

MSSIA ANNUAL MEETING
FEBRUARY 22, 2024

NEW JERSEY UPDATE



LYLE RAWLINGS
PRESIDENT



AGENDA

Solar in the 2035 RPS bill

Interconnection

Storage

Other Happenings

New Jersey's 100% RPS by 2035 bill (S2978)

- **Joint committee meeting – Senate and Assembly to discuss the bill March 11**
- **Battle between solar industry, unions, some enviros, against Princeton CMI/Zero Energy Lab, NRDC, NJ Conservation Foundation, and EDF**
- **Need to find out what Sen. Smith's plans are ASAP.**

The current status of in-state solar energy:

- **Current installed capacity plus approved projects in the pipeline (5.35 GW) are enough to generate about 8.5% of the state's annual electric needs.**
- **That capacity, on cloudless days in spring or fall, will generate over 38% of the state's load between 10 AM and 3 PM.**
- **The state's Energy Master Plan "Least Cost Scenario" calls for 17.2 GW of solar by 2035, and 32.2 GW by 2050.**

It also states that solar energy should be remunerated according to the "full value stack" of services that it provides.

100% Nuclear + Wind + Solar in NJ: Sooner Than You Think

Staying on course with existing nuclear, successful wind development, and solar development according to the EMP Least Cost Scenario will get us very close to 100% by 2035:

1. Load growth - EVs grow load by 16.8% by 2035¹ (ave. 1.4%/year)
 - Assume building electrification adds 1.0%/year through 2035
 - Assume energy conservation subtracts 1.4%/year per the EMP

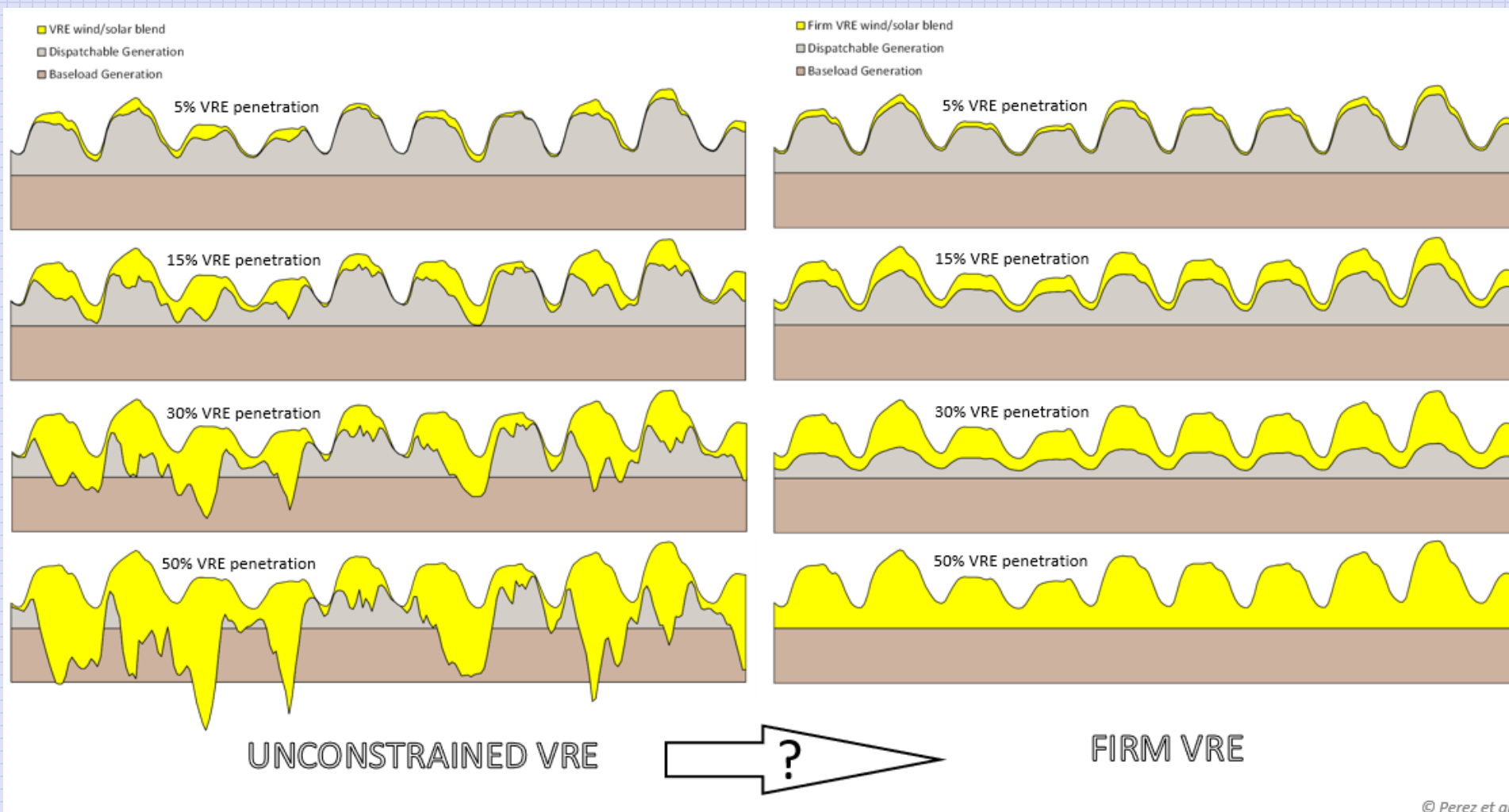
Then net growth is 1.0%/year. **2035 total load = 88.4 million MWH/year**

