

**JAN 15, 2026- contents of “CHAT” during Jan 15,2026 panel discussion on data centers. (If something important is missing, email it to stevemiller@comcast.net )**

**Michael W: PJM stands for PJM** it was PA-NJ-MD when it started in 1960's but since its now 13 states and DC they renamed it to mean just PJM

**Jen N: Why does it take so long to get new supply into the system, the outdated transmission system?.**

Steve M ANSWER: From PJM perspective: Every generating source is carefully vetted by PJM, using their time-honed processes. “Reliability” is included in every decision.. Also, the transmission equipment and interfaces must be designed/configured, ordered, installed, then paid by the generating project.. From standpoint of the Governor’s statement on Jan 16, big areas for PJM concentration are electric price certainty, and control of generation for data centers: (see links to references at end of this document):

**Don ..Leonardo NJ: can't we buy power** from systems other than PJM, such as wind generation from TX

Steve M ANSWER: yes, you can buy 3rd party electricity. See bottom section 3 of

<https://electric.smiller.org/> 3rd party prices must be compared to your "Price to compare" which is the "Basic Generation Service" on your electric bill. After subscribing (and paying) 3rd party electric supplier, you would also continue to pay "Delivery Service Charge" portion of your electricity bill.

**Nadine S: Any idea on how the new law S4100/A5264** in NJ regarding solar permitting will help to speed up building solar projects in our state?

Michael ANSWER: That is for distributed solar on your roof and that is reviewed by the local utilities to interconnect you to the local grid. A standardized permitting tool will be provided by DCA to provide fast approval of solar and battery permits:

<https://www.njshines.org/2025/12/20/revised-smart-solar-permitting-bill-to-cut-red-tape-accelerate-installations-deliver-affordable-electricity-passes-legislature/>

I do know that DCA has 18 months to get the automatic approval on line (it's in the bill).

By contrast, during the panel discussion, Betsy spoke about the larger solar systems that are interconnected to the PJM grid so they can sell energy into the PJM grid

**Mark F: Aren’t there also grid / transmission issues** as well?

Steve M Answer: yes, the grid is costly and time consuming to upgrade. New generation projects are expected to pay for the required grid updates .

**Sarah F: One of the ways ERCOT has gotten generation on the grid** faster is to allow projects on the grid under rules called “connect and manage” - i.e., if there’s congestion on the grid, your generation won’t be used. The planning to ensure that a generator will never be constrained takes a long time. Automating the planning process is expected to help, even w/o “connect and manage” if I understand correctly.

Michael ANSWER: ERCOT is a little different its not an interconnected grid its a grid unto itself for just TX but PJM is 13 states and interconnected to other grid but yes that is a possible option.

Steven M Answer: PJM, in their Jan 16 letter (see link at end of this document), now plans to use "connect and manage" for one category of "Large Load" (i.e. "data centers"). During peak load intervals on the grid,

this category would be the first to be curtailed, PRIOR to implementing their normal "Demand Response" programs , which occur PRIOR to any emergency curtailments.

**Sarah F: Per the current conversation...**There's a lot of speculative investment going on. It's disturbing.

Steve B: Should artificial intelligence be allowed to destroy the natural world? rhetorical sounding question, I know.

Darshana G. it's already started... We have a new and fast growing problem called-Data Centers

**Stan G: What would be involved in changing the pricing formula** away from using the peak rate charge?

Bob: What's the rationale for charging everyone the marginal cost of energy?

Michael ANSWER: because it actually gets you the lowest price because generator will bid in at their lowest cost to insure they get into the merit order. as opposed to bidding in the highest cost.

**Steve B: What incentives are there for "behind the meter" supply**, i.e. on-site solar/battery?

Michael: currently in NJ there is net metering and SREC II. As a DER solar every MWH you generate you get paid \$85 and that is in place for 15 years. It essentially pays for the solar over time.

**Leland B: What is \$ / Kwh?** Steve M Answer: One kw for 1 hour is 1Kwh. JCP&L used to charge \$0.147 per Kwh (total for both the electricity supply, and the distribution) The current (1/2026) price appears to be over \$0.19 per Kwh (includes both electricity basic supply plus distribution charge) .

