IEPA/IPA/ICC Resource Adequacy Study
Response to Agency Questions
July 16, 2025

Introduction

The Commonwealth Edison Company (ComEd) appreciates the opportunity to offer some additional thoughts and suggestions regarding the critical issue of progress towards Illinois' ambitious goal of creating an equitable, clean energy future as described in the Climate and Equitable Jobs Act (CEJA)[1]. In the years since CEJA's passage, ComEd has observed increasing demands for the interconnection of large load customers which makes it vital that Illinois policymakers understand the options for achieving CEJA's goals without compromising other policy priorities such as economic development. ComEd offers these comments for consideration as the Agencies[2] begin this important work.

Overall, ComEd believes the Agencies should focus on what tools the state of Illinois has to balance the priorities of economic development, clean energy resource development, meeting the climate goals embedded in CEJA and ensuring Illinois citizens have access to reliable and affordable power supply to meet their daily needs. As the federal landscape for clean energy changes has rapidly shifted, it becomes more critical for the state to examine its own incentives and policies supporting clean energy resources. At the same time, the state must contend with the limits of its authority within a competitive energy construct and the rules, policies, and practices put forth by MISO and PJM[3]. ComEd urges the Agencies to gather data such that a holistic picture of load growth, generation capacity, and energy deliverability can be viewed against a backdrop of increasing customer energy costs and overall economic pressures on affordability.

TOPIC 1: Resource Adequacy Study goals and scenario analysis considerations.

Question 1: The Agencies recognize this study process is purposefully targeted in its nature, with Section 9.15(o) providing clear goals and expectations of the resource adequacy study and resulting report. What additional goals, objectives, or evaluation metrics should be considered, either as part of this study process or future resource adequacy study efforts?

Response:

[1] Public Act 102-0662.
[2] The "Agencies" refer to the Illinois Environmental Protection Agency (IEPA), the Illinois Commerce Commission (ICC), and the Illinois Power Agency (IPA).
[3] PJM in this instance refers to PJM Interconnection, LLC, the regional transmission operator for the ComEd service territory.

The Agencies should consider three additional metrics: affordability considerations, projected load growth, and the impacts of the One Big Beautiful Bill Act (OBBBA)[4].

Affordability

ComEd serves over 3.8 million residential customers, and affordability of electric utility services is assessed mainly through the "energy burden" metric, which measures home energy costs as a percentage of household income. The company aims to keep these costs below 3% or 6%, depending on heating type, to ensure affordability. ComEd notes that its average residential energy burden is projected at 1.20% in 2024 and 1.24% by 2027, well below the 3% threshold. Its electricity rates are 11% lower than top metropolitan areas and among the lowest in the U.S., indicating strong value for customers. ComEd believes it is vitally important to ensure that the energy burden on its customers remains low as demands on customers' budgets – whether they be households or businesses – rise in the face of uncertain economic conditions. ComEd urges the Agencies to consider energy burden impacts of any potential policy changes.

Load Growth

ComEd forecasts electricity demand at both system and distribution component levels to guide infrastructure planning and ensure reliability under typical and extreme conditions. This involves analyzing historical load data, weather patterns, and local growth factors including new developments and electrification trends. For example, ComEd uses historical peak load data aligned with 90/10 weather conditions to forecast load for substations and feeders, balancing realistic service expectations with planning for extreme weather. ComEd also uses its forecasts to integrate projections of local growth and new technologies. For example, load growth assessments incorporate economic trends, new business initiatives, and emerging technologies like electric vehicles (EVs) and distributed energy resources (DER), adjusting forecasts annually to reflect these dynamic factors. For this study's purpose, it will be important to note the interrelated effects of things like utilization of DERs and electrification on peak demand: solar and other DER reduce net feeder loads during peak summer demand, but increased electrification, especially heating, may shift peak demand to evening or winter hours.

ComEd urges the Agencies to look at the latest forecasts provided to PJM as well as the forecasts used by the Illinois Power Agency (IPA) in its most recent energy procurement and long-term renewable resources procurement plan. ComEd encourages the Agencies to supplement monthly energy and peak demand forecasts with 8760 hourly energy forecasts from each zone in the state to ensure that every hour of every day has sufficient clean energy available to meet electricity demand.

