a much more potent greenhouse gas than carbon dioxide.

I live in Vestal just off NY Route 26 South and encounter XNG trucks every day I drive into town. XNG on its web site states it does not consider these trucks to be a danger to the area. According to XNG the trucks are designed to carry the fracked gas under pressure in sealed containers to businesses and pipelines. Empty containers are then brought back to a

Pennsylvania compressor station to be refilled and again transported. I witnessed a collision in which one of the trucks was damaged but not overturned and there was no apparent leakage. XNG's transport of CNG complements and substitutes for pipelines which like every form of transport have been subject to failure.

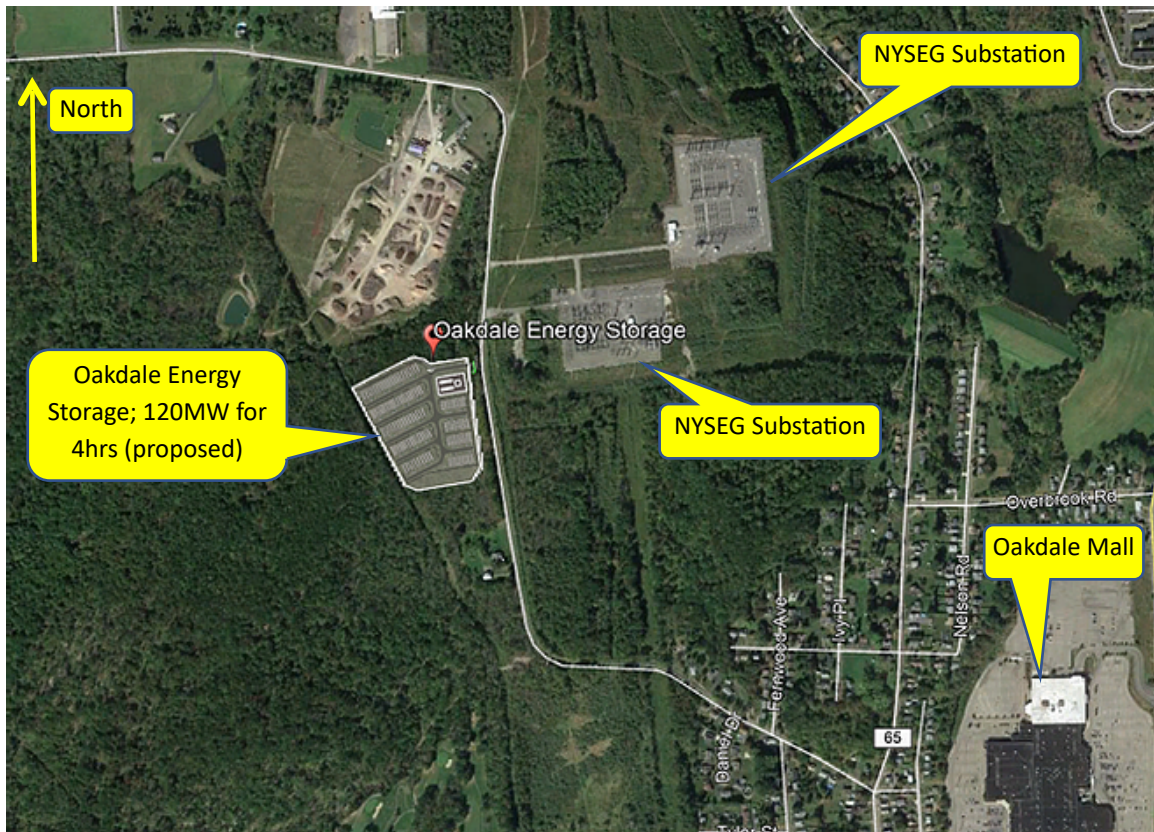


photos: AllOTSEGO.com

Grid-Scale Energy Storage Project Proposed for Union

– Valdi Weiderpass

GlidePath Development (Elmhurst IL) proposes building a 480 MWhr battery energy storage system that could provide 4 hours of electrical power for about 100,000 households (more than in Broome County). The project would assist the transition to renewable energy (wind and solar), and facilitate closures of natural gas-fired 'peaker' generating plants, thereby reducing pollution and greenhouse gases. The project, Oakdale Storage, is proposed for a Town of Union site on Robinson Hill Road near two NYSEG-owned electrical substations. <https://www.oakdaleenergy.com/>



Oakdale Energy Storage project location (GlidePath Power Solutions, LLC)

Plans call for lithium-ion battery modules in racks, housed in about 116 storage containers each about 53 feet long, 8 wide and 9 high. According to the company:

The project would be equipped with a state-of-the-art Battery Management System (BMS), which would monitor voltage, temperature, current, and other data at each battery cell. The BMS would shut down and electrically isolate any battery that exceeded normal operating limits, ensuring safe operation of the facility. The facility will be monitored 24/7.... we have included the following elements in our proposed plan: ... Redundant safety systems automated fire suppression....Here is a list of some of the safety and testing standards to which the installation will be compliant (this is not an exhaustive list):

- Uniform Code including NY Dept of State 2019 Energy Storage System Supplement
- NFPA 68, 69, 70E
- BATTERIES: UL1642, UL1973, UL9540, UL9540A
- INVERTERS: IEEE1547, UL1741, IEC61000-2-2,4, FCC Part 15 Class A

If you are interested in this project, another public hearing (via internet) is planned by the Town of Union for later in March. You can contact the Town for details.

Susquehanna Group

(All of Broome, & most of Chenango,
Delaware, Otsego, Tioga Counties)

Chair	*Valdi Weiderpass
Vice Chair	*Scott Lauffer
Secretary	*Karen Boba
Treasurer	*Joann Lettis
Conservation Co-Chairs	*Douglas Gausman, *Joann Lettis
Political Chair	*Allan Hochberg
Chapter Delegate	*Jim Taft
Alt. Chapter Delegate	*Joann Lettis
Newsletter Editor	*Jim Taft
Outings Chair	*Chris Harasta
Webmaster	*Chris Harasta
	* Member Executive Committee

To become a candidate for the
Susquehanna Group's Executive
Committee, mail by November 1, 2021
a candidate statement of 150 words or
less to:

Susquehanna Group
PO Box 572
Endicott NY 13760

The Nominating Committee will create
a slate of candidates, and ballots will be
mailed with the December *Sierran*.

COMING EVENTS

Dear Member – Club meetings during the pandemic continue online. To join any Coming Event use a Zoom app.

Mar 16, 7:30pm, Zoom 475 123 3298 David Nicosia, National Weather Service (NOAA) Meteorologist will discuss bird migrations, and bird adaptations to climate and land-use changes.

April 20, 7:30pm, Zoom 475 123 3928 Christopher Audette, Executive Director of Waterman Conservation Center, will discuss his Peace Corps experiences in Sub-Saharan Africa.

May 18, 7:30pm, Zoom 475 123 3928 Roy Hopke, Consulting Forester, will speak on how our forests are transitioning during climate change.

GROUP ELECTION RESULTS

The December 2020 election filled 4 two-year positions on the Susquehanna Group Executive Committee:

Karen Boba
Chris Harasta

Joann Lettis
Scott Lauffer

Work is finally visible on the 2.5-mile NYS DOT 434 Greenway which will connect the Binghamton southside to Binghamton University and become part of the (so far) 2-county Two Rivers Greenway.



The New Climate War: The Fight to Take Back Our Planet

Michael E. Mann, PublicAffairs, 2021

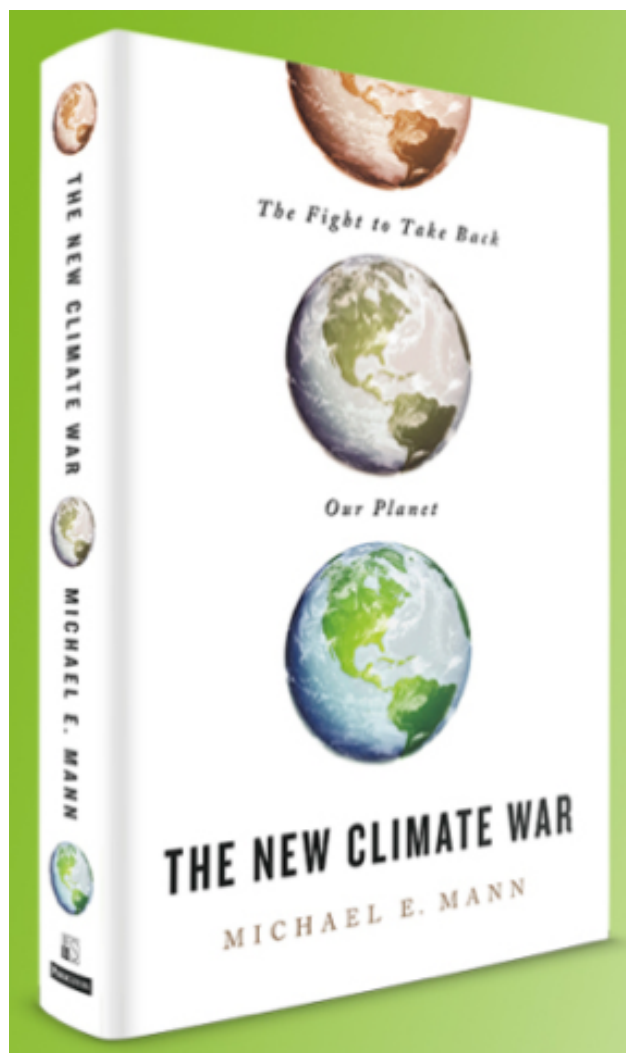
— Chris Rounds

Readers who've been involved with the Sierra Club may recognize Michael Mann as author of *The Hockey Stick and the Climate Wars* (Columbia University Press, 2012). In *The New Climate War* he argues that opponents of climate science have shifted focus. While in the past they simply denied the reality of climate change, they have come to recognize that position as untenable. They have had to “admit that the waters around them have grown.”