Michael ANSWER: kilowatthour - is a unit of energy. It is how you buy and pay for electricity on your electric bill

**Jen N: We noticed a 50% increase in our bill.** Our bill was \$825! Also the highest we have ever seen

**Leland B Am I correct to assume that water use is flow through, not annihilation?**

Steve M. ANSWER: Closed loop cooling would require water "chillers" which require a lot of electricity. It is cheaper to run water through cooling towers and spray water, which causes a LOT of evaporation, and add more water to the cooled return water; Another method would be like (currently closed) Oyster Creek Nuclear, which collected cooling water from Oyster Creek, and then returned the hot water back into a down stream location on Oyster Creek, near where it dumped into Barnegat Bay and the ocean. AND in the future, we have new technology described here by Greg G: Technology improvements to reduce energy and water demand for AI Centers: Supercomputers can stay chill with hot water says Nvidia. Nvidia says it can use hot water to cool its next-gen Vera Rubin systems to be available 2H2026. The ability to use 45-degrees Celsius water means no chillers are needed. That has implications for energy efficiency and the broader cooling market. MIT's chip stacking breakthrough could cut energy use in power-hungry AI processes | Live Science. Engineers from MIT say that stacking circuit components on top of each other could be the answer to creating more energy-efficient artificial intelligence (AI) chips. The logic and memory components, which respectively perform computations and store data, can transfer data more easily when in direct contact as opposed to when apart.

**Leland B: I recently signed a 2 year contract with CleanChoice energy** for \$0.19 per Kwh. Am I thus protected from the rate increases you are discussing?

Steve M ANSWER: Yes, you should be protected. Read the CleanChoice contract fine print, but it is likely you will pay, for the next 2 years, exactly the \$0.19 price for the ELECTRICITY. The JCP&L equivalent price

is called the "Price To Compare" which is the basic electric generation price on your (original) JCP&L bill. It is that basic generation price which has risen dramatically because of the PJM auctions. The price for DISTRIBUTION, to reach your house is added to the basic electricity price. (this distribution price is slow moving, and depend on JCP&L tariffs - on how much JCP&L pays for infrastructure to get the electricity to your house.). My basic electric price was about 11cents/kw in Feb, 2025. My basic electric price is now about 15 cents/kwh in my January, 2026 bill. In both Feb, 2025 bill and Jan, 2026 bill, the distribution price remained about 5 cent/kwh.

**Mark F: I understood that b/c the practice of one data center company proposed construction in different areas and only intended 1 data center** - that resulted in an increase in forecasted demand to PJM - contributing to the large increase - is that correct and is that being mitigated?

Steve M. ANSWER: Yes, the forecast was high because of overcounting of future data centers (and our electric bills were higher than they would have been with better forecasting). The current PJM 2026 load forecast (issued early January) stated they were taking steps to better correct for this over estimating by verifying permits and verifying license requirements are satisfied before adding to the load forecast.

However PJM published only general details on correction details.

The Jan 16 "Statement of Principles Regarding PJM", (see link at end of this document) together with the DOE announcements were very clear that data centers must provide concrete data/evidence that they are planning to build (to avoid double/triple/quadruple counting)

MICHAEL ANSWER: to a degree - PJM and the local utilities are sharing and reviewing data but they need a formal process that is an integrated distribution plan that is submitted to the BPU for review and is public. This data information now happens behind the curtain.

**Neelu S: We should have some legislation forcing data centers to set up their own power generation!**

Steve M ANSWER: Earlier NJ legislation (not advanced further) contained this idea; ALSO the Jan 16 Governor's statement (see link, at end of this document) requires allocation of costs to the data centers.

Michael W: that will help in NJ since the state can only regulate DC in their state but a lot of the increase in load is happening in VA and MD (both in PJM) and we all are paying for that in our rates. All states need to act the same - it would be a federal issue but I doubt this admin will do that.

**Steve B: What incentives are there for "behind the meter" supply, i.e. on-site solar/battery?**

Michael W ANSWER:: Currently in NJ there is net metering - you get paid your rate for all the electricity you generate. Plus there are SREC II and you get a set value for every MWh your system generates - its currently \$85 per MWh that you would get for 15 years.