[4] The OBBBA provides for reconciliation pursuant to Title II of H. Con. Res. 14 and became public law on July 4, 2025.

Impacts of Federal Policy Changes

The OBBA will have a dramatic impact on the national clean energy industry, and on Illinois' specific goals to eliminate any reliance on in-state fossil fuel generation. OBBBA accelerates the end of production and investment tax credits for clean energy projects, creates new restrictions on foreign entities, and changes deadlines for project qualifications. ComEd offers below a high-level summary of key provisions but notes that this summary is provided for illustrative purposes only to highlight the importance of the Agencies assessing and modeling the impacts of OBBBA on Illinois' current and future resource adequacy plans.

- **Clean energy tax credits (production tax credit, investment tax credit):** OBBBA creates a new one-year safe harbor for wind and solar: projects starting construction within 12 months of OBBBA enactment qualify for full clean electricity tax credits without a placed-in-service deadline, but those starting after 2025 face foreign entity restrictions. Wind and solar projects outside the safe harbor must be placed in service by December 31, 2027, to qualify for credits, while other technologies like nuclear and geothermal have extended eligibility through 2033 with phasedown. Clean energy credits remain transferable to unrelated parties, but transferees cannot be prohibited foreign entities or receive material assistance from such entities, and credits may be recaptured if a project later falls under foreign entity control or influence, including through ownership changes. OBBBA does create incentives for fuel cells, letting them qualify for a flat 30% Investment Tax Credit without lifecycle emissions requirements or adders, and creates a location bonus for nuclear resources.
- **Domestic content adder adjustments:** Projects beginning construction after June 16, 2025, must meet increasing domestic content thresholds for credit adders, aligning Investment Tax Credit thresholds with Production Tax Credit thresholds.
- **Foreign Entity of Concern (FEOC) restrictions:** Credits are disallowed if projects are owned, controlled, or materially assisted by prohibited foreign entities, with detailed ownership and sourcing thresholds modeled on CHIPS Act standards. Projects must meet minimum non-FEOC content percentages to avoid disqualification, with thresholds rising over time and specific rules for components like solar modules and critical minerals. 1

Following OBBBA's enactment, on July 7, President Trump issued an executive order titled "Ending Market-Distorting Subsidies for Unreliable, Foreign Controlled Energy Sources," directing federal agencies to enforce stricter standards for clean energy tax credits under the OBBBA. The executive order instructs the Treasury to issue new or revised guidance within 45 days (by August 18, 2025) to clarify the "beginning-of-construction" standard under CEPTC and CEITC. The executive order states that this guidance must prevent artificial acceleration of construction start dates by requiring that a

"substantial portion" of a wind or solar facility has actually been built before safe harbor provisions can be invoked.

Together, these changes mean that clean energy resource developers and investors must quickly assess the viability of projects. Under the current policy framework in Illinois, ComEd understands that projects are often financed by a combination of energy and capacity market revenues as well as renewable energy credit (REC) production. With the loss of the clean energy PTCs and ITCs, ComEd believes the price of RECs would have to dramatically increase to make up for the loss, potentially by as much as 75%. Such prices would have a dramatic impact on the quantity of RECs procured under the current framework, and by extension on the number of projects that Illinois could expect to be completed. If the state chose instead to expand REC procurements to maximize the number of projects which could be constructed to align with new federal policy requirements, the budget impacts on customers would be equally dramatic. As a result, ComEd believes the Agencies should examine multiple scenarios based on these changes.

Question 2: Which variables are the highest priority to explore? Further, are there important policies or drivers missing in addition to those outlined in the preceding stakeholder workshop that could help shape scenario development?

Response:

Several drivers and data points should be used to help shape scenario development, including market prices and forward price curves, load forecast sensitivities (including interconnection queues), and expected new development. Please see related files attached, including the most recent PJM load forecast and ComEd's load forecast updates recently submitted to IPA.