In the new book, Mann, Director of the Earth Science Center at Penn State, suggests the resistance to fighting climate change has shifted focus from denial to “deception, distraction and delay.” [p. 3] Fossil fuel industries, supported by the Koch brothers, Mercers, Scaifes and others have changed tactics. Mann here describes the new tactics and proposes a plan to combat them.

At the heart of the deniers new strategy is what Mann calls “deflection” which argues that combating climate change, rather than a matter of public policy, is the responsibility of individuals. As the argument goes, if we really want to reduce atmospheric CO₂ emissions we should install solar panels, trade in our gas hogs for electric vehicles, and stop eating hamburgers. Forget about new fossil fuel regulations or banning fracking—we should focus on our own behavior. While Mann points out that behavior change is important in reining in climate change, it cannot take the place of systematic policy changes at every level. Deflection pits members of the environmental movement against one another. Environmental purists can point to others in the movement and say, “You can’t believe anything he says! He drives a truck and eats meat!”

Mann outlines a four-part battle plan against deflection. First, “*Disregard the Doomsayers*,” those who won’t be swayed by evidence. Instead focus on those in the middle ground who can be swayed by reasoned argument. Second, “*A Child Shall Lead Them*.” Here he celebrates Greta Thunberg and other young people who can break through cynical shells that keep many of us from taking climate action. Third, “*Educate, Educate, Educate*.” Knowledge, our most powerful tool, must be used to win over those susceptible to reason. Lastly, “*Changing the System Requires Systemic Change*.” Specifically, we have to elect people to make policy changes necessary to move society toward a more sustainable global future.



Susquehanna Group Member of Note: Julian Shepherd

– Jim Taft

Born in England, Julian Shepherd came with family to Canada at age 4, then to Ithaca NY where he mostly grew up. Mom was a social worker, and dad a professor of engineering. After high school Julian attended Cornell, London University, and finally Harvard which conferred a PhD in Biology (specializing in insect physiology). There were 2 years in Kenya studying insects involved with human diseases. In 1975 he sought a faculty position in the US. Binghamton University hired him and over a long career there he has taught biology, entomology, ornithology, tropical ecology, wetlands, conservation biology, and other subjects.

In the late 1990s Dr. Shepherd learned that IBM was selling its country club and large surrounding properties. The 200-acre IBM Glen's old-growth trees were to be logged. Julian and others convinced IBM of the Glen's unique biological value and the company agreed to gift the property. It is now owned and managed by the Waterman Conservation Center.

Dr. Shepherd led the Susquehanna Group for several years. He managed stream samples for the Water Sentinels program, and embarked on an independent project to inventory natural areas in Broome County, generally traveling by bicycle. In 2012 he received a Supercommuter Award from Planet Bike.

Final questions for Dr. Shepherd:

Q: What is your favorite natural area in Broome County?

A: Tough question. I'd say the University's nature preserve.

Q: What is the most important issue now for the Sierra Club and the Susquehanna Group?

A: No hesitation. Climate change.



