

Stakeholder Feedback Request for the 2026 Long-Term Plan Chapter 3: REC Portfolio, RPS Goals, Targets, and Budgets and Program REC Pricing

June 25, 2025

The Illinois Power Agency ("Agency" or "IPA") is soliciting feedback on various topics as the Agency develops the 2026 Long-Term Renewable Resources Procurement Plan ("2026 Long-Term Plan"). Stakeholders are invited to comment on as many of the following items as they would like and may provide comments beyond the scope of these specific questions. Responses will be published on the IPA website under the "Plans Under Development" section of the Procurement Plans page. A draft of the plan will be released for public comment on August 15, 2025.

Please note that the Illinois Power Agency is exploring many ideas and points of view as it considers how to improve its programs, procurements, and operations. The inclusion of an idea or question does not necessarily imply that the IPA intends to take a specific approach in the upcoming Long-Term Plan or otherwise.

How to Reply

Please provide comments via email attachment to <u>IPA.ContactUs@Illinois.gov</u> with the subject "[Responder's Name] – Response to IPA Workshop 3 Stakeholder Questions" by July 10, 2025.

Feedback will generally be made public and will be published on the IPA website. Should a stakeholder seek to designate any portion of its feedback as confidential, that stakeholder 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 feedback 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 Illinois Power Agency ("IPA Act").³

Background

The questions provided below expand upon those provided in Stakeholder Workshop #3⁴ held June 23, 2025. The intent of these questions is to solicit specific and detailed stakeholder feedback on key topics and data to be considered as part of the renewable energy credit ("REC") portfolio, Renewable Portfolio Standard ("RPS") Budget Forecast Model, and Program REC Pricing Model updates through

¹ See: https://ipa.illinois.gov/energy-procurement/plans-under-development.html

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.

³ 20 ILCS 3855/1-120.

⁴ See: https://ipa.illinois.gov/content/dam/soi/en/web/ipa/documents/2026-ltp-chapter-3-workshop.pdf.



the Agency's 2026 Long-Term Plan. Stakeholders are requested to review each question and provide written responses via email.

Stakeholder input is critical to the RPS Budget Forecast and REC Pricing processes, providing the Agency with valuable perspectives, considerations, and recommendations. The Agency requests that stakeholder responses are detailed, providing links or reference materials where appropriate in response to the questions.

TOPIC #1: REC Portfolio and RPS Budget Forecast

The RPS Budget Forecast model is comprised of a series of model inputs from those that are factually fixed (e.g., actual utility-scale renewable project strike prices or actual Program REC Prices) or that are tied to key policies (e.g., Illinois RPS targets), and others based upon market forecasts and assumptions (e.g., forward energy prices and inflationary rates) or renewable project statistics (e.g., internal rates of return, forecast project strike prices and Program REC prices). These model inputs are highly significant, impacting the resulting RPS Budget model outputs and conclusions, and ultimately forecasting RPS Budget shortfall and potentially resulting in project and Program restrictions or temporary suspension. While each are informed by market data, project data, and best available public information as a whole, some inputs can be subjective, requiring additional context and nuance to be considered given the forward-looking nature of the analysis and the volatility inherent in the market.

It is with this focus that the Agency is seeking Stakeholder feedback – to better inform the model inputs, provide recommendations for scenarios that could be considered to adjust REC procurement targets if a budget shortfall is projected in the near-term or were to occur, and to provide more general feedback on the use and potential improvement of the RPS Budget Forecast Model itself. The results of the RPS Budget forecast model will be incorporated into Chapter 3 of the 2026 Long-Term Plan.

RPS Budget Forecast Model Input Questions

- 1. Currently, the RPS Budget Forecast Model utilizes the same forecast prices when forecasting Indexed REC projects (i.e., the same forecast "strike price" is maintained during forecasted years for all utility-scale projects regardless of project type), which are also held constant for each forecast year as well. These prices are successively replaced with the actual strike prices realized following an IPA Indexed REC procurement. This choice was implemented for simplicity given the unclear nature of future project prices especially given both market volatility and project-specific nuances that are difficult to predict and to maintain consistency and reduce unintended errors between model updates.
 - a. Should the IPA consider varying Indexed REC strike prices by resource type (solar or wind/hydro) and by year (forecast year)?
 - b. If yes, what are the most important factors to consider if the Agency were to consider varying the forecast strike prices by resource?