- Topic 1 Ques 2_Attach 1- RA Study_ComEd Response to DR for IPA 2025 LTRRPP
- Topic 1 Ques 2_Attach 2- Data Requirement for 2025 LTRRPP
- Topic 1 Ques 2_Attach 3 – ComEd March 2025 Forecast Summary
- Topic 1 Ques 2_Attach 4 – ComEd March 2025 ProcurementBlocks_Update.xlsx
- Topic 1 Ques 2_Attach 5 – 2024 Muni Ag Renewal TrackingFinal.xlsx
- Topic 1 Ques 2_Attach 6 – Model Stat Compare
- Topic 1 Ques 2_Attach 7 – ComEd March 2025 Updated Forecast
- Topic 1 Ques 2_Attach 8 – Spring Procurement Volumes
- Topic 1 Ques 2_Attach 9 – PJM 2025 Load Report

Question 3: Which of the following drivers are most critical to explore in the resource adequacy modeling scenarios and why?

a. Extreme weather
b. Demand growth
c. Thermal retirements
d. Transmission build and future needs
e. Generation resource diversity
f. Out-of-state reliance on generation resources
g. Some other driver not described above

Response:

While each of these drivers are important and worth consideration, interconnection queues are most critical to explore in the resource adequacy modeling scenarios. ComEd recommends looking at the queues at PJM, MISO, ComEd, and Ameren, to get a full picture of projected load and generation interconnections, paying particular attention to construction/in-service dates, points of delivery and progress, and contingency plans for projects falling behind schedule. The urgency of this work reflects a common theme that has surfaced throughout the ICC's Policy Sessions on Resource Adequacy, but, in particular, the session on July 2, where RTOs and ISOs repeatedly spoke about concerns regarding tightening reserve margins, that will only be met if projects remain on schedule, and that doing so would represent a historical pace of generation additions to the system.

Question 4: Are there known or expected developments in federal or state policy that should be integrated into scenario development? Please explain in detail and provide references where possible.

Response:

As noted above, ComEd believes the Agencies should pay particular attention to the impacts of OBBBA and the implications for clean energy resource development. ComEd also notes that in the spring session of the 104th General Assembly, Illinois policymakers and stakeholders developed an energy omnibus, Senate Bill 40, which contained numerous provisions potentially affecting this study, in particular policies adjusting the budget for meeting renewable portfolio standard (RPS) requirements, procurement of energy storage resources, expansion of support for distributed energy resources such as solar paired with storage, and a way to propose public policy transmission projects:

- Adjusted the RPS budget annually for inflation beginning w/ the 27 DY.
- Created an energy storage procurement process beginning in August 2025, including an initial procurement of 1,038 MW by August 26, 2025, and subsequent schedules targeting 3 GW by the end of 2029 and 6 GW by the end of 2034, with annual procurements allowing

quantity and geographic flexibility. The proposed legislation focused the initial procurements on stand-alone energy resources and excluded storage resources with costs recovered through regulated rates since January 1, 2017.

- Revised existing distributed generation rebate provisions to include energy and EV storage systems, adjusts the rebate threshold date to two years from the Act's effective date with a set rebate value of $250 per kW, and provided separate rebates for frequency regulation market participants and additional rebates for resource owners in EIECs. It mandated the establishment of a scheduled dispatch virtual power plant program by early 2026, with a five-year enrollment commitment requiring dispatch on weekdays during summer afternoons, compensation set at no less than $10 per kW of average dispatch, and allowed the ICC to adjust schedules and establish additional services.
- Created a new integrated resource planning process by which the ICC, IPA, IEPA, and the Illinois Finance Authority are required to collaborate on integrated resource plans (IRP) starting June 1, 2026, and every four years thereafter, ensuring these plans evaluate future electric resource needs, reflect reliability margins, comply with environmental laws, include emissions forecasts. The plans would then undergo a 180-day review process with the ICC having authority to modify plans for alignment with state goals while providing safe harbor protections against imprudence findings.
- Modified the existing Renewable Energy Access Plans (REAP) to include public policy transmission projects and advanced technologies to support the state's clean energy goals, requiring annual evaluations of REAP effectiveness, cost-benefit analyses of transmission projects, and the development of plans for integrating advanced transmission technologies and headroom analysis by utilities.

Question 5: How should cost implications or other findings beyond potential reliability shortfalls be presented or considered to support constructive policy decisions?

Response:

ComEd urges the Agencies to examine the pace and timing of proposed procurement events for energy supply and RECs as well as the interconnection queues of both distribution utilities and RTOs.