**Carolyn G: Trump already predicting a loss in the Nov midterms today.** New Congress can put breaks on AI and introduce regulations

Steve B: Except they probably won't without a giant public outcry. the rot is bipartisan

**Neelu Sinha: Also, the NJAIHub is not far away! 619 Alexander Rd, Princeton, NJ 08540**

**Bob: I understand how the queue incents lower bids, but demand determines how far up the queue the system will need to buy energy.** So the system is paying mostly for lower cost energy, but if I understood correctly, consumers are still charged at the price of the highest price supply. Why shouldn't

consumers pay for the combination of actual costs rather than everything being billed at the highest marginal cost?

Michael: Yes you are correct but if you change the way the PJM sets payments bidders will bid differently so they would not bid at the lower cost.

Steve M ANSWER: the "Capacity" auction is focused on the expected peak load dates and times. The high price is paid for generators which keep the turbines spinning until they are called to instantly produce to handle the peaks

**Michael : Steve mentioned Integrated distribution planning.** The issue is when NJ deregulated energy so you can buy electricity and natural gas anywhere. Prior to that Utilities filed integrated resource plans (IRP) that laid out the utilities need for generation distribution and transmission. But with dereg the state BPU is not fully responsible for generation and to a major degree transmission so they stopped IRP. We need the utilities to get back to public planning so we all know what is going on. Even though the state Energy Master Plan required the utilities to submit integrated distribution plans (IDP) they have not. Some of this surprise on the increased load could have been foreseen with IDP.

**Steve B: My lord -- who ARE these people on the commissions and boards?** are they local residents? Welcome to the New America!

Carolyn G I think air permit chair is from Bridgewater in Somerset County

**Jim: Thank you very much Kip Cherry for your panel discussion talk !**

Neelu: What an eye opener, thanks Kip Cherry!

**Carolyn G: When Mikie takes office Jan 20. Let's see if she declares the state of emergency** on utility costs (no increases) on Day 1 like she promised.

Don ... Leonardo NJ: who will press Mikie to do that? What action is being taken in NJ to address the issue of sky rocketing rates viz legislation, state agencies and what can we do individually press to data center legislation?

Steve ANSWER: we hope that the Jan 16 Governor's "Statement of Principles Regarding PJM", will cause all 13 PJM states to support each other. We already read PJM is taking action (see link at end of this file). This unified action should cause the electric prices to drop.

Carolyn G: Some progress made on Climate Superfund bill I believe

**Dave M: I went before the Bridgewater Town Council** when they were looking to approve a data center in town. The council members and "consultant" were clueless about the power and water needs and also that data centers need diesel backup generators, which would require onsite fuel storage. I spoke privately to the developer; told me he was a real estate developer who was going to lease the space out, did not care what the occupants were planning. Apparently this is not an unusual practice.

Carolyn G: We have 3 NEW Council members now!!! First Dems in 37 years. All enviro friendly especially the new president Joan Geiger, Esq. Zoning board already had big changes last week.

Dave M: I know. Was at the inauguration.

Carolyn G; Lets chat offline

**Howie S: If you can afford it, BUY your own solar from a local contractor.** Talk to two or three contractors. Most months I pay \$6.00

Betsy: Replying to "If you can afford it..." I put in solar panels in 2022. I haven't paid for electricity since then.

Jim: So much info. Thank you all for your GOOD Work !

Don ... Leonardo NJ: Betsy which solar installation company did you use?

Betsy: ANSWER: Infinity Solar in Mahwah, NJ Our electrification coaches can help with this.

**Jim: Jim E, Austin, Texas Sierra Club**

**Jen N: Corporate greed knows no limits**

**Howie S: Does the Organization of PJM states have a web site?**

Michael ANSWER:: I assume it is OPSI;

Steve M : <https://opsi.us/> membership includes one representative from the BPU/PUC for each of the states served by PJM .

The PJM site is [PJM.com](http://PJM.com) You can apply for a login/password which gives more access to the website esp related to the work of the numerous committees

**Dean: V. Data processing is now very fluid.** What consumes huge amounts of power today in NJ can be processed tomorrow in Tucson. It's a fundamental tenet of cloud computing. Forecasting it will be very difficult.

Steve M comment: do you have data or references? I believe processing will continue at extremely high speed in one location. But this location can be anywhere - as long as there is a high speed network, and time is available to transfer jobs anywhere in the world.

**Ann V: Data centers should be required to produce their own energy** with solar panels. Steve Answer: yes, we should have regulations/legislations in place to require data centers to bring their own new renewable electricity.

