ASSEMBLY, No. 5564

STATE OF NEW JERSEY

221st LEGISLATURE

INTRODUCED APRIL 10, 2025

Sponsored by:
Assemblyman JOE DANIELSEN
District 17 (Middlesex and Somerset)

SYNOPSIS

Requires submission of energy usage plan to BPU for proposed artificial intelligence data centers; requires all electricity for artificial intelligence data centers to be derived from new clean energy sources.

CURRENT VERSION OF TEXT

As introduced.

AN ACT concerning artificial intelligence data centers and supplementing Title 48 of the Revised Statutes.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

1. The Legislature finds and declares that data center operation is one of the fastest growing industries worldwide and in the United States and that as of March 2024, there are 5,381 data centers located in the United States, 73 of which are located in New Jersey.

The Legislature further finds and declares that data center load growth has tripled over the past decade and is projected to double or triple by 2028.

The Legislature further finds and declares that PJM Interconnection (PJM) is the regional transmission organization that manages the electric grid across 13 states, including New Jersey; that PJM's capacity market ensures long-term grid reliability by securing the appropriate amount of power supply resources required to meet predicted energy demand; and that PJM utilizes an annual capacity auction to procure capacity for a given year.

The Legislature further finds and declares that at PJM's capacity auction in July 2024 capacity prices increased by $12.5 billion compared to capacity prices from the previous year; and that the 2025 Basic Generation Service auction for residential and small commercial customers (BGS-RSCP), certified by the Board of Public Utilities, saw approximately 35 percent higher prices than in 2023.

The Legislature further finds and declares that in both auctions increased capacity prices were driven by an expected increase in demand and a stagnant supply of energy in New Jersey and the rest of the PJM territory.

The Legislature further finds and declares that many states served by PJM, including New Jersey, urged the Federal Energy Regulatory Commission (FERC) to safeguard ratepayers from unwarranted prices by modifying PJM's auction price cap due to growing concerns about the potential for excessive capacity market price increases in upcoming capacity auctions, which prompted the FERC to postpone the PJM's next capacity auction.

The Legislature further finds and declares that the expansion of data centers has placed strain on the electric grid and that projections of increased energy demand from data centers has put an undue burden on New Jersey ratepayers.

The Legislature therefore determines that it is in the public interest of the residents of New Jersey to require all electricity supplied to a data center within the State to be derived from new verifiable Class I renewable energy, energy from nuclear power plants, or a combination thereof.

2. As used in this act:

"AI data center" means the same as defined in section 2 of P.L.2024, c.49 (C.34:1B-395).

"Application for local development approval" means the application form and all accompanying documents required for approval of a subdivision plat, site plan, planned development, conditional use, zoning variance, or direction of the issuance of a permit pursuant to the "Municipal Land Use Law," P.L.1975, c.291 (C.40:55D-1 et seq.) or R.S.40:27-1 et seq., for any use, development, or construction.

"Artificial intelligence" or "AI" means the same as defined in section 2 of P.L.2024, c.49 (C.34:1B-395).

"Board" means the Board of Public Utilities.

"Class I renewable energy" means the same as defined in section 3 of P.L.1999, c.23 (C.48:3-51).

"Nuclear power plant" means the same as defined in section 2 of P.L.2018, c.16 (C.48:3-87.4).

"Person" means the same as defined in section 3 of P.L.1999, c.23 (C.48:3-51).

"PJM Interconnection, L.L.C." or "PJM" means the same as the term is defined in section 3 of P.L.1999, c.23 (C.48:3-51).

"Transmission and distribution system" means the same as the term is defined in section 3 of P.L.1999, c.23 (C.48:3-51).

3. a. Upon a finding by the board pursuant to subsection b. of section 4 of this act, and published in the New Jersey Register and on the board's internet website, all electricity supplied to an AI data center within the State shall be derived from new verifiable Class I renewable energy, energy from nuclear power plants, or a combination thereof, such that there is no net decrease of verifiable Class I renewable energy and energy from nuclear power plants supplied to the transmission and distribution system.

b. Upon a finding by the board pursuant to subsection b. of section 4 of this act, and published in the New Jersey Register and on the board's internet website, any person submitting an application for local development approval for the establishment of an AI data center within the State shall simultaneously prepare and submit an energy usage plan to the board for approval. The energy usage plan shall include, at a minimum, procedures that the AI data center will utilize to:

(1) derive all electricity from new verifiable Class I renewable energy, energy from nuclear power plants, or a combination thereof, as required pursuant to subsection a. of this section;

(2) minimize the amount of energy that is used to cool computers by optimizing the layout of the room, ventilation, and cooling systems;

(3) optimize water usage, including the process the AI data center will use to source water in a manner that has the least negative impacts to the environment and to drinking water;

(4) ensure that ventilation and weatherproofing of the building is optimized to minimize energy usage; and

(5) utilize the heat generated by the computers in the AI data center for water or space heating in the AI data center or adjacent buildings.

c. No later than 90 days after receipt of an energy usage plan, the board shall make a determination to approve the plan as submitted, approve the plan with conditions, or disapprove the plan and shall provide written notification to the person that submitted an energy usage plan of the determination. If the energy usage plan is disapproved, the board shall inform the person that submitted the energy usage plan of the reasons for the disapproval. The person shall have 30 days thereafter to submit a revised energy usage plan to the board. After receiving approval from the board, the individual or business shall proceed with the implementation of the plan for the proposed AI data center.

d. No AI data center shall connect to the transmission and distribution system without receiving approval from the board for an energy usage plan submitted pursuant to subsection b. of this section.

4. a. The board shall monitor all other states within the PJM region to determine if any state laws, rules, regulations, or policies of those states require all electricity supplied to an AI data center to be derived from energy sources, such that there is no net decrease in energy supplied to the transmission and distribution system, and prepare, and update as necessary, a list of states that have implemented such requirements.

b. When the board finds that a majority of the states within the PJM region have implemented the energy supply requirements articulated in subsection a. of this section, the board shall publish that finding in the New Jersey Register and on the board's Internet website no more than 30 days after making the finding.

5. This act shall take effect immediately.

STATEMENT

This bill would require all electricity for artificial intelligence (AI) data centers to be derived from new verifiable Class I renewable energy, energy from nuclear power plants, or a combination thereof, such that there is no net decrease of verifiable Class I renewable energy and energy from nuclear power plants supplied to the transmission and distribution system if the Board of Public Utilities (board) finds that a majority of the states in the PJM region require all electricity supplied to an AI data center to be derived from energy sources, such that there is no net decrease in energy supplied to the transmission and distribution system.

In addition, the bill would require any person submitting an application for local development approval for the establishment of an AI data center within the State to simultaneously prepare and submit an energy usage plan to the board for approval if the board finds that a majority of the states in the PJM region require all electricity supplied to an AI data center to be derived from energy sources, such that there is no net decrease in energy supplied to the transmission and distribution system. The energy usage plan would be required to include, at a minimum, procedures that the AI data center will utilize to:

(1) derive all electricity from new verifiable Class I renewable energy, energy from nuclear power plants, or a combination thereof;

(2) minimize the amount of energy that is used to cool computers by optimizing the layout of the room, ventilation, and cooling systems;

(3) optimize water usage, including the process the AI data center plans to use to source water in a manner that has the least negative impacts to the environment and to drinking water;

(4) ensure that ventilation and weatherproofing of the building is optimized to minimize energy usage; and

(5) utilize the heat generated by the computers in the AI data center for water or space heating in the AI data center or adjacent buildings.

No later than 90 days after receipt of an energy usage plan, the board would be required to make a determination to approve the plan as submitted, approve the plan with conditions, or disapprove the plan and to provide written notification to the person that submitted an energy usage plan of the determination. If the energy usage plan is disapproved, the board would be required to inform the person that submitted the energy usage plan of the reasons for the disapproval. The person would have 30 days thereafter to submit a revised energy usage plan to the board. After receiving approval from the board, the person would be required to proceed with the implementation of the plan for the proposed AI data center.

The bill would also prohibit any AI data center from connecting to the transmission and distribution system without receiving approval from the board for an energy usage plan.

Finally, the bill would require the board to monitor all other states within the PJM region to determine if state laws, rules, regulations, or policies of those states require all electricity supplied to an AI data center to be derived from energy sources, such that there is no net decrease in energy supplied to the transmission and distribution system, and to prepare, and update as necessary, a list of states that have implemented such requirements. When the board finds that a majority of the states within the PJM region have implemented the energy supply requirements, the board would be required to publish that finding in the New Jersey Register and on the board’s Internet website no more than 30 days after making the finding.