- | | |
|---|-------|
| 2. Nuclear generation at 3,452 MW = 27.8 million MWH/year = | 34.8% |
| 3. Wind at 7,500 MW = 27.9 million MWH/year = | 36.1% |
| 4. In-State Class 1 at 400 MW = 2.8 million MWH/year = | 3.5% |
| 5. Solar per EMP LCS ² = 19.8 million MWH/year = | 24.7% |

In sum, 2035 nuclear + wind + NJ Class 1 + solar (per EMP) = 94.0% of total load.

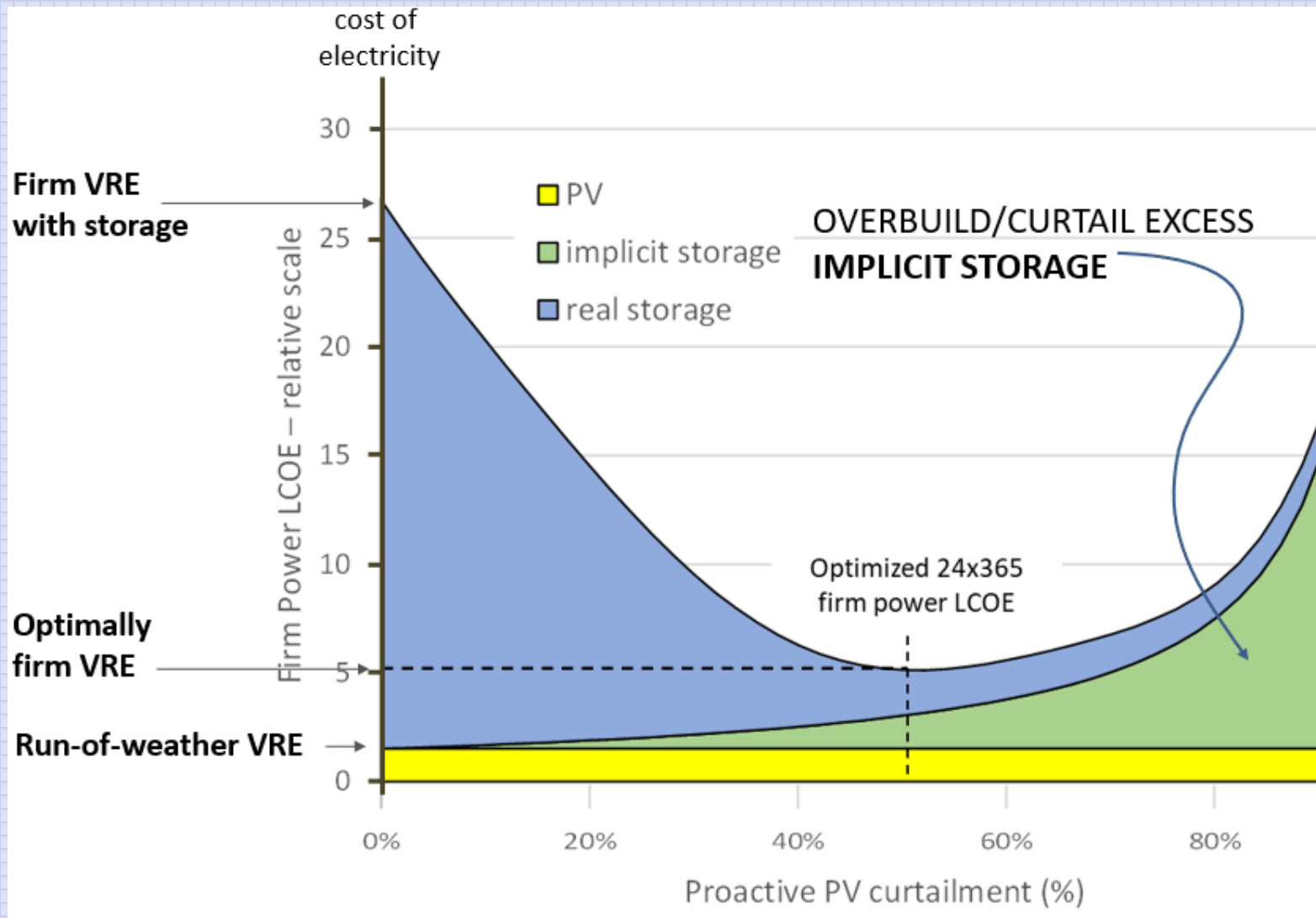
It's All About Firm Power

Credit: Dr. Richard Perez, Clean Power Research

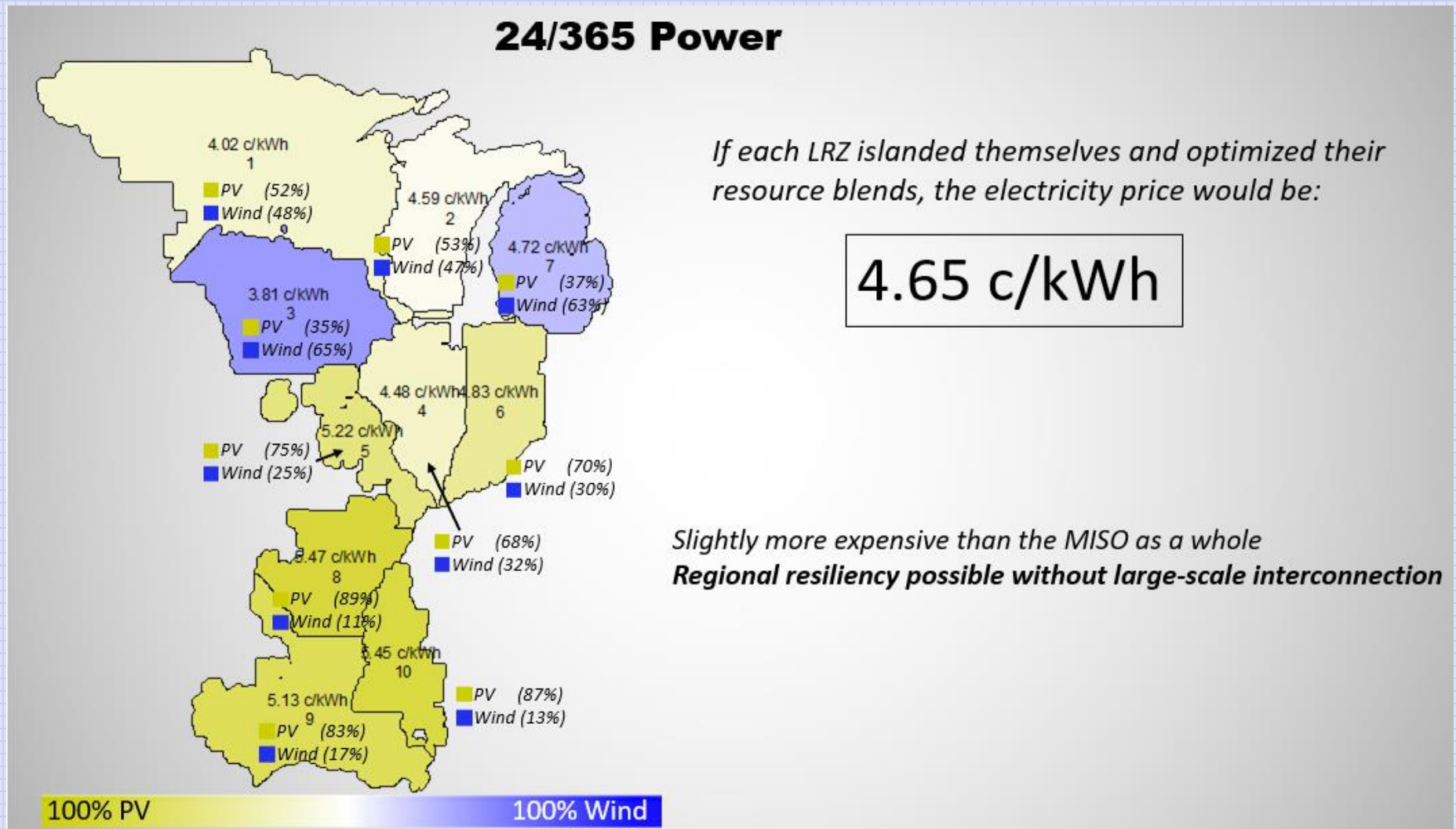


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SENATE, No. 245

STATE OF NEW JERSEY

221st LEGISLATURE

PRE-FILED FOR INTRODUCTION IN THE 2024 SESSION

Sponsored by:

Senator BOB SMITH

District 17 (Middlesex and Somerset)

Co-Sponsored by:

Senator Greenstein

