**Pragmatic Environmentalist of New York Summary Update August 1 through August 14, 2022**

This is an update of my recent posts at Pragmatic Environmentalist of New York and elsewhere. If you do not want to be on this mailing list then let me know. Previous updates are also available.

If you are interested in the climate science then I want to call attention to an upcoming debate on the resolution "**Climate science compels us to make large and rapid reductions in greenhouse gas emissions**." Andrew Dessler will take the affirmative, and Steven Koonin will take the negative. Dessler is a Professor of Atmospheric Science at Texas A&M University and Koonin is a Professor of Civil and Urban Engineering at NYU, his background is in theoretical physics. The debate will convene at The Sheen Center, 18 Bleecker Street in Lower Manhattan, at 6:30 pm East Coast time on Monday, August 15, 2022. Tickets are available to attend in person or to participate in the live stream. A recording of the event will also be available about a week after the debate.

Climate Justice Working Group Disadvantaged Community Criteria August 4, 2022
The Climate Act created the Climate Justice Working Group (CJWG) who has developed a set of draft criteria to determine which communities should be targeted for benefits from Climate Act investments. This post describes the comments I submitted on these criteria.

My biggest concern is that I believe that this process over-emphasizes communities and that those people who individually meet the draft Disadvantaged Community (DAC) criteria but happen to live in a community that as a whole does not meet those criteria will be victimized by that accident of geography. This concern might not be an issue because there was some language that suggested that it was being addressed. However, with the emphasis on communities and what I think the immense need for investments to protect those least able to absorb the inevitable energy price increases I believe it is likely that some people who need support won't be able to get it.

I also made a recommendation to address the affordability concern. In particular I suggested that the Criteria weighting scheme be adjusted to emphasize unintended policy vulnerabilities. I argued that the housing, mobility, and communications factor indicators should be rated higher so that the communities where energy poverty is an issue will be addressed better. According to the technical documentation "The NY REV Energy Affordability Policy intends to limit energy costs to no more than 6% of income as per the 2016 order from the PSC." I have been unable to find any documentation that lists the current status of the state for this parameter but I think this is important because I think it is the parameter that is most likely to be negatively affected by the net-zero transition.

Climate Justice Working Group Low Income Affordability Data August 9, 2022
As a follow up to my analysis of the draft criteria I evaluated the references used for the energy affordability metric. I was hopeful that the LEAD Tool used to generate the CJWG energy affordability indicator would provide enough information to calculate the status of the state relative to the NY REV Energy Affordability Policy target of 6%. Disappointingly the LEAD Tool does not provide the number of individuals so I was unable to calculate the status of the State relative to this metric.

In my comments on the Draft Disadvantaged Community Criteria, I argued that energy affordability should be an environmental justice priority. Using a first-order approximation of the distribution of energy affordability relative to the mean I guess that upwards of a million people could be in energy poverty outside of the disadvantaged communities. As far as I can tell those individuals are more likely to reside in rural areas.

Draft Scoping Plan Residential Building Shells August 11, 2022
This article addresses the building shell requirements necessary to include when home heating is electrified. It is based on an energy audit for my home and a discussion with a ventilation expert. The auditor assigned to do my home assessment had a certification from the Building Performance Institute, knew his stuff, and was willing to put up with my questions.

