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VIA EMAIL

Illinois Power Agency 105 W. Madison Street, Suite 1401 Chicago, IL 60602

Comments of Commonwealth Edison Company

IPA Preliminary Draft Policy Study

Pursuant to Section 1-129(f) of the Illinois Power Agency Act, Commonwealth Edison Company ("ComEd") respectfully submits these comments ("Comments") on the Illinois Power Agency's ("IPA") 2024 Policy Study ("Policy Study"), which the IPA published on January 22, 2024, for public review and comment. ComEd appreciates the considerable time and effort required of the IPA to review and provide the thorough background information contained in the study, analyze the three policy proposals, model impacts, and provide study results.

ComEd is fully committed to meeting the Climate and Equitable Jobs Act's (CEJA) aggressive timelines and ambitious targets to decarbonize the Illinois energy sector by 2050 in an equitable manner that invests in the State's workforce. ComEd offers these recommendations and comments to the IPA from a unique electric utility perspective and its associated experience and analyses.¹

Energy Storage

In addition to the Coal to Solar and Energy Storage Initiative for utility-scale energy storage systems, CEJA presents significant incentives for residential and commercial energy storage systems located in Illinois. ComEd, pursuant to CEJA requirements, offers the following rebates to offset energy storage system costs.

¹ ComEd's silence at this time regarding any particular issue should not be interpreted as agreement with all statements, approaches, calculations, or recommendations made in the Policy Study pertaining to that issue.

 Energy Storage Rebate through Distributed Generation Rebate (DG Rebate) program: For systems not eligible for net metering under subsections (d), (d-5) or (e) of Section 16-107.5 of the Public Utilities Act ("PUA"), \$250/kWh. For systems eligible for net metering under subsections (d), (d-5), or (e) of Section 16-107.5 of the PUA, \$300/kWh until 2029 and \$250/kWh thereafter.

As a part of the Illinois Commerce Commission's ("ICC") ongoing investigation into the value of, and compensation for, distributed energy resources (DER) under Section 16-107.6(e) of the PUA, the ICC will determine; 1) if DERs, including energy storage, can provide any "additive services" (as defined by the law) as well as the associated compensation for those services, and 2) additional compensation for DERs that creates savings and value by being co-located or in close proximity to EV charging infrastructure in use by medium and heavy duty vehicles primarily in EJ communities. *See* ICC Order Initiating Investigation (June 29, 2023) at 2. As additional energy storage incentives are considered, it is imperative that all value streams, including but not limited to those described above, be included as revenue sources so customers do not pay twice for the same benefit, product, or service.

It is ComEd's understanding that IRA incentives and ComEd's DG Rebate could subsidize approximately 50% of the installation costs of residential battery storage systems. For larger systems, ComEd's DG Rebate and IRA incentives could subsidize upwards of 70% of battery storage system installations costs. To illustrate this, ComEd complied Table 1 using findings of a Levelized Cost of Energy (LCOE) study performed by Lazard and 2023 cost data released by NREL².

² PowerPoint Presentation (lazard.com), Data | Electricity | 2023 | ATB | NREL

Table 1



Utility-scale battery storage technologies, at this time, cannot reasonably address the need for more clean generation resources. In December 2022, ComEd sponsored Energy and Environmental Economics, Inc's ("E3") independent Illinois decarbonization study³ ("Decarbonization Study") to evaluate electrification scenarios between 2030 and 2050. Electric grids have historically been planned around a summer peak due to air conditioning loads. The transition of heating load from natural gas to electricity is expected to shift the Illinois electric grid to a winter peak, as early as 2030. *Decarbonization Study* at 4. By 2030, ComEd's service territory will require around 8 GW of combined new solar, wind, and storage capacity. *Id.* at 44. By 2050, the cumulative new capacity additions (now to 2050) range from 31.5 to 100.9 GW depending on the electrification scenario. *Id.* Figure 1 was included in the Decarbonization Study⁴ and shows the ComEd total electric build requirements between 2030 and 2050 for moderate and high electrification scenarios.

