

Fracked Gas on Steroids: gas-fired power plants no bridge to the future

by Mina Hamilton

General Electric, Siemens, the Spanish multinational Iberdrola and a bunch of privately-held energy companies - all are making millions in the rush to build fracked gas power plants. Supposedly they provide clean, green energy, and are often touted as the answer to climate destroying, coal-fired plants. They are not. And, unfortunately, these fracked gas electric generating plants popping up all over the map have their own set of serious problems.

This type of power plants, called combined-cycle, sounds as benign as it is efficient. For combined-cycle plants burn gas to turn turbines and generate electricity, then the waste heat is recovered and the resulting steam is used to turn a second set of turbines.

So what's the problem? There turn out to be several, real and severe:

1) Fracked gas infrastructure, toxic releases:

Fracked gas-fired plants **lock** states like Massachusetts, New York, Connecticut, Pennsylvania, Rhode Island and Maine into **thousands of miles of gas pipelines and hundreds of compressor stations**. We do not say "hundreds" lightly. As of 2015 there were 537 compressor stations on-line in Pennsylvania alone.¹ Each one pumps out tons of formaldehyde, sulfuric and nitrogen oxides into the atmosphere. Since a typical, large compressor station emits 58 tons of nitrogen oxide per year, that means that means tens of thousands of tons are being pumped annually into the atmosphere from PA's 537 compressor stations.² Nitrogen oxides induce smog and can inhibit crop growth by up to 30%. In fact, we are not just looking at "sacrifice" areas, we are looking at "sacrifice" states.

Furthermore, millions of tons of methane will be released every year by each and every fracked gas, combined-cycle plant. For example, the Cricket Valley plant near Dover, NY will spew over 3.6 million tons of greenhouse gases - mostly the atmosphere destroying methane - out of its 274-foot-high stacks annually. That's roughly equivalent to the yearly emissions from about 640,000 automobiles.³

2) A history of accidents

High-pressure, unsafe gas pipelines supplying fracked gas to combined-cycle plants are **increasingly putting both rural and urban areas at risk**. A 2013 study from Hedgeye Risk Management showed that Kinder Morgan (the

¹ Conversation with Sam Koplinski-Loehr of the Clean Air Council.

² Department of Environmental Protection, PA, Air Quality permit for Wellington Compressor Station, in Washington County, PA. http://www.marcellus-shale.us/Welling_Compressor.htm

³ The autos are mostly pumping out carbon dioxide and with the electric-generating plants it's mostly methane which, in the short term, is far more deadly to the atmosphere than CO2. The US Environmental Agency estimates the average US vehicle produces 4.7 metric tons of CO2 per year. <http://www.epa.gov/otaq/climate/documents/420f14040a.pdf>

proposed builder of the Northeast Direct pipeline) regularly decreased capital expenditures for maintenance of old pipelines. For example: in 1997, Kinder Morgan bought the Californian SFPP pipeline. Five years later, the company had cut maintenance costs by 99%. If this is company policy regarding old pipelines, one has to ask what is the policy regarding new pipelines?⁴

Some of the gas pipeline rupture, explosion and fire accidents over the past twenty years include the 2014 Spectra Energy pipeline explosion in East Harlem that killed 8 and injured 70; the 2010 Pacific Gas & Electric pipeline explosion also killing 8 and destroying an entire neighborhood in San Bruno, CA; the El Paso Natural Gas explosion in New Mexico in 2000, which killed 12, including 5 children (this pipeline has since been bought by Kinder Morgan).⁵ The worst accident on record was in 1996 was in San Juan, Puerto Rico, with 33 fatalities and 69 injured. This pipeline was owned by Enron, the notoriously corrupt company that imploded in 2001. The National Training and Safety Board subsequently ruled that the cause was San Juan Gas Company's failure to adequately train or oversee employees. It also so happens Richard Kinder was the Chief Operating Officer of Enron at the time; he left Enron later that year.

This list of pipeline explosions does *not* include the multiple explosions and fires that have occurred at more than 10 compressor stations since 2011.

3) Expanding a fossil-fuel based economy

The financing of expensive fracked gas power plants slows investment in renewable energy and energy efficiency. The energy future of citizens is put in the hands of secretive, privately-held companies and multinational investment companies. For instance, the Carlyle Group just bought Red Power, previous owner of the 830-MW fracked-gas plant in Sayreville, NJ. The Carlyle Group? Hmm, isn't that the global asset management firm that George W's dad worked for?