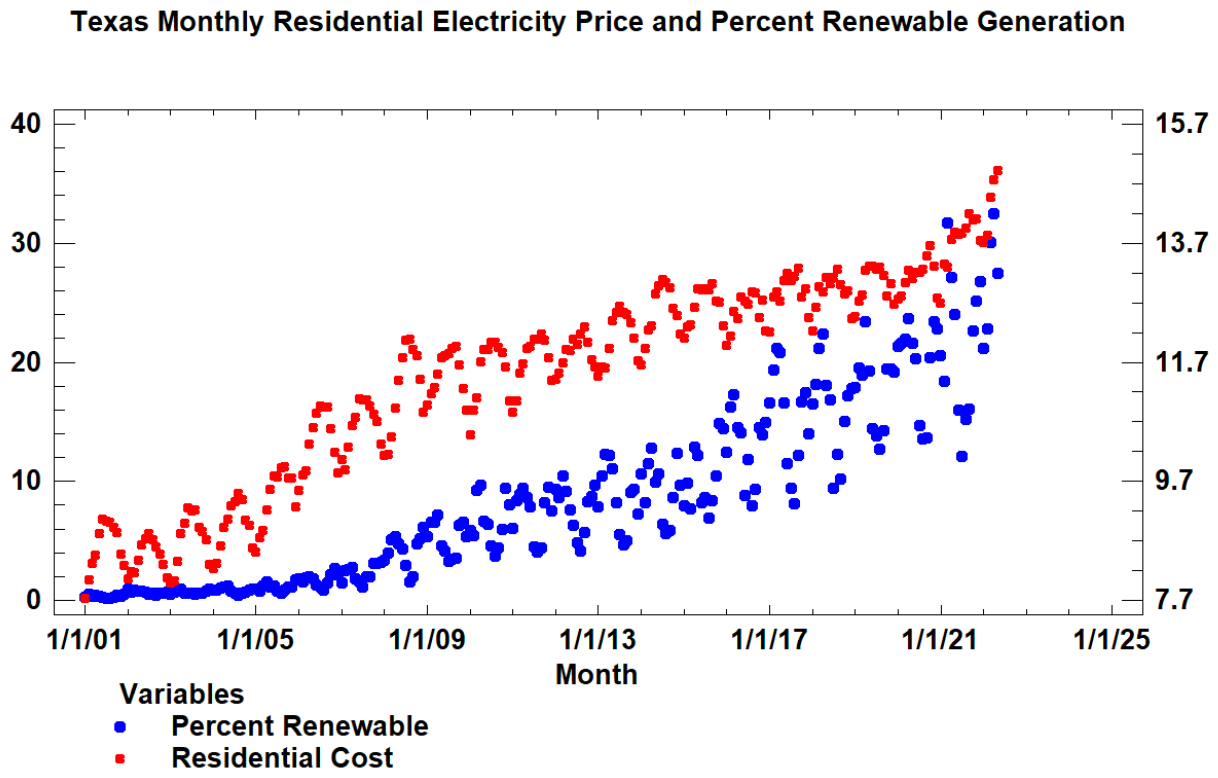
The takeaway message from these experts is that the advanced home heating technology proposed can work but there are complications and caveats. It is not simply a matter of swapping out a fossil-fired furnace for a heat pump and the potential for the conversion to be done improperly is high particularly given the tremendous rate of conversions envisioned in the Integration Analysis. There simply won't be enough experienced people available to audit, develop specifications, and install all the conversions projected.

Both people made the point that changes need to be made not just to the heating system but the building shell needs revisions too. Based on my discussions with these experts the air infiltration, inflow, and exhaust requirements are much higher priorities than I realized. The Climate Action Council needs to be sure that the Final Scoping Plan adequately defines the building shell criteria so that experts in the field understand what the State claims is necessary for the different building shell types. This is also crucial so that the projected energy savings and emission reductions are achieved.

Resources for the Future: Retail Electricity Rates Under the Inflation Reduction Act of 2022 August 12, 2022 This post first appeared at Watts Up With That.

Resources for the Future (RFF) has published an Issues Brief titled Retail Electricity Rates Under the Inflation Reduction Act of 2022. According to the report the Inflation Reduction Act (IRA) legislation, will "save typical American households up to $220 per year over the next decade and substantially reduce electricity price volatility." If this were likely then I would expect to see that the observed data from Texas would show price reductions and lower volatility. I used data from the United States Energy Information Administration (EIA) Electricity Data Browser to see if that were the case. As you can see in the following graph there is no reduction in prices and it appears in the last year that there is an increase in price volatility.

Note that my version of the post highlights some of the comments. I believe that they show that it is unreasonable to expect that costs could go down when an electric grid relies on intermittent wind and solar generating resources.




New York Siting Board Denies a Solar Project Application August 13, 2022

Much to my surprise on August 9, 2022 the New York State Board on Electric Generation Siting and the Environment (Siting Board) denied approval to North Side Energy Center, LLC (North Side) to build and operate a 180-megawatt solar farm in St. Lawrence County. In order to expedite renewable energy development, the Office of Renewable Energy Siting (ORES) was set up with the authority to over-rule any local objections to renewable projects if they are "unduly burdensome".

While it is encouraging that the State did deny the application for a renewable project it is important to note that the application was incredibly arrogant. I have been involved with environmental permitting applications for years. One of the cardinal rules is to avoid wetlands as much as possible. It is amazing that the developer thought that they could get a permit for a project that impacted more than 500 acres on a project footprint of 1,200 to 1,400 acres. Apparently, the word is out that New York is wide open for development and NextEra thought they could get away with it.

Also of note is that this project met the Department of Agriculture and Markets goal for a project to limit converting agricultural areas to no more than 10% of mineral soil groups 1-4 classified by the Department's NYS Agriculture Land Classification, which the Department has identified as New York State's most productive farmland. Unfortunately, there still is no sign that ORES is concerned about the effect of massive utility-scale solar development on New York's agricultural industry in general and on the loss of prime farmland in particular.