



SB2497/HB3758 ANALYSIS

These bills establish a 15 GW energy storage standard and deliver the following:



Increase Reliability: Strengthens grid reliability by building more large-scale energy storage and creating a Virtual Power Plant Program, both of which are critical for a smooth transition to a renewable energy future.



Reduce Costs: Saves Illinois families and businesses **\$2.49 billion** through the energy storage program over the next 20 years. This program would also **reduce power outages, saving up to \$7.3 billion** by 2050.



Boost Illinois' Economy & Creates Jobs: The renewable energy future is projected to **generate up to \$16.3 billion in economic activity** in the Illinois, create thousands of union jobs under project labor agreements (PLAs) and include the same equity requirements as CEJA.



Help Meet Climate Goals: These bills **reduce emissions in the power sector by 50 million tons** by 2045 and deliver an immediate solution to help Illinois stay on track to meet its climate goals without sacrificing grid reliability or raising costs to consumers. Without this important step, these emission reductions and other CEJA goals won't be realized.

Voters Support Clean Energy

APPROXIMATELY
75% OF VOTERS SUPPORT incentives to build a more reliable grid through storage

ALMOST
60% OF VOTERS SUPPORT creating *more* clean energy jobs

Energy cost savings are a priority for nearly
75% OF ILLINOIS VOTERS

Source: Illinois Voters Support for Energy Storage System Incentives, Impact Research, conducted January 17-21, 2024.

KEY QUESTIONS

Is the proposed energy storage program needed now?

Yes, because deploying large scale energy storage resources requires considerable time. Commencing an energy storage program in the near term would be an appropriate hedge against the elevated reliability risks presented by accelerating power station retirements and delayed deployment of renewable energy resources in the region.

What are the consumer cost impacts of the proposed energy storage program?

Illinois consumers would realize between a net reduction of \$2.49 billion in utility bill savings through the energy storage program. Based on current estimates, the average single-family utility account served by Ameren Illinois would realize an average cost savings of \$4.37/month over 20 years and the average ComEd single family residential account would realize an average cost savings of \$2.81/month.

How will 15 GW of energy storage help Illinois meet its capacity needs?

Under CEJA's timeline, 8.4 GW of coal capacity will be retired by 2030. For comparison, in the next five years, new solar capacity is only expected to grow by less than 6.6 GW. In order to fill this gap and the growing demand for electricity with clean resources, Illinois needs to dramatically accelerate the build out of energy storage to both optimize existing wind and solar generation assets and support new renewable projects coming online in the future.

Scan the QR code to learn more!





SB2497 & HB3758 will Modernize Illinois' Electric Grid and Lower Consumer Costs

The 2021 Climate and Equitable Jobs Act (CEJA) created a clear roadmap to achieve a 100% clean energy future for Illinois by investing in clean energy and retiring coal plants. SB2497 & HB3758 make necessary investments to meet those standards while creating a cleaner and more reliable and affordable power grid that benefits all of Illinois for decades to come.

These bills establish a clean energy storage procurement mandate, break down barriers that slow down clean energy development, and streamline clean energy procurement to help Illinois meet CEJA's mandates.

Consumer Savings

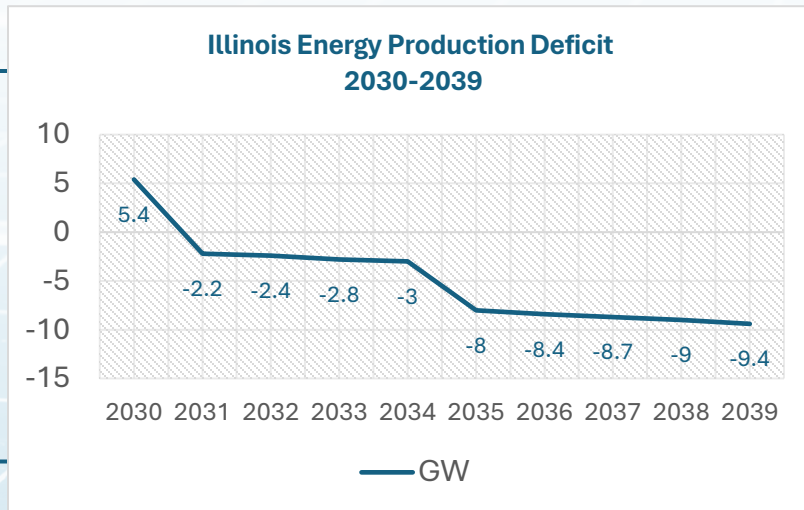
SB2497 & HB3758 **save consumers \$2.4 billion on energy bills** through 2049 by eliminating the need to import energy from outside Illinois and **prevent \$7.3 billion in blackout-related expenses** through 2049.

