



Illinois Power Agency

House Bill 3445 Policy Study Request for Stakeholder Feedback

September 29, 2023

Introduction

The Agency is soliciting stakeholder feedback to support its work in developing a Policy Study regarding key Illinois energy policy proposals. **Responses to this request are due October 20, 2023.** Information on how to respond is provided below.

Background

The Illinois General Assembly passed [House Bill 3445](#) (HB 3445) on May 26, 2023. HB 3445 directs the Illinois Power Agency to conduct a Policy Study to evaluate the potential impacts of proposals made during the Illinois General Assembly's Spring 2023 Legislative Session and provide policy recommendations for the General Assembly. The following proposals will be the subject of the IPA Policy Study:

- [Senate Bill 1587](#) would require the Agency to develop a storage procurement plan that results in electric utilities contracting for energy storage credits from contracted energy storage systems.
- [House Bill 2132](#) would require the Agency to develop a procurement process to “procure at least 700,000 renewable energy credits, delivered annually for at least 20 years, from one new utility-scale offshore wind project [in Lake Michigan].”
- A policy proposal requiring the Agency to procure high-voltage direct current (“HVDC”) renewable energy credits associated with electricity transmitted across an HVDC transmission line, which the Agency understands to be the Soo Green Line (a proposed underground transmission line proposed to carry renewable energy from a converter station near Mason City, Iowa to converter station near Yorkville, Illinois).

Although Governor Pritzker issued an amendatory veto striking other language from HB 3445 on August 16, 2023, the Agency is proceeding with the Policy Study while awaiting action from the General Assembly on the bill. The Agency will publish a draft of the Policy Study by January 21, 2024 for public comments, and will publish a final Policy Study no later than March 1, 2024.



The IPA has engaged its Planning and Procurement Consultant, Levitan and Associates, to undertake the modeling and analytical work necessary to conduct the Policy Study. The Policy Study will utilize industry standard modeling tools including GE MARS to evaluate the impacts on generation reliability and resource adequacy; PSS/E and TARA to evaluate the impacts on transmission reliability and grid resilience; Aurora production cost simulation to evaluate the impacts on electricity prices and generation related emissions; and IMPLAN to evaluate the impacts on the State's economy.

The Agency's Planning and Procurement Bureau will work closely with Levitan and Associates on analyzing results from these modeling tools and will develop policy recommendations for the General Assembly that consider:

- Support for Illinois' decarbonization goals
- The environment
- Grid reliability
- Carbon and other pollutant emissions
- Resource adequacy
- Long-term and short-term electric rates
- Environmental justice communities
- Jobs and the economy

The Agency has engaged with the proponents of Senate Bill 1587, House Bill 2132, and the Soo Green HVDC transmission line to gather technical information about proposed projects under these policies to be utilized for the modeling and analytical work described above.¹

The Agency is now interested in stakeholder feedback to provide broader information and additional perspectives on the policy areas being studied, including any data, information, reports, analyses, considerations, or other information which stakeholders believe should be brought to the IPA's attention for conducting a comprehensive and well-rounded analysis.

How to Respond

Please provide comments via email to IPA.ContactUs@Illinois.gov with the subject "[Responder's Name] – Policy Study" by October 20, 2023.

Responses will generally be made public and will be published on the Agency's website. However, should a commenter seek to designate any portion of its response as confidential, that commenter should provide both public and redacted versions, and the Agency will only post the redacted version. Independent of that designation, if the IPA determines that a

¹ Technical information request questions are available at:
<https://ipa.illinois.gov/content/dam/soi/en/web/ipa/documents/procurement-plans/2024/illinois-power-agency-policy-study-technical-information-82323.pdf>



response contains confidential information which should not be disclosed in connection with a competitive procurement event, it reserves the right to provide its own redactions.²

The Agency will protect confidential information under Section 1-120 of the IPA Act, and new Section 1-129(e) of the IPA Act, when it takes effect.

Stakeholder Feedback Questions

Stakeholders may comment on as many or as few of the items below as they would like. As outlined above, stakeholders should not feel limited by the questions offered below and may also provide other information that they deem relevant to the Agency as it conducts this Policy Study.

1) Energy Storage

- a) Senate Bill 1587 sets a procurement goal of 7,500 MW of energy storage by 2030. Is this a realistic or appropriate goal for energy storage in Illinois? How does this compare to goals and timelines for achieving those goals in other states?
- b) Is an indexed energy storage credit structure (as proposed in SB 1587, and modeled off the approach presently utilized for large-scale renewable energy projects in the Illinois Renewable Portfolio Standard) an appropriate compensation structure for energy storage? If not, what structures would more efficiently and cost-effectively compensate energy storage projects to incentivize new development? Should that structure vary based on project size?
- c) Should procurement design differ for varying types of energy storage projects, such as differentiating between stand-alone energy storage projects, projects paired with renewable resources, specific-storage technologies, and projects located at the sites of former coal plants? If so, what kind of varying procurement structures should be considered?
- d) What scale of procurement for long-duration energy storage is needed for Illinois? Is the proposal in SB 1587 sufficient? What special considerations for long-duration projects should the IPA consider when conducting its analysis?
- e) What large-scale energy storage procurement designs used in other states are seen as best practices?
 - i) What obstacles have emerged in those procurement designs, and how have they been addressed or resolved?
- f) What best practices in other states for potential tariff design for the participation and/or aggregation of customer-side energy storage from should be examined by the IPA?
- g) To model the impact of the deployment of energy storage in Illinois, the Agency and its consultants will need to make assumptions about the size, location, duration, technology, and other key attributes of energy storage projects that might