- c. If yes, what are the most important factors to consider if the Agency were to consider varying the forecast prices by year?
- d. The RPS Budget Model currently uses a forward price curve for calculating imputed REC prices that is based on around the clock prices. Should the IPA consider using different forward price curves that are matched to the generation profile of each resource? Forward prices are generally available as monthly on-peak and off-peak quotes. What would be good adjustment factors to use to simulate average generation-weighted prices for wind, hydro, and solar?
- e. Are there any additional factors or considerations that the Agency should take into account when forecasting future, uncontracted Indexed REC project strike prices?
- 2. In addition to Indexed REC forecasted strike prices, the REC Budget Forecast Model also utilizes a standard variable (percentage decrease) to forecast Illinois Shines (statutorily known as the Adjustable Block Program or ABP) REC prices, based upon the most recent, final Illinois Shines REC prices used by the Program. Specifically, a standard 4% annual decrease to the REC prices is utilized. This value is used to incorporate expected increased market efficiencies, declining hardware and installation costs, and improved customer awareness and thus declining acquisition costs.
 - a. Is there a better standard for the Illinois Shines REC prices forecast statistic that should be used, as opposed to the 4% annual decrease currently utilized?
 - b. If yes, what percentage should be used? And based upon what underlying data or statistics? Please provide references to support your recommendation.
 - c. Should the change vary by Program category? If yes, why?
 - d. Should there be a point (year) at which a standard value is used given the lack of data or information? (e.g., after 5 years a standard X% decline is used for the remaining years)
- 3. The RPS Budget Forecast Model utilizes different capacity factors for Illinois Shines projects depending on their category, size (MWs), and in which utility territory projects operate. There is also an annual REC degradation rate of 0.5% to simulate declining REC production (for both Illinois Shines and Indexed REC) each year. Further, the starting capacity factor for a given project type does not change over time. For example, a Community Solar project in Group A that applies in 2027 and another project that applies in 2035 both start with a 17% capacity factor.
 - a. Should the Agency consider updating capacity factors for Illinois Shines programs? If yes, how should the capacity factor changes occur (e.g., by category, by year, etc.)? Please provide support for any recommendation provided.
 - b. Should the 0.5% REC production degradation rate be updated or adjusted? If yes, to what value(s)? Please provide support for any recommendation provided.



- 4. On May 22nd the Agency held a workshop to provide stakeholders with an increased understanding of the updated RPS Budget Forecast Model. As a follow-up to that workshop, the Agency is keen to gather stakeholder feedback.⁵
 - a. Do stakeholders have any additional feedback or recommendations to improve the model's form or function? Of note, this could include updates stakeholders might like to see or configurations or scenario capabilities that would benefit from being added to either the model or the narrative discussion contained in Chapter 3 of the 2026 Long-Term Plan.

RPS Budget Forecast Model "Big Picture" Questions

Public Act 103-1066, enacted in February 2025, modified Section 1-75(c)(1)(C)(i) of the IPA Act, 6 which establishes percentage-based targets for the IPA's procurements of annually delivered RECs to meet Illinois RPS goals. Prior to the enactment of P.A. 103-1066, Section 1-75(c)(1)(C)(i) provided that at least 45% of the RECs procured should be from new wind projects and modernized or retooled hydropower projects and 55% of the RECs procured should be from new photovoltaic projects. As modified by P.A. 103-1066, Section 1-75(c)(1)(C)(i) authorizes the Agency to propose, through the Long-Term Plan, adjustments to those percentage-based targets based on developer interest, market conditions, budget considerations, resource adequacy needs, or other factors.

Further, P.A. 103-1066 modified Section 1-75(c)(1)(E) of the IPA Act⁷ to ensure full and interrupted payment to sellers under existing REC contracts and created a new Section 1-75(c)(1)(E-5)⁸ to lay out a process for the IPA to follow in the case of a budget shortfall. If the IPA determines in a delivery year that expenditures would exceed collections and previously collected and held funds, the IPA will notify the Illinois Commerce Commission and suspend or reduce programs and procurements. That suspension or reduction would not occur until the end of the program year (for Illinois Shines and Illinois Solar for All) that the determination is made, and the IPA would conduct an annual review until the shortfall is resolved. This process is designed to allow for ongoing program and procurement activity and to provide significant notice to stakeholders before suspension or reductions are implemented. For more information on the modeling of when a budget shortfall might occur, please refer to the presentation from the June 23, 2025 workshop.⁹

1. While no budget shortfall is currently forecasted for the 2026 Long-Term Plan period (the 2026-2027 and 2027-2028 program years), the Agency may propose changes to the wind and solar split to seek additional RECs from highly performing renewable energy resource types (e.g., those that are oversubscribed under Illinois Shines, have higher cost to REC production

⁵ See: https://ipa.illinois.gov/renewable-resources/rps-budget-forecasts.html for more information on the workshop including the presentation and a recording.

^{6 20} ILCS 3855/1-75(c)(1)(C)(i).

⁷ 20 ILCS 3855/1-75(c)(1)(E).

^{8 20} ILCS 3855/1-75(c)(1)(E-5).