SYNOPSIS

Requires BPU to study and implement methods to allow additional distributed energy sources to interconnect to electrical grid.

b. The board shall consider the following potential solutions, as well as any additional potential solutions identified by the board:

(1) permitting the flow of electricity, through an electrical substation, from the distribution system to the transmission system;

(2) requiring solar inverters to include, activate, and use technology that allows the inverter to inject and absorb reactive power autonomously or in response to remote control;

(3) requiring energy storage systems to include, activate, and use technology that allows the energy storage system to inject or absorb real and reactive power; and

(4) requiring solar photovoltaic systems to include, activate, and use technology and services that enable the power output of the system to respond to short-term predictions of weather conditions to control the rate-of-change of the power output, or other system parameters.

SENATE, No. 225

STATE OF NEW JERSEY

221st LEGISLATURE

PRE-FILED FOR INTRODUCTION IN THE 2024 SESSION

Sponsored by:

Senator BOB SMITH

District 17 (Middlesex and Somerset)

Senator LINDA R. GREENSTEIN

District 14 (Mercer and Middlesex)

Co-Sponsored by:

Senator Diegnan

SYNOPSIS

Establishes incentive program for installation of energy storage systems.

SENATE, No. 212

STATE OF NEW JERSEY

221st LEGISLATURE

PRE-FILED FOR INTRODUCTION IN THE 2024 SESSION

Sponsored by:

Senator BOB SMITH

District 17 (Middlesex and Somerset)