photo: Binghamton University



photo: Pipe Dream, 2012

Texas Blackouts – The Reality

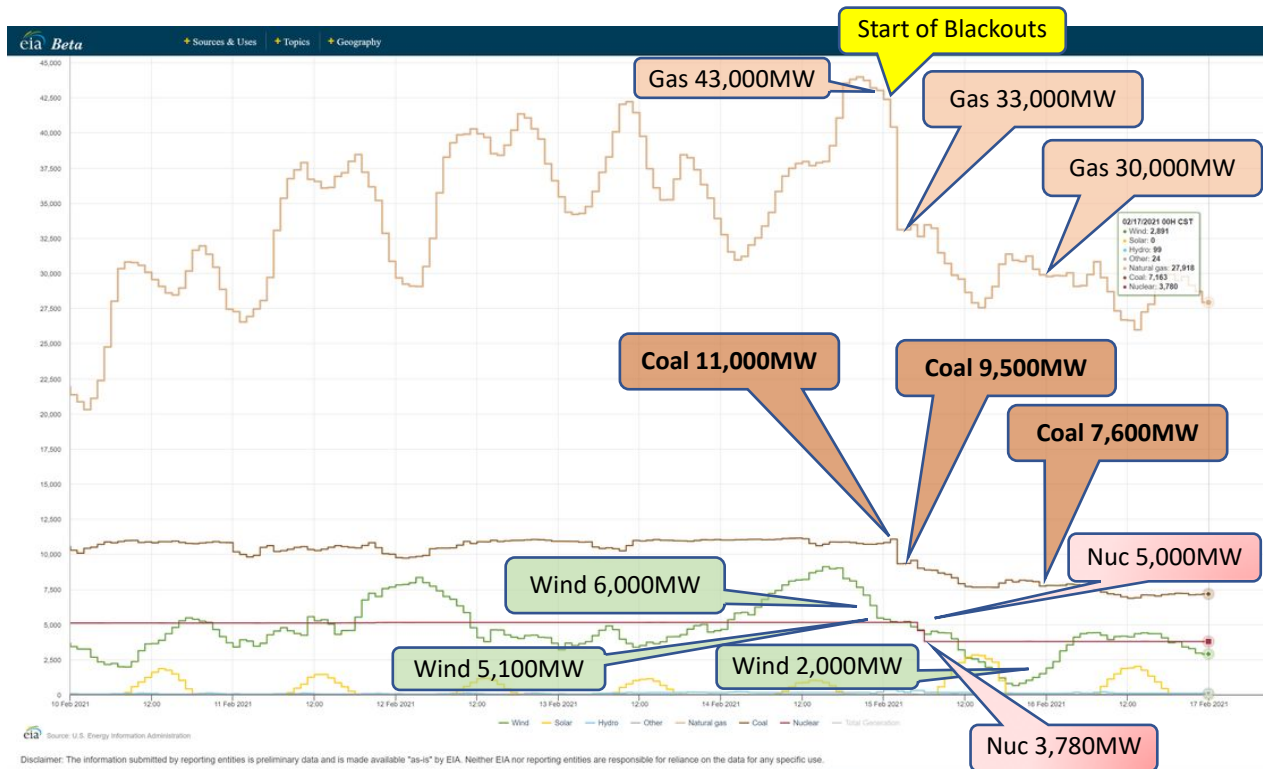
– Valdi Weiderpass

Most of Texas lost power during a winter storm starting February 10. Governor Abbott said on Fox News: “This shows how the Green New Deal would be a deadly deal....Our wind and our solar got shut down, and they were collectively more than 10 percent of our power grid, and that thrust Texas into a situation where it was lacking power on a statewide basis....It just shows that fossil fuel is necessary.”

Power generation records and a little history, however, show the actual causes.

1. Texas government has historically encouraged a state power system independent from out-of-state grids which could alleviate in-state shortages.
2. Its power generators were subject to lax regulation.
3. Texas power producers were unprepared for effects of cold weather on electricity generation and demand in spite of ample previous experience, technical analyses, and warnings. See <https://texasclimatenews.org/features/how-texas-froze-neglect-of-power-grid-and-climate-warnings-set-the-stage/>
4. Every sector of generation had cold-related failures, largely due to insufficient weatherization, which in turn was due to insufficient state regulation. Solar power was little affected by the storm.

Texas ERCOT Electricity Generation by source – from US Energy Information Administration Beta records (in MW) – [Callout bubbles by V Weiderpass]



Additional information can be found at:

<https://www.eia.gov/state/analysis.php?sid=TX>

<https://www.amarillo.com/story/news/2021/02/17/texas-energy-wind-power-outage-natural-gas-renewable-green-new-deal/6780546002/>

<https://www.eia.gov/todayinenergy/detail.php?id=46836>

https://www.eia.gov/beta/electricity/gridmonitor/expanded-view/electric_overview/balancing_authority/ERCO/GenerationByEnergySource-14

363 Gateway Project

- Scott Lauffer

The project is in final planning stages and NYSDOT is evaluating public comments. The area being addressed is in Binghamton along the Susquehanna River mainly between the confluence with the Chenango and Rockbottom Dam. Two public information meetings were conducted, and comments were due February 12. Design approval is expected by Spring 2021. Of the initial 15 alternatives, NYSDOT narrowed the list down to Alternative #11B at a cost of \$15.2M and Alternative #12 at a cost of \$21M.

Purposes:

- Enhance multi-modal connectivity and access between Downtown Binghamton and the Susquehanna River
- Create a Gateway facility for non-motorized users that integrates with the Two Rivers Greenway system
- Provide a safe multipurpose trail separated from vehicle traffic
- Improve river views
- Improve physical access to the river

More information is at:

<https://www.dot.ny.gov/363gateway/projectdocuments>



Susquehanna Group P.O. Box 572 Endicott NY 13760