⁹ See: https://ipa.illinois.gov/content/dam/soi/en/web/ipa/documents/2026-ltp-chapter-3-workshop.pdf.



ratios, or are simply bid in greater volumes). In order to ramp up to achieve the 45%:55% wind/hydro to solar target over time, for Indexed RECs, the share of capacity procured between utility-scale solar and utility-scale wind projects is projected to be weighted toward utility-scale wind, at 60-70% through 2029, then projected to adjust to 54% wind from 2030 onward. (Note: the solar target is split between utility-scale projects procured through the Indexed REC procurements and those secured through the Illinois Shines – thus, broadly, the current aggregate wind to solar split remains at 45:55 per the original statutory requirements).

- a. Should the Agency consider changing the 45%:55% wind/hydro-to-solar split? If yes, to what percentages and why?
 - i. Should there be a separate target for hydropower projects as opposed to currently being included in a combined target with wind projects? If yes, why?
- b. Should the split be focused on all projects (Indexed REC and Illinois Shines) or only certain types of projects, and why?
- c. Should a change to the target percentages be consistent for all program years, or instead change based upon the results of an Indexed REC procurement and/or participation (over/under-subscription) in an Illinois Shines category? Why?
- d. Should any consideration on the cost-to-REC production ratio be considered? (i.e., emphasis in procuring more projects that produce more RECs at the least cost, thus acquiring more RECs under the RPS Budget) If yes, what weighting should be considered?
- 2. Continuing from the previous question, the split between solar projects procured via the Indexed REC procurements versus those secured through the Illinois Shines is relatively stable throughout the forecast period, as defined by the statute.
 - a. Should the Agency consider changing the solar carve-outs between utility-scale and Illinois Shines?
 - b. If yes, what should they be changed to and based upon what statistics and drivers? Please provide support for your recommendation(s).
- 3. Currently the Agency's RPS Budget Forecast projects a budget shortfall during the 2028-2029 program year. However, if the forecast changes due to market and/or procurement changes and a shortfall were to be forecasted earlier (e.g., during the 2026-2027 or 2027-2028 program years), the Agency could consider implementing a process to adjust its procurements to extend the budget and maximize the number of projects contracted to provide RECs and support progress toward achieving the Illinois RPS and clean energy targets.
 - a. In the event of an imminent forecast RPS budget shortfall, should the Agency consider adjusting project targets to extend the RPS budget and delay the shortfall?
 - b. If yes, which projects should be reduced or suspended (e.g., utility-scale wind, utility-scale solar, Illinois Shines or Illinois Solar for All ("ILSFA") projects, etc.)? How should the Agency consider the reduction or suspension of utility-scale renewable projects versus those of the programs?



- 4. Under a constrained RPS budget, are stakeholders open to a project/program triage mechanism to optimize the remainder of the budget and maximize the potential contracting of RECs?
 - a. Should the Agency consider changing the Indexed REC procurement allocation between solar and wind (currently 55/45 respectively)?
 - b. Should the Agency consider changing the solar carve outs between utility-scale and Illinois Shines?

TOPIC #2: REC Prices and the REC Pricing Model

REC Pricing Model Input Questions

The REC Pricing Model is comprised of a series of model inputs focused on forecasting the likely costs and revenues for different Illinois Shines and Illinois Solar For All (ILSFA) project categories, and as a result, forecasting the REC Prices required to bridge the gap for developers and customers to support distributed generation solar and community solar projects. The model is built off of the CREST model developed by the National Renewable Energy Laboratory. These REC Pricing Model inputs can have significant impacts to the resulting REC Prices used in the Illinois Shines and ILSFA Program. Examples of key inputs include forecasted project costs and rates of return, asset hardware costs, net energy metering and other incentives, etc. The Agency assesses various data streams (public data sets, reports, etc.) to inform the establishment of the value. Further the Agency has actively sought developer and other key stakeholder input on the REC prices, especially requesting detailed and specific feedback on model inputs. In 2025 this occurred through an Approved Vendor questionnaire (issued in January) and the issuance of draft REC Prices for the 2025/2026 Program Year in March. With the update of the 2026 Long-Term Plan, the Agency is again seeking input from stakeholders to help inform the REC Pricing Model's update.

- Various incentives are available to developers and/or customers beyond those provided through the Agency's Illinois Shines and ILSFA Programs. However, the incorporation of these incentives and the resulting impact on costs of solar project development are often less transparent.
 - a. Under the Illinois Shines, participant savings are assumed to be 20%, and under ILSFA, 100% for small residential and 50% for other subprograms of net metering value. In other words, 80% of the net metering value of an Illinois Shines project is used as revenue in the REC Pricing Model. Do these savings rates align with what stakeholders are seeing with their projects? Is there variability within each Program's categories and if so, to what extent?
 - b. To calculate the net metering revenue for a reference system, the model currently assumes that for DG projects on-site consumption is at a rate of 60% (which receives the full-retail rate) and 40% is exported energy (which receives only the supply rate). Is this 60/40 split what developers are observing with customer systems? If this split



is changing, how has it changed over time and what are the underlying causes of the change? Do project size or orientation result in different consumption vs. export rates?

