

# Proposed Danskammer Energy Center: Overview



# Background

- **Danskammer Energy Station** was built by **Central Hudson Gas & Electric** in the 1950s, and sold to **Dynegy** in the 1990s as part of electricity deregulation.
- According to **Environmental Protection Agency (EPA)**, Danskammer was among the top ten emitters of pollutants by weight in NY, releasing 1.4 million pounds (700 tons) of hazardous emissions into Newburgh's air, land, and water in 2000.
- **Riverkeeper** sued Dynegy over its outdated *once-through cooling* system, which was responsible for large fish kills.
- In 2008, Dynegy alleged that the plants had been overvalued and that they paid more in taxes to **Orange County, the Town of Newburgh and the Marlboro School District** than they should have.
- In 2011, Dynegy filed for **bankruptcy**.
- Danskammer has been responsible **for more toxic pollution than nearly all of the total 646 industrial sites in NY**, with numerous violations of federal air quality standards. In 2012 sued **by Sierra Club, Earth Justice, and others** to employ improved pollution control.
- On Nov. 8, 2012, workers at Dynegy's Roseton and Danskammer Generating Stations -- **IBEW Local #320** -- **went on strike** in protest of the Corporation's demands to strip away hard earned pension and retirement benefits.



# Coal-Fired Days

- The facility has 6 units:  
2 natural gas- and coal-fired units w/387 MW capacity;  
2 oil and natural gas-fired units w/146 MW capacity;  
2 emergency diesel generators, w/3 MW capacity each.
- Used 450 M gpd of Hudson River cooling water, killing 144,000 adult and juvenile fish by impingement, 161 million fish eggs and larvae by entrainment and more by thermal pollution.
- **Coal ash** stored on-site contains arsenic, lead, cadmium, and other heavy metals, which can cause cancer and other illnesses. The Central Hudson Danskammer Waste Facility coal ash landfill contaminated groundwater with high levels of sulfate, iron, magnesium, manganese, boron, iron, turbidity, and high pH.
- The original coal-fired plant was closed in Oct. 2012 due to severe flood damage sustained during **Superstorm Sandy**. The NY Independent System Operator (NYISO) considered it inoperable -- a mothballed facility that was to be sold for salvage.
- Danskammer Energy assured parties that for clean-air reasons it would only fire gas in the coal-capable units.



Danskammer Energy was formed for the sole purpose of acquiring and returning the facility to service.

Mercuria Energy America Inc. owns the controlling interest in Danskammer Energy. Mercuria Energy is a power marketer authorized by FERC to make sales of energy, capacity, and ancillary services at market-based rates.



# Current “Peaker” Plant

- Reopened in 2014 by FERC; repowered to burn gas or oil
- 537 MW capacity
- Runs 5 – 10 % of the year to meet peak power demand, such as on hot summer and cold winter days
- Runs 4 gas-fired turbines, which burn gas as a primary fuel and # 6 fuel oil as a backup
- Still uses 450 M gpd of HR water in its once-through cooling system
- EPA TRI emissions: 377 lbs. in 2014



NY State pays companies to maintain excess power sources, even when they're not running to ensure capacity during peak demand. Danskammer gets about \$30 million a year from the program, according to Larry She of Mercuria. The facility operates only a handful of days a year but still makes \$10 million to \$20 million in profit, largely thanks to the **capacity payments**.

# Long-Chain of Ownership

- **Central Hudson** sold Danskammer to Dynegy in 2001.
- **Dynegy** sold the plant to **Helios Power Capital, LLC** in 2013, who in turn sold it to **Mercuria Energy Group**, to restart the former coal-fired facility as a natural gas-fired power plant.
- In Nov. 2017, **Danskammer Holdings LLC** took over ownership from Danskammer Energy LLC. Danskammer Holdings is owned by **Tiger Funds**, a collection of investment funds based in New York City.
- One of those funds, **Tiger Infrastructure**, agreed to buy Danskammer from Mercuria Energy Group.