As detailed in the Decarbonization Study, the battery storage requirements across the reference, moderate, and high electrification scenarios do not rise significantly until 2050 and renewable generation needs are multiple times greater. The storage technologies that are the subject of the Policy Study, address

³ Available at <u>Illinois Decarbonization Study (ethree.com)</u>

⁴ Figure 1 of these Comments duplicates Figure 34 of the Decarbonization Study.

load-balancing and intermittency challenges. *Policy Study* at 48. Energy storage can address these challenges only if sufficient clean, carbon free generation is available within the short-term storage capability of the storage technology. At this time, storage technologies cannot address the additional capacity needs associated with shifting from summer to winter peaks, a challenge that involves storing power for months rather than hours based on the current production profiles of renewable generation. Depending on the storage technology, implementation in the near term would likely leave the facilities well past or near the end of its useful life by the time the storage need arises. The useful life of renewable generation is generally greater, between 20-30 years.



Figure 1 – ComEd Total Electric Builds, Inclusive of Hydrogen Production

Due to the continuing downward trend of lithium-ion batteries, the \$298 million per year difference the Policy Study models customers would pay⁵, and shorter lead times for battery storage projects, Illinois policy makers should prioritize proposed solutions that cost effectively address the need to further the development of utility-scale renewable generation.

Offshore Wind

HB 2132 authorizes an RPS rate impact cap increase of 0.25%, roughly equivalent to \$32 million per year. *Policy Study* at v. Procurement of 700,000 RECs annually approximates to \$45.71/REC. This price

⁵ Draft Policy Study Errata at 6.

exceeds the IPA's most current projections for land-based utility-scale wind RECs by multiple orders of magnitude⁶. *See* Appendix B of the IPA's proposed 2024 Long-Term Renewable Resources Procurement Plan (LTRRPP)⁷. ComEd therefore questions the efficacy of adding the additional charge to finance offshore wind development instead of using existing RPS funding to finance projects at far lower costs. ComEd currently has over \$400M of unused REC collections that should be utilized prior to any additional charges being added to existing RPS funding.

SOO Green

Of the three proposals evaluated by the Policy Study, SOO Green's cost to Illinois customers of approximately \$431.3 million annualized in 2022 dollars is the highest. *Policy Study* at vi. This additional charge would increase the RPS budget by approximately 72% in order to acquire RECs related to generation produced in Iowa that would not further Illinois' progress towards it's own renewable energy goals and only provide approximately \$93.9M of wholesale energy cost benefits, a cost benefit ratio of greater than 4.5.

CEJA expanded upon the prior approach of qualifying adjacent state by qualifying RECs "associated with the electricity generated by a utility-scale wind energy facility or utility-scale photovoltaic facility and transmitted by a qualifying direct current project...to a delivery point on the electric transmission grid located in this State or a state adjacent to Illinois." Section 1-75(c)(1)(I) of the IPA Act. The SOO Green legislation, among other concerns, provides that RECs would not count towards Illinois RPS goals and provides a separate financing mechanism "through tariffed charges added to the electric utility's delivery services customers." *Policy Study* at 29-30. Additionally, the Policy Study summarizes filings made by SOO Green before the Iowa Public Utility Commission revealing the creation of \$663 million in capital

⁶ Appendix B of the IPA's proposed 2024 Long-Term Renewable Resources Procurement Plan forecasted REC prices for deliveries between 2026 and 2030 fall between \$9.31/REC to \$4.66/REC. IPA REC procurements use an indexed REC pricing structure, and the IPA forecasts incorporate forward prices of between \$42.99 and \$47.63.

⁷ Available at <u>Renewable Resources (illinois.gov)</u>

expenditures and 5,439 FTE-years in construction job creation in Iowa on top of between 19,683 and 24,030 FTE-years created through the development of renewable resources in Iowa. *Id.* at 179. These facts alone, much less coupled with the substantive rate impact, should give policy makers pause. Clean energy policy must further Illinois RPS goals and at a minimum must allow Illinois clean energy facilities to compete for available funding. While the SOO Green Line would provide significant long-term resource adequacy benefits for Illinois' power sector energy transition, the proposed method of compensation and the magnitude of the costs when compared to benefits expected is unjustified at this time.

Respectfully Submitted,

Commonwealth Edison Company

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