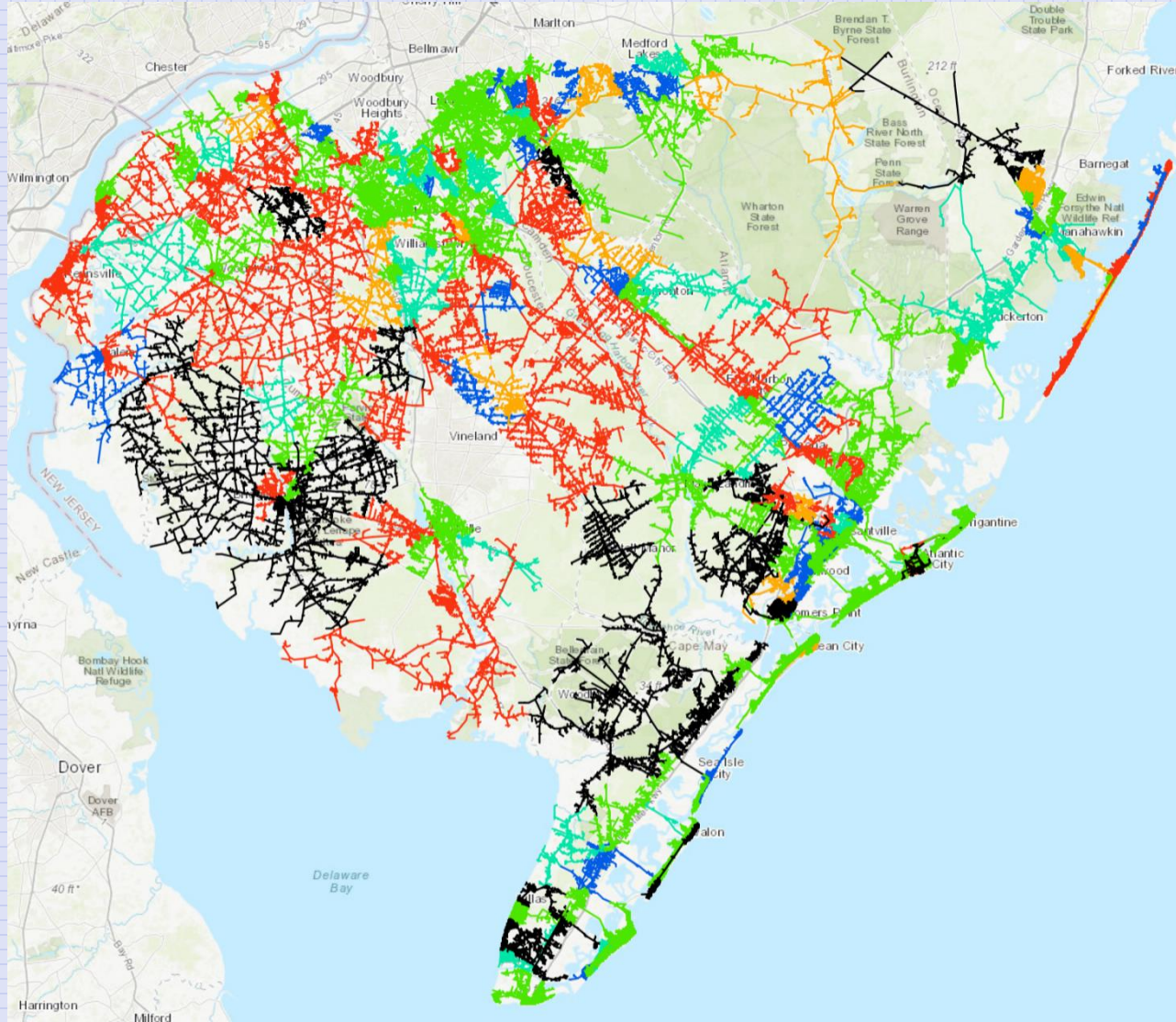
Senator LINDA R. GREENSTEIN

District 14 (Mercer and Middlesex)

