

**Testimony for the LIPA Commission
Hofstra University
November 29, 2022**

While I live in Nassau County, I serve as an At-Large Delegate to the Sierra Club's NYS Atlantic Chapter Board of Governance. The Sierra Club applauds the task of this commission. What happens downstate could become a model for the rest of NYS. I also serve on the Boards of Directors for Nassau Hiking & Outdoor Club and South Shore Audubon Society. I look forward to keeping these organizations' 50,000 statewide and local members updated about your deliberations.

Your responsibility is formidable. Your task is of a trailblazer as you forge a plan for a fully public path forward- one that promises greater reliability, better rates, enhanced democracy, and, critically important, an expedited path toward renewable energy. Uncertainty will always be part of our human experience, but we must resist wallowing in the status quo if we are to construct a path that supports the mandates of the CLCPA.

If we keep approaching problems the same way, we should reasonably expect similar results. Unfortunately, this is the common decades-long theme weaved throughout Long Island's utility history. Different names. Similar plans. And so, our island's story speaks to the moral courage of our NYS Legislature in establishing this commission.

My comments will focus on solar energy, from my personal experience to the broader picture. From planning to installation of my own solar panels, I never felt supported by PSEG; nor did I have the sense that PSEG applauded my decision.

While planning the layout for the 40 solar panels that traverse my roof, my contractor failed to provide an option that included some panels on my front roof. But I insisted because I know that research has demonstrated that there is a copycat effect in neighborhoods where solar panels can be seen from the street. (1) A reimagined LIPA must commit to advancing residential solar and thereby multiplying thousands-fold the copycat effect that just one residential home could engender.

LIPA must also promote the construction of solar panels that span the expansive roofs on each public-school building, each municipal government building and each public library. Not one inch of available public roof space should be left untouched.

Enhanced support for community solar is no less critical. Small and mid-sized businesses should also be encouraged through special incentives to make solar a part of their infrastructure.

Municipalities must be encouraged to reutilize degraded land for solar farms, and, concurrently discouraged from removing forest and other open space in green for green swaps. Removing wild places to build solar infrastructure is counterproductive and senseless.

The Long Island Solar Roadmap provides a carefully planned, habitat-sensitive framework that seeks to advance the deployment of mid- to-large-scale solar power. It's a valuable guide for a reimagined LIPA. (2)

Just as LIPA is offering scholarships to students from disadvantaged communities who are interested in careers with LIPA, LIPA should first subsidize solar installation in communities where there is the greatest financial need. As quickly as financial resources allow, the program should be expanded to include communities with moderate needs.

I receive frequent emails from PSEG, but the one I received on November 22nd was particularly revealing. In one article, they compared electric vehicles with conventional vehicles. PSEG claimed that EVs reduce greenhouse gas emissions by 20 percent when "refilled with electricity from coal-fired powerplants." By "refilled with" they apparently meant "charged with." They also made a vague reference to renewable energy. While the actual amount of emissions reduction electric vehicles provide is dependent on when and where drivers charge their vehicles, PSEG failed to mention that they rely on methane gas, and we don't have coal-fired powerplants on Long Island.

When I perused the US Department of Energy site PSEG linked to, I could not find any documentation for PSEG's coal claim, but I did find valuable information. In NYS, the annual emissions per electric vehicle is 1,575 pounds of CO2 equivalents. Each gasoline powered light duty vehicle by contrast contributes 12,594 pounds of CO2 equivalents. While the difference is vast, the only reason EVs even contribute as much as an average of 1,575 pounds of CO2 equivalents is because 44% of EVs are charged using natural gas. Methane gas is by far the largest electricity source for EVs, followed by nuclear power at 25%. Only 3% of EVs charge from solar panels. (3) (4)

We can, we must do better. Charging EVs with solar power could realize CO2 emissions reductions of up to 90%. Solar panels and electric vehicles go together like warm apple pie and vanilla ice cream. And we urgently need an electric company that will prioritize educating the public about the virtues of solar energy and doing everything in its power to incentivize the combined contribution of EVs and solar panels for meeting our climate goals under the CLCPA. Everyone who owns an EV should be offered additional subsidies for taking the next step by installing solar panels and vice-versa.

Moreover, according to the US Department of Energy, a low carbon grid is composed 97% from renewable energy and only 3% from natural gas. A medium carbon grid is composed 24% from zero emission fuels and 76% from natural gas. Natural methane gas won't get us anywhere near our NYS climate goals, but don't expect PSEG to let that cat out of the bag. (4)

PSEG is all about methane gas as is evidenced by their frequent mailings offering serve contacts for natural gas home systems.

PSEG seeks higher base rates from those who generate clean energy from the sun, no matter that those of us who invest in solar, even with NYS and federal rebates, will need to wait many years before we make up the cost of the installation. Fortunately, our contribution to cleaner air starts the moment our solar panels are plugged in. PSEG might think it's unfair that those of us with solar panels don't contribute our fair share to maintaining the grid, but we need an electric company who appreciates that those of us who have invested in solar panels are doing much more than our fair share in reducing disease-causing particulate matter and climate damaging greenhouse gases.

Now PSEG wants its customers to go green by purchasing LED light bulbs and smart thermostats from the PSEG online marketplace. Such measures are all well and good, but we won't come anywhere close to meeting our state's mandated climate goals by merely changing our light bulbs and our thermostats. We need a reimagined electric company that's going to get real with the public about our climate crisis and the clear path forward, not one who takes us on a profit-driven convenient little baby step bird walk toward light bulbs and thermostats that we should be purchasing at our local hardware store, thereby supporting local businesses.

Speaking of such, in another PSEG email, the company touted its support for small businesses. Eligible businesses receive incentives to occupy vacant spaces. Electric rate discounts are offered to growing companies. Conspicuously missing, however, was any reference to incentives offered for the installation of solar panels. We need a reinvigorated LIPA to lead on supporting small business owners who pursue investment in renewable energy.

Amid painful inflationary pressures, Mr. Sun hasn't raised my rates one penny. I keep soaking in those delectably delicious rays free of charge the year round. Last year, my 40 panels covered 95% of all my electric use, including charging my EV, my inground pool and my pond pumps. This year, I'm set to exceed that very high percentage. It's a beautiful thing.

While the task of this commission involves far more than how LIPA might encourage the buildout of solar infrastructure in all its manifestations, this issue merits paramount consideration. Solar energy is well worth the short term and the long-term investment, for our families, for our future.

As designated vanguards of our future, I wish you Godspeed, and I trust that you have the best interests of all our island's residents in mind. Thank you for all you do.

For a Green Long Island,

Guy Jacob

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Conservation Co-Chair, South Shore Audubon Society
Conservation Chair, Nassau Hiking & Outdoor Club**

Resources:

1. <https://press.princeton.edu/books/hardcover/9780691193083/under-the-influence>
2. <http://solarroadmap.org/>
3. U.S. Department of Energy. Alternative Fuels Data Center Emissions from Electric Vehicles. https://afdc.energy.gov/vehicles/electric_emissions.html
4. chrome-extension://efaidnbnmnnibpcajpcglclefindmkaj/https://afdc.energy.gov/files/u/publication/ev_emissions_impact.pdf