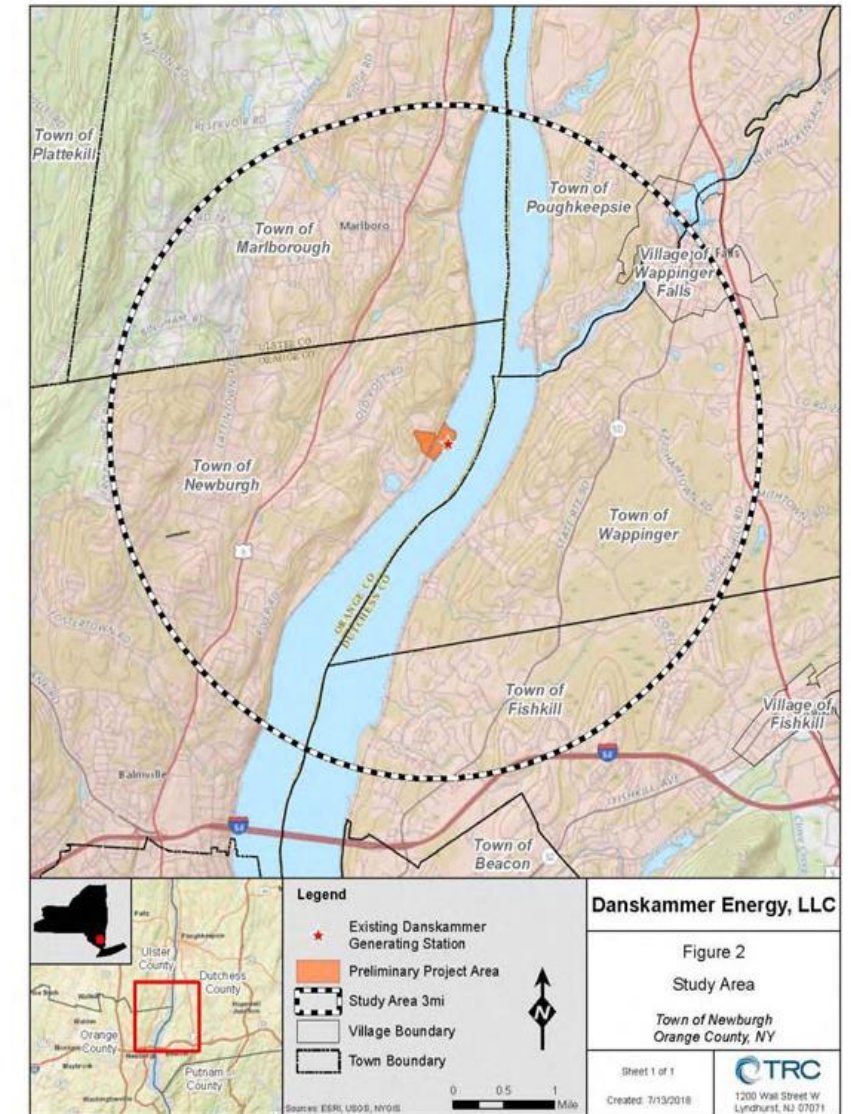
- Tiger Infrastructure and Mercuria's joint application to NYS PSC notes that Mercuria will lend Tiger Infrastructure \$66 million to cover part of the price.



# Proposed Year-Round, Baseload Gas-Fired Plant

- Cost: ~ \$400 million
- A combustion turbine generator and a steam turbine will generate between 525 – 575 MW of electricity
- Will use fracked “natural” gas as its primary fuel, with provisions to use ultra-low sulfur diesel (ULSD) for up to 30 days as a back-up fuel
- An air cooled condensing (ACC) system will eliminate the use of Hudson River cooling water
- Selective catalytic reduction (SCR) technology will be used to control oxides of nitrogen (NOx) and an oxidation catalyst to control carbon monoxide (CO) and volatile organic compound (VOC) air emissions.
- Will create 6 – 8 management positions and 25 +/- FT operations and maintenance staff
- Incentivized by FERC’s Lower Hudson Valley Capacity Zone:

In May 2014, the Federal Energy Regulatory Commission implemented a new capacity zone (NCZ) to address potential electricity supply shortfalls in lower New York and the Hudson Valley by attracting new power generation to the area. Central Hudson, the NYS PSC and many others contested the proposal through a series of ultimately unsuccessful legal motions and appeals. The NCZ is now paid for by residents and businesses within the zone and paid to power plant operators in the zone. It further increased the cost of ratepayers’ electric bills by an estimated 3% (or as high as 6% - 10%).





# Roseton & Danskammer: Cumulative Impacts

- Roseton is a 1,200 MW plant; burns gas and oil; uses 926 M gpd of Hudson River water for cooling.
- Bowline Units 1 & 2 in Haverstraw generate 1,139 MW, using 1,106 M gpd HR water
- Lovett 350 MW coal-fired plant in Stony Point closed since 2007.





# What about Climate Change?



See Scenic Hudson Sea-level Mapper: <http://www.scenichudson.org/slr/mapper>



# Environmental and Health Impacts

- Emissions and particulates reduce air quality
- Increased rates of asthma and other respiratory ailments..(City of Newburgh is already burdened with lead and with PFOS in their drinking water)
- Impacts on the Hudson River – are worse with the peaker plant.
- Year-round, 24 x 7 Greenhouse Gas Emissions
- Fugitive Methane from fracking, pipelines, compressor stations and other transport is a highly potent GHG
- If built, the impacts of fracking will occur for many years to come...

- Time to ***TGEE!***

Transition to a Truly Green Energy Economy = Renewables + Storage + Efficiency



***Fracked gas is NOT a ‘bridge fuel’ – A power plant that uses fracked gas is NOT a climate solution!***

***Thank you!***



**Manna Jo Greene, Environmental Director  
Hudson River Sloop Clearwater, Inc.**

845-265-8080 x 7113    845-807-1270 (cell)  
845-687-9253 (home office)

[mannajo@Clearwater.org](mailto:mannajo@Clearwater.org)    [www.clearwater.org](http://www.clearwater.org)