These bills build upon CEJA's momentum to construct more clean energy capacity. This is critical to preventing shortfalls, which raise prices for Illinois residents, as exemplified by the 2024 PJM Interconnection Auction that is expected to increase monthly rates for millions of Illinois residents served by PJM by \$30 per month.

These bills create \$2.4 billion in consumer savings and prevent \$7.3 billion in blackout-related expenses

Bridging the Gap

8.4 GW of coal plants will retire by 2030 under CEJA, but we are not currently on pace to replace these retirements. Illinois is projected to have a shortfall of at least 9.4 GW by 2039. SB2497 & HB3758 create incentives to spur further clean energy development to avoid these projected shortfall.



Source: Cost and Benefit Analysis of Energy Storage Resource Deployment in Illinois

Creating Jobs & Economic Growth

These bills generate up to 115,000 full-time employment years and \$16.3 billion in economic activity that in turn prepares Illinois for continued investment by strengthening economic growth from energy investments. More data centers and manufacturing investments will need a reliable, affordable, and clean energy grid.

\$16.3 billion in economic activity generated

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Why Illinois Needs Clean Energy Storage

Key findings from “Cost and Benefit Analysis of Energy Storage Resource Deployment in Illinois”

A study by Mark Pruitt, former Director of the Illinois Power Agency, Associate Professor at Northwestern University, and Principal of the Power Bureau, examined Illinois’ energy capacity outlook.

The study found immediate legislative action is needed to build at least 15 gigawatts (GW) of clean energy storage. Doing so would reduce consumer costs, future-proof the state’s economy, and improve power grid stability.

Illinois Must Act Now

- Federal, regional, and state regulators agree that **Illinois is at risk of an energy deficit**.
- **Fossil fuel plants could stay online longer** if enough energy storage isn’t deployed soon to fill the projected energy deficit.
- Illinois’ poor energy capacity outlook is already **causing cost increases, affecting consumers and deterring business investments**. Energy wholesaler PJM Interconnection, which serves millions of Illinoisans, recently saw a more than 800% price spike – and these price hikes will continue if we do not create more in-state energy capacity.

Future-Proof Illinois’ Economy

- Without 15 GW of clean energy storage, by 2040, Illinois faces an energy shortfall of at least 9.4 GW — the capacity needed to power approximately 7 million homes.
- Illinois needs increased power capacity to support new residential and economic growth through high-energy businesses such as data centers, artificial intelligence, and manufacturing.
- Building 15 GW of clean energy storage would result in a net cost savings of approximately \$2.4 billion for Illinois consumers.
- Up to 115,000 full-time jobs would be created by constructing and operating 15 GW of clean energy storage.

Improve Grid Stability

- If Illinois does not increase its energy capacity to meet future needs, the entire grid will be more susceptible to blackouts.
- Without enough in-state capacity to meet demand, Illinois must import more out-of-state energy or keep fossil fuel plants online longer. These costs will be passed on to consumers.
- High-energy businesses will choose other states if they cannot be guaranteed reliable and affordable power.