- 2. Do project interconnection costs vary by program (Illinois Shines vs. ILSFA), program category or project size, or some other factor? Please provide details on the factors that are influencing interconnection costs, including the cost(s) or a range of costs in relation to those factors.
- 3. Do inverter costs vary by project type or size? Please provide details and/or references to support your answer.
- 4. Do project internal rates of return ("IRR") vary by Program, category, and/or other variables? Please explain and provide details, including either specific IRRs by variable (program, category, etc.) and/or a range and the factors leading to the differences.
- 5. What are common or otherwise standard project construction lengths (i.e. the time it takes from contract execution, through system build, to operation)?
 - a. Have these construction tenors been shortening or extending over time?
 - b. If extending what is causing the extension and to what degree?
- 6. Do any of the following project factors change by program and/or category? Please explain and provide details where possible.
 - a. Project management costs
 - b. Debt ratios
 - c. Subscriber savings
 - d. Property taxes
- 7. While the REC Pricing Model utilizes a large number of variables and inputs to best model project costs and revenues, the Agency also recognizes there may be additional variable not currently incorporated that may aid in improving the accuracy of the model results. Are there additional inputs the Agency should consider incorporating?
 - a. If yes, what inputs? Are these inputs used for all projects, or specific to project types/size?
 - b. What sources can the Agency use to qualify and quantify these inputs?
- 8. The Agency is currently considering if the current community solar program adder is appropriate. Do stakeholders have a recommendation on how best to calculate the community solar program adder which is intended to account for the cost of acquiring and maintaining small subscribers? Do stakeholders have data or cost estimates from another jurisdiction or similar process? If yes, please explain and provide support if recommending a change to the adder.
- 9. The REC Pricing Model currently calculates REC prices for Public Schools based on the CREST results for DG projects, adjusted for the 20-year payment term for public schools rather than calculating Public Schools REC prices via different inputs into the CREST model itself. The IPA is considering aligning Public School REC price calculations with the other programs.
 - a. Should REC prices for Public Schools should be calculated separately from DG projects?



- b. Do stakeholders have feedback or suggestions as to how calculations should be integrated with the other program calculations?
- c. Are there costs or considerations that are unique to Public Schools projects that should be considered if calculating Public School projects separately? Please provide details.
- 10. The REC Pricing Model uses the National Renewable Energy Laboratory's ("NREL") Annual Technology Baseline ("ATB") to inform its Balance of Plant ("BoP") assumptions. Is there an alternative, more granular or localized data source that should be used to better reflect actual BoP costs?
- 11. Currently, the NREL ATB does not differentiate capacity factors between rooftop and ground-mounted community solar. Do capacity factors vary between rooftop and ground-mounted community solar projects? Please provide data (actual project data and/or reports) to support any proposed difference.
- 12. Are there other jurisdictions that have a preferred methodology to create REC Prices (or a similar product)? Please provide details or including references to that program and what makes it preferred to the process implemented by the Agency.
- 13. Are there any additional REC Pricing Model input and/or methodological changes that the Agency should consider? Please provide details including references to supporting data or documentation where appropriate.

REC Pricing "Big Picture" Questions

In addition to the preceding questions focused on REC Pricing Model inputs, the Agency is contemplating broader REC Pricing impact and update questions, with the intent to understand if there are broader improvements to the model's function and to support market-reflective REC Prices.

- 1. The Agency has identified large swings in participation for certain Illinois Shines and ILSFA project categories. For example, Illinois Shines DG projects often go to waitlists, while the Public Schools category has been underperforming. Similarly, the ILSFA non-profit/public facilities subprogram typically meets its target while the residential 5+ unit category projects are underperforming (and the 1–4-unit subprogram had underperformed in earlier program years).
 - a. What are the key factors related to REC prices that are contributing to underparticipation in Illinois Shines and/or ILSFA categories/subprograms? What is the weight that REC Prices for a given category or subprogram affects participation versus other factors beyond REC prices? Please provide details and examples.
 - b. What key factors related to REC prices are contributing to the over-participation (waitlisted projects) in Illinois Shines and/or ILSFA? What is the weight of REC Prices as the factor that may be negatively impacting category participation versus other factors beyond REC prices? Please provide details and examples.



- 2. Do stakeholders have any additional ideas or recommendations not discussed in this section on the REC Pricing Model which could result in an improvement in the model and its resulting REC Prices?
- 3. Are there other methodologies for setting REC prices that the Agency should consider instead of the cost-based modeling approach currently being used? If so, what would this methodology look like and what would the process of setting REC prices look like under this methodology?