Advanced Power, a privately-held company based in Switzerland, owns the highly controversial 350 MW fracked-gas plant planned for Brockton, MA⁶ and the FERC approved, yet to be built, Cricket Valley fracked gas mammoth 1000

⁴ The Hedgeye Report, "Is Kinder Morgan Maintaining Its Stock Prices Instead of Its Assets?", was quickly attacked by just about every investment house on the planet. Seeking Alpha, an investment research service, said the case versus KM was "flimsy." Morningstar said KM's accounting practices were "standard for the industry" (**not** a re-assuring thought), and Rich Kinder scheduled a conference call in which he vigorously attacked the writer of the report as being an "inexperienced" 26-year-old. How much these attacks had to do with the merits of the report or the investments of the attackers is an unresolved question. Although the report published in 2013 called for "shorting" KM shares, KM's stock shares actually out-paced the market in 2014, rising by 16%. However, the report had warned that the market might well ignore its recommendations - until further down the road.

⁵ The line had last been checked and given an OK on August 2. The explosion was on August 30.

⁶ The Brockton fracked gas plant has been opposed for years. In early 2015 the Mayor approved the plant - over the opposition of all 11 members of the Brockton City Council.

MW plant in Dover, NY. The Dover plant's fracked-gas would be sourced via the Iroquois pipeline.⁷

Meanwhile, Global Infrastructure Partners - again a privately held firm - is the new owner of the CPV Valley fracked gas plant in Orange County. It is tied into the Millennium pipeline. And Footprint Power⁸, the Highstar Fund IV, and Oak Tree Capital Management, all privately-held companies, own the 674 MW fracked-gas plant in Salem just outside of Boston. The gas for the latter will come from Spectra's bitterly contested AIM pipeline. The list goes on and on.

What on earth is happening here? Residents of New England, residents of the planet, we, our homes, our schools, organic farms and orchards, rivers, pristine forests and parks have been all "commoditized" and now our very own backyards traded like wheat or corn on commodities exchanges? All so a few appallingly rich guys can get richer?

Adding insult to injury we don't even know *who* these wealthy guys are. What happens when there is a fire at one of the fracked gas, combined-cycle plants? What if the industry goes belly-up, because these traders have overestimated demand and there's a glut of gas on the market? What happens when somebody finally does a cumulative-impact study of the millions of tons of GHG's - read methane - due to be released at each and every one of these supposedly "clean" plants?

Do these anonymous guys head for the exit - and quickly? You betcha.

Rather than feed the profits of the super-wealthy, rather than further investment in a dead-end technology and calling it a 'bridge' to a renewable-based future, we need a moratorium on all investment in and construction related to fossil fuels. We need a ramped up transition to renewables, retrofitting and real energy efficiency.

We also need to be sure that decisions about our planet are not made on the basis of crummy accounting and sleazy deals. We need full transparency. The books of secret, limited partnerships and privately-corporations should be open to public scrutiny and full accountability.

⁷ "The Iroquois pipeline is a 416-mile interstate natural gas pipeline system that begins at the TransCanada interconnect in Iroquois, Ontario, Canada and extends from the U.S. Canadian border at Waddington, NY, through New York State and western Connecticut to Commack, NY; and from Huntington, NY to its terminus in Hunts Point in Bronx, NY." <http://www.iroquois.com/natural-gas-pipeline-questions.asp>

⁸ <http://www.footprintpower.com/> Oddly, Footprint on its website says it will not pursue projects that are dependent upon fracked gas because of "environmental concerns." The company does not know that Salem power plant's source of gas will be Spectra Energy's AIM fracked gas pipeline? Or are they just lying through their teeth?

And Richard Kauffman⁹, Richard Kinder, Alfred Sorensen¹⁰ and the Koch brothers - all three brothers please?¹¹ Maybe, it's time you guys sat in the back of the room - and listened.

Mina Hamilton was a co-founder and co-director of the Sierra Club Radioactive Waste Campaign and she was a researcher with Radioactive Waste Management Associates. She also served on the Board of Directors of Greenpeace, USA and was president of the Delaware Valley Conservation Association. The latter was one of the key groups that stopped the Tocks Island Dam that would have flooded 37 miles of the Delaware River. Her writing on fracked-gas pipeline issues is at <http://wloe.org/Mina-Hamilton.677.0.html>. Her articles have appeared in Mother Jones, the Nation, the Progressive, In These Times and at dissidentvoice.org.

⁹ Kauffman is known as Governor Andrew Cuomo's "Energy Czar." He heads up NYSERDA, NYPA and several other New York State energy agencies. He has deep ties to Goldman Sachs (one of the big funders of LNG development) and Morgan Stanley (another enthusiastic fracked gas funder).

¹⁰ Alfred Sorensen is the CEO of the privately-held Pieridae Energy Co that is planning an LNG terminal, the Goldboro terminal in Nova Scotia. Its gas would be sourced from Kinder Morgan's Northeast Direct Pipeline and Spectra Energy's Alconquin or AIM pipeline.

¹¹ David and Charles Koch are the biggest non-Canadian leaseholders of dirty tar sands in Alberta, Canada with a lease on 1.1 million acres. William Koch waged a 12-year, \$1.5 million war against Cape Wind, the off-shore wind farm planned for Nantucket Sound. He effectively killed the project as of Spring of 2015.