Planning Reserve Margin Projections for Ameren Illinois and ComEd



Scenario A (Business As Usual)

Scenario B (Decreased Renewable Deployments)

Scenario C (Increased Demand for Electricity)

Reduce Consumer Costs

15 GW of clean energy storage would:

- **Save Illinois consumers \$2.4 billion**
- Prevent consumer electricity bill hikes of \$30 per month
- Avert \$7.3 billion in blackout-related expenses
- Avoid up to \$4.9 billion worth of carbon emissions



SB2497/HB3758 STORAGE FAQs

Is the proposed energy storage program needed now?

- Yes, because deploying large scale energy storage resources requires considerable time. Commencing an energy storage program in the near term would be an appropriate hedge against the elevated reliability risks presented by accelerating power station retirements and delayed deployment of renewable energy resources in the region.

What are the consumer cost impacts of the proposed energy storage program?

- Illinois consumers would realize a net cost savings of approximately \$2.4 billion with the deployment of 15 GW of energy storage resources. Based on current estimates, the average single-family utility account served by Ameren Illinois would realize an average cost savings of \$4.37/month over 20 years and the average ComEd single family residential account would realize an average cost savings of \$2.81/month.

How will 15 GW energy storage help Illinois meet its capacity needs?

- Under CEJA's timeline, 8.4 GW of coal capacity will be retired by 2030. For comparison, in the next five years, new solar capacity is only expected to grow by less than 6.6 GW. In order to fill this gap and the growing demand for electricity with clean resources, Illinois needs to dramatically accelerate the build out of energy storage to both optimize existing wind and solar generation assets and support new renewable projects coming online in the future. Illinois requires 15 GW of additional energy to meet future demand, ensuring the state remains an attractive destination for new businesses and a stable location for current businesses to thrive.

What is the general reason for all these storage provisions?

- The Climate and Equitable Jobs Act (CEJA) supercharged Illinois' solar industry; however, energy storage, a necessary tool for both the clean energy transition and for ensuring grid reliability, was not included in CEJA. To capitalize on CEJA's incredible momentum and ensure Illinois stays on track to meet its urgent climate goals, these bills provide bulk storage targets and the ability to pair battery storage with both residential solar and community solar.
- An energy storage standard, also known as an energy storage target, is essential for ensuring the grid remains reliable, keeps costs to ratepayers as low as possible while simultaneously growing jobs in the state. These bills includes core energy storage programs that will ensure the state of Illinois transitions to clean energy and that good paying jobs in the energy sector grow throughout this transition. One way these bills achieve this is through the creation of the Virtual Power Plant (VPP) Program. VPPs are created by aggregating resources, such as home rooftop solar paired with battery storage. Individually, these devices generate and store power, have backup power, and provide savings on energy bills. Together, these devices can inject vast amounts of power into the grid to reduce peak energy supply constraints and add reliability to the grid, which can result in consumer savings.
- Data shows that Illinois may need as much as 15 GW of energy storage capacity by 2035 as the RPS deploys more renewable energy on the grid, fossil fuel plants come offline, and electrification data centers place upward pressure on electricity needs. These bills ensure that the state will have sufficient storage resources connected to the grid under the right timeline to keep the grid reliable during the energy transition.
- Energy storage technologies provide unique and essential benefits to the grid and to taxpayers across all settings – at the utility-scale, community-scale, and in commercial and residential settings. These bills holistically address all of those unique settings and ensures ratepayers can capture each of those unique benefits.



SB2497/HB3758 STORAGE FAQs

What are some key provisions updates in these bills?

- **Increase in Long-Duration Demonstration Projects:** These bills increase the number of long-duration and multi-day duration energy storage demonstration projects that the IPA would be tasked with carrying out. This was done to ensure that an adequate number of demonstration projects existed to evaluate the values and benefits of a variety of different technologies and variety of different use cases.
- **Added Flexibility in the Bulk Storage Procurement Program:** Instead of relying on index storage credits for all bulk storage procurements, these bills allow both the use of index credits and tolling agreements. Additionally, they give the IPA the authority and flexibility to allocate procurement amounts between these mechanisms in a way that best suits the state and ratepayers. This change was also made with lessons already learned from New York's procurement processes, which are years ahead of Illinois.