Question 6: What blind spots or gaps in the RA Study process do you worry might be overlooked or otherwise not addressed?

a. **Are the identified blind spots or gaps unique to customer segments, modeling scenarios, market conditions or other targeted parameter?**
b. **How could the identified blind spots or gaps be addressed? (e.g. through additional scenarios, targeted data inputs, utilizing specific modeling, etc.)**

Response:

The PJM Interconnection has made significant changes to its capacity market design to address reliability and cost-effectiveness which have been approved by Federal Energy Regulatory Commission (FERC) for the next two PJM capacity auctions, including the inclusion of Reliability Must-Run (RMR) units in the capacity market. These changes aim to recognize the contribution of RMR units that may be reasonably expected to perform during capacity emergencies The qualifying RMR units,[5] which have already negotiated compensation agreements to cover the additional period they agreed to run beyond their intended retirement date and are expected to perform during capacity emergencies, will be modeled in the capacity auctions as price-takers. PJM has also acknowledged that it will work with stakeholders to consider the development of a pro forma RMR agreement with standardized terms and conditions that would require RMR resources to run during capacity emergencies. At the same time, FERC approved PJM's proposal to maintain the gas-fired combustion turbine generation unit as the Reference Resource for the same auction cycles.

The Agencies should endeavor to understand the potential impacts of how RMRs may play out in Illinois. For example, if the current timeline for IEPA emission reductions are followed but the plants in question are RMR'd by the RTOs. Illinois may face a situation where the fossil generating stations continue to operate and emit pollution while Illinois consumers pay more for that energy through an RMR contract than they would if the plants were allowed to continue operations. This analysis is complex but critical to understanding the cost benefits of the current state policy in conjunction with market structures that are not under the control of the state.

Question 7: Have any peer jurisdictions developed scenario(s) through the completion of their own resource adequacy assessments or studies that should also be considered by the Agencies through this Resource Adequacy Study?

a. **Provide details concerning the scenario(s), which jurisdiction developed the scenario, and provide a link to the supporting detail(s).**

[5] RMR units PJM expects to include in the capacity auctions for the 2026/2027 and 2027/2028 Delivery Years are Wagner Units 3 and 4 and Brandon Shores Units 1 and 2, pending completion of all regulatory requirements. Both generating facilities are located in Anne Arundel County, Maryland.

b. Is the assessment part of a broader resource adequacy assessment, or an more detailed integrated resource planning effort?
c. Are there any market conditions or policy considerations that are unique to the jurisdiction and/or the scenarios referenced?

Response:

At this time, ComEd is not aware of any such studies or scenarios.

TOPIC 2: Analytical approach to analysis and data assumptions.

Question 8: Are there recommendations for specific data sources that could be utilized in this study?

a. Are there preferences for certain input assumptions that should be made?
b. What prior or concurrent studies could be referenced that might add value or ensure alignment with similar or adjacent work (e.g., queue assumptions, RTO projections)?

Response:

The report should consider ongoing analysis that state electric utilities and RTOs are conducting to assess generation resource adequacy and transmission security in Illinois. This analysis models the energy transformation envisioned by CEJA to determine potential solutions to support achievement of the energy policy and economic development goals of CEJA, while evaluating issues, mitigations and potential solutions to generation resource adequacy issues and transmission security violations. This information is intended to assist the state, utilities, and RTOs to develop plans for development and investment decisions that support the goals of efficiently delivering adequate, reliable, and affordable energy to customers.

ComEd also urges the Agencies to evaluate what other models used by RTOs are used to address these issues. For example, both PJM and MISO have options for states to consider when it comes to capacity and resource adequacy: for PJM, it's known as a fixed resource requirement (FRR)[6]; for MISO, a fixed resource adequacy plan. For example, under PJM's FRR, load-serving entities such as utilities can meet reliability requirements outside the market while still participating in PJM's energy and ancillary services markets. Entities electing FRR must annually commit enough resources to meet reserve requirements, face charges if commitments are insufficient, and comply with Capacity Performance standards during emergencies but costs through regulated rates rather than the

[6] See Securing Resources Through the Fixed Resource Requirement, accessed July 14, 2025.

market, provided they demonstrate sufficient resources to meet federally mandated reliability requirements for at least five consecutive years.