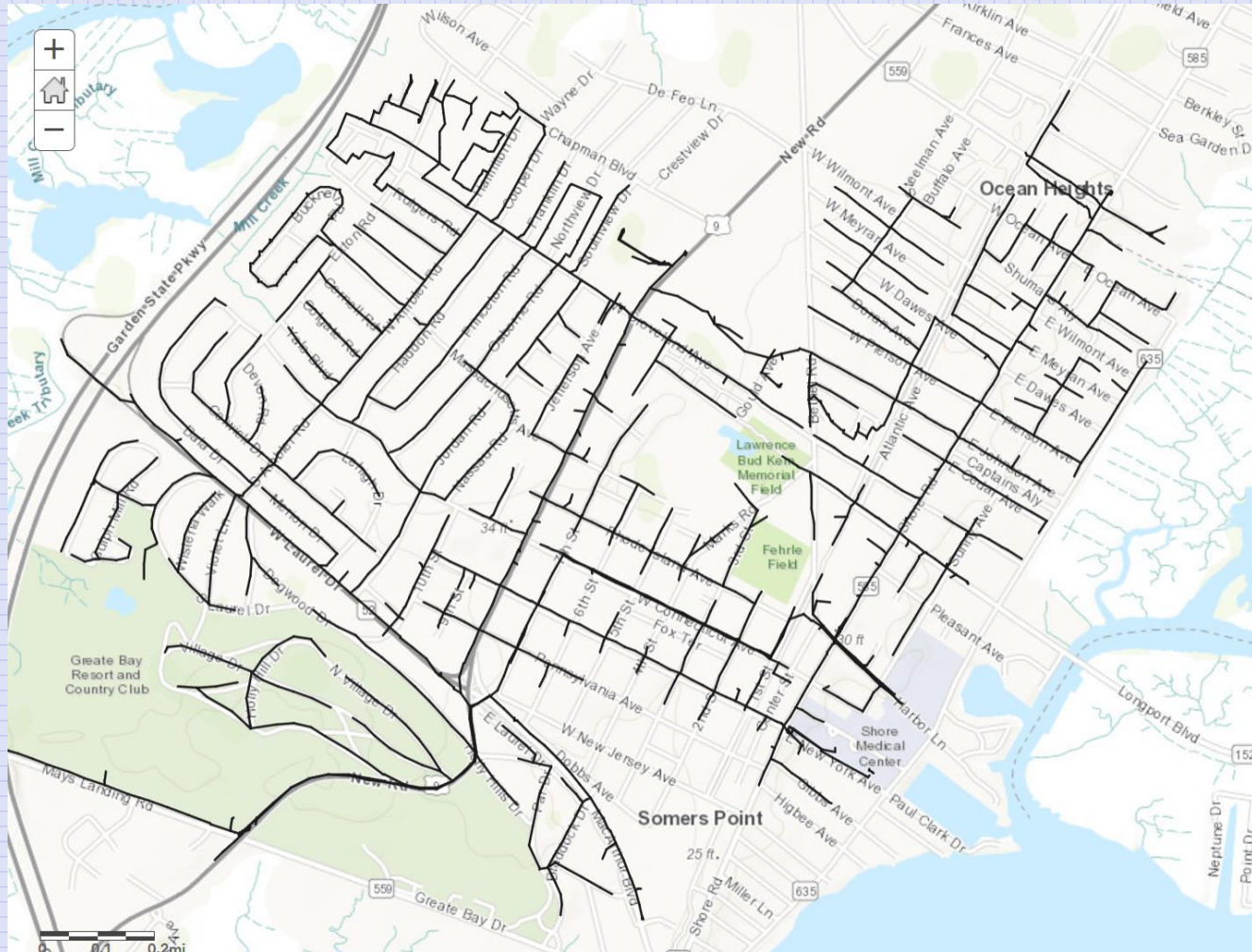
SYNOPSIS

Directs BPU to update interconnection standards for Class I renewable energy sources and develop fixed fee structure for interconnection costs.

Circuits closing or severely restricted – ACE (black is closed, red is restricted to <250 KW)