Alice F: Would designing solar on the roofs be enough energy to run the data centers?

Howie ANSWER: in a word NO

Betsy ANSWER: No, because they need power all the time, not just when the sun is shining. They could add batteries to store some of their energy. But it wouldn't be enough.

Steve ANSWER: Stan G calculated that solar would produce (roughly) less than 10% of required electricity, IF solar was placed on all the surface area of the building and land of a typical data center.

**Rachel Dawn Davis (she/her) Waterspirit: I apologize if I missed this -Is there a discussion of NJ leaving PJM in this network?** I have heard this in other coalitions. FYI: The NJ Shines Coalition is educating and advocating about legislation for NJ plug-in solar as well

Steve M Answer: NJ imports over 30 % of its electricity (primarily from PJM). In the last few months, the BPU has proposed (perhaps launched) grid-sized solar, and grid-sized storage. This is a positive step/ But NJ has a LONG ways to go to become self-sufficient (we can dream for NJ OSW resurrection - this might enable NJ to become self-sufficient.

**Jen N: Thanks for such an informative....and infuriating... webinar!**

**Pat H -Mike: I thought they got out of nuke because it got too expensive** years ago.

**Jeff P: Rewiring America Electric Coach program provides free advice on solar** and other green tech for your home.

You can also get a balcony solar system for relatively small money.

**Betsy: NJ has an existing NJ Electrification Coaching Network, which uses volunteer (free) coaches trained by Rewiring America**

**Betsy: Use Energy Sage for rooftop solar bids.**

Jeff P: Third Act is working with Energy Sage.

Ruth D: Thank you!

**Greater NJ Gateway Climate Reality Chapter(Brian R): Hi. I just wanted to invite everybody to a webinar on “The Environmental Impact of Automobiles”** Tues. 1/20 7pm ET with Climate Reality NJ. I’m going to talk some less discussed environmental issues and vehicle manufactures REGISTER HERE: [https://us02web.zoom.us/meeting/register/eZ34ZaY7Svmn\\_PLjg35Kvg#/registration?os=ipad](https://us02web.zoom.us/meeting/register/eZ34ZaY7Svmn_PLjg35Kvg#/registration?os=ipad)

## REFERENCES

Sierra Club Policies regarding data centers:

<https://www.sierraclub.org/sites/default/files/2026-01/policies-for-data-centers-2026.pdf>

Jan 16 , Governor’s "Statement of Principles Regarding PJM",

<https://www.energy.gov/documents/statement-principles-regarding-pjm>

PJM letter, dated Jan 16, 2026 (in response to the Governor's Principles, dated Jan 16)

<https://www.pjm.com/-/media/DotCom/about-pjm/who-we-are/public-disclosures/2026/20260116-pjm-board-letter-re-results-of-the-cifp-process-large-load-additions.pdf>

Jen N: More Perfect Union produced a pretty eye opening video on the impact of data centers

[https://www.youtube.com/watch?v=wLX\\_w0TtBpY&t=915sJ](https://www.youtube.com/watch?v=wLX_w0TtBpY&t=915sJ)

Good analysis of Governor’s Statement <https://www.csis.org/analysis/exploring-new-math-puzzle-pjm-intervention>

NJ and some of the other PJM states like MD and DE need to push the addition of batteries in PJM using the Surplus Interconnection Service (SIS)

See Gabel’s report -<https://acore.org/resources/resisting-a-resource-shortfall-fixing-pjms-surplus-interconnection-service-sis-to-enable-battery-storage/>

and implementation of FERC Order 2222.

Betsy: <https://NJECN.substack.com> is the “library“ for the free volunteer coaching service “NJ Electrification Coaching Network”

Apply here for a free electrification coach:

[https://docs.google.com/forms/d/e/1FAIpQLSfaDHim\\_UAX5vqoF0rAFexYtMe7xY0wLH-J7iyjMZlYvxE9Ng/viewform](https://docs.google.com/forms/d/e/1FAIpQLSfaDHim_UAX5vqoF0rAFexYtMe7xY0wLH-J7iyjMZlYvxE9Ng/viewform)

## [2025-6 Virginia Data Center Expansion and Its Impacts](#)

[Links to related major announcements](#)