In terms of transmission planning, ComEd notes that Texas has developed a framework for promoting renewable energy development which was designed to encourage competition among project developers with the goal of developing high quality projects at least cost. Texas' Competitive Renewable Energy Zones (CREZs) process was undertaken between 2005 and 2014. CREZs informed the siting of new high voltage transmission lines that reduced network congestion and opened new, wind-rich areas for renewable energy development. The resulting CREZ plan targeted high-capacity transmission development for zones containing three to four times more undeveloped wind potential than the new high-voltage lines could accommodate. This enhanced competition among developers and ultimately incentivized them to develop high-quality projects at least cost. The costs of developing transmission to CREZs were folded into the electricity rate base that funded the rest of the transmission system. Similarly, New York enacted the Accelerated Renewable Energy Growth and Community Benefit Act (the Accelerated Renewable Act) which established, among other things, a Priority Transmission Project (PTP) process for constructing new, expanded, and upgraded bulk transmission infrastructure needed on an "expeditious" basis to access and deliver renewable energy resources. Under this framework, the New York State Public Service Commission can designate specific transmission projects as a PTP which can accelerate its development. ComEd urges the Agencies to consider alternative transmission planning models such as this one as it illustrates the range of options states have taken to address their particular state public policy goals.

Question 9: Are there specific transmission constraints, expansions, or projects that should be considered and reflected in a model scenario? Further, are these transmission considerations intended to target and/or solve specific challenges? Please explain, provide supporting documentation justifying inclusion, and provide pertinent reference materials including reports or studies.

Response:

ComEd believe it's important to consider long term transmission planning materials provided by the RTO's in developing a modeling scenario. Examples include MISO's Multi-Value Projects Analysis Documents 2024-Tranche 2.1, MISO MTEP 24 Report, and MISO Tranche 2.1 Fact Sheet.

https://www.misoenergy.org/planning/multi-value-projects-mvps/#nt=/multivalueprojecttype:MVP%20Analysis%20Documents%20(2024-Tranche%202.1)

https://cdn.misoenergy.org/MTEP24%20Full%20Report658025.pdf

https://cdn.misoenergy.org/LRTP%20Tranche%202.1%20Fact%20Sheet%20Website666573.pdf

Question 10: Are there specific assumptions that should be considered concerning generation resources, including buildout (queue, pace, technology availability) or retirements, both in-state and regionally in the RTO markets?

a. **Which proposed assumptions should be considered as part of the base case and which are best considered as part of a prospective scenario? Provide any available references to RA studies, IRPs, or comparable assessments and reports to support your recommendations.**
b. **Which assumptions are contingent upon specific policy and/or legislative conditions being met or otherwise enacted? Please explain in detail.**

Response:

As noted above, ComEd believes it's important to consider the implications of potential market changes on resource adequacy projections, including not just RMR rule changes but also changes which impact the eligibility, accreditation, and performance risk for clean energy resources.

Question 11: As a component of the RA Study, the Agencies will be seeking to obtain utility and RTO load forecast projections and the underlying assumptions behind the load forecasts. In addition to these utility forecast assumptions, what additional assumptions should also be considered, either embedded in a base case or considered in scenarios? Further, what data sources should be drawn upon, supporting any load forecast modifications? (i.e. large load / electrification growth)

a. **Provide details on why these additional assumptions should be considered during the modeling process?**
b. **Are any proposed load forecast assumptions directly impacted and/or predicated upon specific to policy, legislative, or other conditions being met and/or otherwise enacted? Please explain in detail.**

Response:

From ComEd's perspective, our forecasts are inclusive of key drivers and reflect our best projections.

Question 12: Are there any additional considerations – data inputs, policy, drivers, or assumptions – that Stakeholders believe the Agencies should consider, not already explain in response to the preceding questions? Please explain in detail.

Response:

Parties have presented valuable data, policy and other driver observations, and modeling thus far in the ICC Resource Adequacy Policy Sessions (December 2024 – July 2025). ComEd recommends these presentations also be considered and leveraged, where appropriate, in the State's Resource Adequacy Study.