Circuits Closing to Further Solar Development

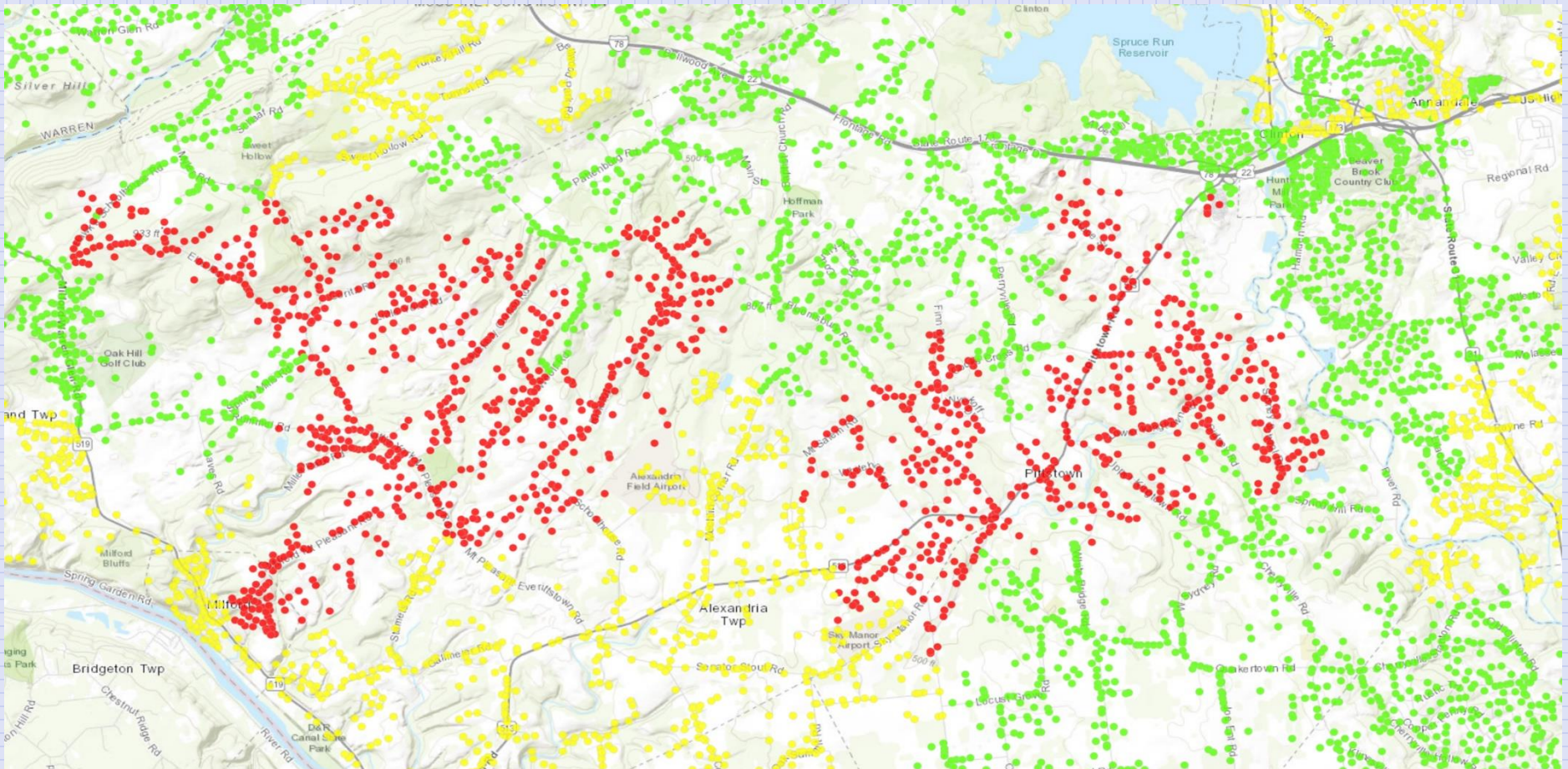


Restricted circuits map
Closeup of Somers Point

**Entire towns are being
closed to further solar
development.**

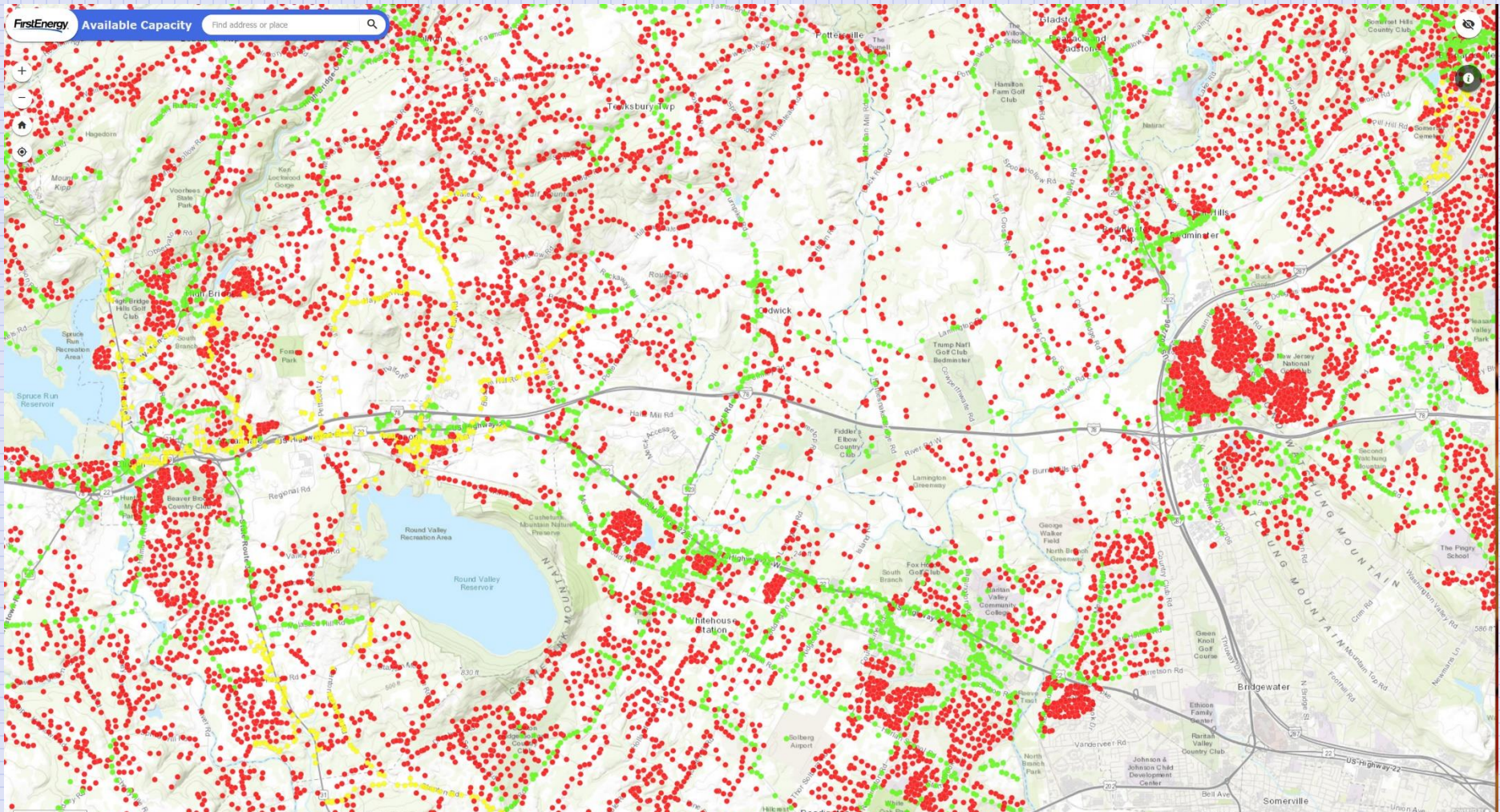
Circuits severely restricted – JCP&L (red is restricted to <100 KW)

Feb. 2020:



Circuits severely restricted – JCP&L (red is restricted to <100 KW)

Nov. 2023:



Other New Jersey Happenings

- At an NJ SIP stakeholder meeting, BPU staff stated that it has asked utilities to propose a market-based incentive program that would pay for services that batteries can provide to the distribution system – just as PJM Interconnect pays for services to the transmission system.
- The NJ SIP (Storage Incentive System) has stalled, with no visible progress in months. The BPU Commissioners recently voted to award a contract to a consultant to work on the NJ SIP design.
- The BPU voted to open a proceeding on “Net Metering Reform”. The time frame for the proceeding to start is unknown. The proceeding could produce very harmful results or beneficial results.
- The process of seeking intervention status in the NJ State lawsuit against the fossil fuel industry (likely outcome is \$\$\$\$), could be a source of funds for Grid Mod, etc.).