What is an index credit mechanism and a tolling agreement – what is the difference?

- **Tolling Agreements / Utility Dispatch Rights:** Under these agreements, utilities are granted the authority to dispatch and control the operation of energy storage systems to maximize grid reliability, optimize energy supply, and respond to dynamic grid conditions. This contractual arrangement empowers utilities to utilize energy storage resources as needed, whether for peak demand management, integration of renewable energy, or ancillary grid services. In return, energy storage asset owners receive compensation for their resources' flexibility and reliability contributions.
- **Index Storage Credits:** In this approach, storage project developers bid a "strike price" in a competitive solicitation, and payments are made over time, linked to project lifetimes or contract durations. Payments are determined by comparing the strike price to a "reference price" derived from market price indices. If the strike price exceeds the reference price, the program facilitator provides a support payment to the project. Projects are selected based on predetermined criteria, including price and non-price factors like project viability and societal benefits. Other index credit proposals have suggested funding these payments through collections from Load-Serving Entities (LSEs).

Will costs of demonstration projects dilute savings for ratepayers?

- No. While the one material increase in these bills is the demonstration projects, those will not present substantial costs to ratepayers, and in fact, the value gained through learning by doing will result in increased efficiency and effective utilization of technologies in the long-term.
- The adjustment for the bulk storage procurement program, by adding a second procurement mechanism and offering discretion to the IPA, ensures that the most efficient and cost-effective procurement programs are used for the vast majority of procurements. This will drive any estimates related to cost down, because the diversification and flexibility allow for real-time programmatic adjustments.

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to learn
more!





SB 2497/HB 3758 LANGUAGE SUMMARY & BILL COMPONENTS

SB 2497/HB 3758 addresses rising energy costs by building 15 GW of standalone and hybrid energy storage and connecting clean energy projects to the grid faster. These bills reduce energy costs for Illinois families and businesses, strengthen Illinois' power grid, create 115,000 jobs, and help meet CEJA's climate goals.



CLEAN ENERGY STORAGE PROVISIONS

- Creates a new process for the Illinois Power Agency to procure utility-scale energy storage.
- Provides financial support for utility-scale storage projects, preventing consumer cost spikes.
- Prioritizes union workers by requiring project labor agreements for standalone energy storage.



INTERCONNECTION AND RENEWABLE DEVELOPMENT

- Creates a new office within the Illinois Commerce Commission (ICC) to oversee renewable energy interconnection.
- Mandates that utilities allocate more resources to interconnection to improve the speed and reliability of connecting renewable energy projects to the grid.
- Allows project contracts to be renegotiated to reduce delays and ensure completion.
- Makes additional technical fixes to improve the interconnection process and remove barriers keeping projects from connecting to the grid.



RENEWABLE ENERGY PROCUREMENT & ADJUSTMENTS

- Adds developer flexibility in scenarios such as budget changes and shifting timelines.
- Clarifies language to connect projects to the grid more quickly without overburdening the system.

DISTRIBUTED ENERGY AND STORAGE PROGRAMS

- Creates a Virtual Power Plant (VPP) program, enabling small-scale energy sources such as residential solar panels to provide power directly to the grid.
- Compensates homeowners and businesses for solar and storage systems benefiting the grid.
- Creates a program to reward an owner of a standalone energy storage system up to 5 MW to connect to the grid and provide relief when power is most expensive.
- Creates a \$100-per-kWh rebate for standalone small-scale storage projects.
- Updates existing rebates to provide additional incentives for projects in underserved communities.

ILLINOIS SHINES (ADJUSTABLE BLOCK PROGRAM) UPDATES

- Removes the annual limit on residential systems supported by Illinois Shines to help more households access solar energy and support developers in Illinois communities.
- Ensures prevailing wages for workers for both solar and storage components of projects.
- Allows a project to be withdrawn and collateral turned if it exceeds cost estimates.