² Stakeholders may submit information via a secure transfer website if they are concerned about transmitting confidential or sensitive information by email. Please email IPA.ContactUs@Illinois.gov to request access.



successfully participate in energy storage procurements. What recommendations do stakeholders have for creating a proxy set of energy storage projects for modeling?

2) Offshore Wind

- a) What are preferred locations in Illinois' Lake Michigan jurisdiction for the development of offshore wind projects?
- b) Given the infancy of the offshore wind industry in the United States, are current supply chains sufficient to support offshore wind development in the Great Lakes? For example, are there vessels in the Great Lakes that can be modified to support Great Lakes wind energy development?
- c) When considering developing an offshore wind project that will be exposed to icing, is available technology sufficient to prevent damage from icing? Is available technology sufficient to prevent cable laying being impacted by ice sheets or ice ridges?
- d) To help inform the Agency's assessment, please recommend sources of published literature on the physical and chemical properties of the lakebed and sediments in Lake Michigan.
- e) What port requirements will be necessary for Lake Michigan wind development?
 - i) Please provide surveys or other analyses examining the suitability of converting/upgrading potential ports for wind energy development. What research should the IPA consider?
 - ii) Could federal funding be leveraged to support port facilities to handle offshore wind development? If so, at what levels relative to needs?
- f) Should the IPA consider any research or assessments to develop innovative port upgrade solutions, such as dry docks, floating crane barges, or submersible barges to facilitate the assembly and deployment of fixed-bottom and floating substructures on the Great Lakes?
- g) What are the primary issues related to securing the rights to use the Lake Michigan lakebed for the construction of offshore wind, and how would those issues need to be addressed?
- h) What other uses of Lake Michigan would be impacted from development and operation of offshore wind projects? How could these impacts be mitigated?
 - i) What considerations must be made for preserving Lake Michigan's natural resources during development and operation of offshore wind projects?
- i) Have HVAC and HVDC interconnection studies been conducted between Great Lakes and land-based substations? What HVDC standards apply to the Great Lakes?
- j) What development of State and federal permitting needs to be done to support construction, O&M, and decommissioning of wind energy developments in the Great Lakes?
- k) To what degree should offshore wind be considered as an option to meet Illinois' renewable energy and clean energy goals? What studies, analyses, or other information should the IPA consider for understanding the potential role of offshore wind in meeting the State's decarbonization objectives, and how offshore wind compares to other strategies?

3) HVDC Transmission Line (Soo Green)

- a) How would the development of a 2,100 MW HVDC line connecting renewable energy resources in Iowa into a delivery point in the PJM market area of Illinois impact the Illinois energy industry?
 - i) With an Illinois Renewable Portfolio Standard goal of 40% by 2030 and 50% by 2040, significant amounts of new renewable resources will need to be developed to meet those goals. Would the development of this HVDC transmission line impact the level of renewable development that would otherwise occur in Illinois?
 - ii) Could the ends sought through supporting a transmission project carrying renewable energy from Iowa to Illinois instead be met through additional support of Illinois-based renewable energy generation?
 - iii) How do the projected costs of supporting an HVDC transmission line project compare to other investments that could help meet similar goals?
- b) How would a new HVDC transmission line benefit consumers in northern Illinois within PJM's territory? How would this line help with reliability, resiliency, prices, and equity for Illinois electrical consumers, and how do those benefits compare to potential costs?
- c) Should Illinois support merchant transmission projects outside of the traditional RTO/ISO transmission development process? What other nontraditional interstate transmission development processes should Illinois consider?
 - i) What are the policy implications for Illinois from development of a merchant transmission project that does not take place through the regular PJM and MISO transmission development processes?
 - (1) Is this a potentially faster and/or lower cost approach to increasing the supply of renewable energy in Illinois?
 - (2) Will renewable energy project developers in Iowa view delivering energy and RECs through this project as preferable to other offtake options?
- d) How can Illinois most effectively ensure that renewable resources developed outside of Illinois, to serve Illinois load, meet the same labor and equitable workforce standards as projects developed under the Illinois Renewable Portfolio Standard?
- e) Are there best practices or lessons learned from other states or jurisdictions about the development of underground HVDC transmission lines, including practices related to supply chain issues and project cost management?
- f) Are there acute regulatory or administrative hurdles facing this HVDC transmission line project for which the IPA should be aware?
 - i) If so, what is the process for overcoming those hurdles?
 - ii) How would any such processes impact the HVDC transmission line cost or development timeline?