To: Illinois Power Agency

From: Members of the Renewables Subcommittee, IL Clean Jobs Coalition

Re: Illinois Power Agency Requests Stakeholder Feedback for 2024 Long-Term Plan

Development

Date: June 16, 2023

#### Introduction

The Renewables Subcommittee was convened to help implement CEJA as envisioned by the Illinois Clean Jobs Coalition (ICJC). Our focus includes renewable programs and procurements, with a particular interest in ensuring the IPA helps facilitate the attainment of the state's renewable portfolio standards while also meeting its equity goals. The ICJC is made up of hundreds of environmental advocacy organizations, businesses, community leaders, consumer advocates, environmental justice groups, and faith-based and student organizations working together to improve public health and the environment, protect consumers, and create equitable, clean jobs across the state.

The below-signed Joint Commenters from the Renewables Subcommittee thank the IPA for an opportunity to provide input on the Long-Term Renewable Resources Procurement Plan (LTRRPP).

These comments are intended to address the RPS questions raised by the IPA and questions in the other requests for comment that we believe relate back to RECs and competitive procurements.

Signatories include:
Central Road Energy LLC
Faith in Place
Illinois Environmental Council
Sierra Club Illinois
Vote Solar
Union of Concerned Scientists

## **Chapter 3: REC Portfolio/RPS Budget and Goals**

## TOPIC 1: RPS Information Presentation

Background - Chapter 3 of the 2022 Long-Term Plan contains a detailed description of the Renewable Portfolio Standard (RPS) goals, targets, budget, and estimates of future expenditures through 2031. In April 2023, the Agency released updates of tables and figures from Chapter 3.1 That update extended the charts and tables from Chapter 3 out to the year 2042.

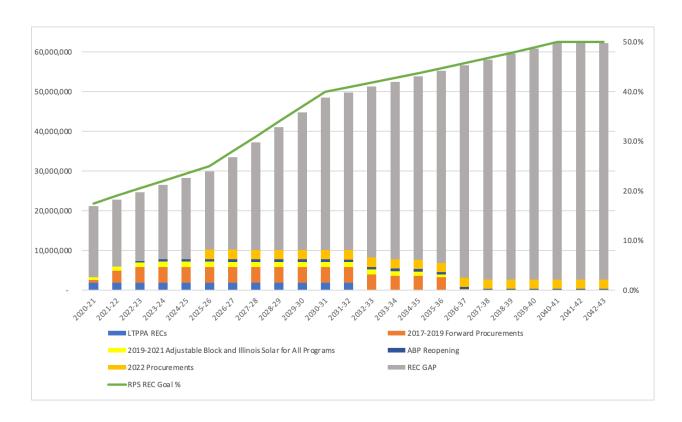
#### Questions

1. How can the Agency improve the presentation of information addressed in Chapter 3? This can be through refinements or clarifications to the narration, additional analyses, added charts, or visuals not currently included in the Chapter.

We would like to see more comprehensive information, additional granularity, and more frequent updates to the project mapping currently offered by the program administrator. In particular, we would like to see one map identifying the size and location of contracted and operating utility-scale wind and solar, self-direct program projects, Adjustable Block Program projects, and Illinois Solar for All projects by census tract with further breakdown by project type (e.g., residential, commercial, community solar, utility). Each of these would be an individual layer that could be toggled on and off. This map should be updated at least quarterly.

2. Can the Agency better elaborate or explain on the information or analysis presented in Chapter 3 that could be added to aid stakeholders in understanding current and future progress towards RPS goals and targets?

We would like to see a graphic that summarizes the progress the program is making toward the Illinois' Renewable Portfolio Standard (RPS) goals. The graphic that was included as "Figure 3-2: Statewide Annual RPS Goal, REC Portfolio and REC Gap" in the LTRRPP and then updated in the April budget report (see below) should be prominently displayed as a frequently updated graphic on the IPA website. It would also be helpful to include a similar graph that shows progress towards the state's carbon-free goals. This could include the Zero Emission Credits (ZECs) that the IPA procures, currently contracted Renewable Energy Credits (RECs), and anticipated future RECs based on annual procurement projections. The denominator (e.g. total state load) would remain the same for both graphs but each would track progress towards different goals in the Climate and Equitable Jobs Act (CEJA).



# **TOPIC 2: RPS Planning Assumptions**

Background - The April 2023 budget update included a sensitivity analysis that looked at ten scenarios where the forward energy price used for calculating indexed REC prices and future strike prices were changed to demonstrate the impact on those variables on future RPS budget availability. The analysis demonstrated the potential for future budget shortfalls. The Agency is further updating its RPS analysis with refreshed data and estimates, including an updated forward price curve, as well as clarifications of categories of projects and expenditures.

## Questions

- 1. Should the Agency use different assumptions for changes over time to REC prices for both indexed RECs and the Adjustable Block Program, as well as for the timelines for project energization rates?
- 2. Should the Agency include a scenario analysis in Chapter 3 comparable to the April 2023 budget update? If so, would a high-low method be sufficient or would a regression analysis be preferred?

The Future Energy Jobs Act (FEJA) (Public Act 99-0906) established and CEJA enhanced ambitious goals for clean energy and decarbonization of the power sector in Illinois. Enhanced long-term budgeting and forecasting are needed not just for IPA decision-making, but also because policy-makers and stakeholders must clearly

understand the trajectory we are on for both achieving (or not) the goals of CEJA, both from a funding/budget perspective and achieving our renewable portfolio standard goals.

One of the important findings by the IPA from the April 2023 budget update is that there is a significant risk to the program:

However, a conclusion from this sensitivity analysis is that to ensure long-term certainty of availability of RPS funds to support the level of renewable energy development needed to meet Illinois' RPS goals, statutory changes to the Illinois RPS may be needed. (Renewable Portfolio Standard Budget Update, April 14, 2023, pg. 4. (Link))

The scenario analysis from the April 2023 update provides important insight for both the IPA's use in planning and for policy-makers. The budget update helps scope the problems that we are facing and demonstrates the range of outcomes that policy-makers must take into consideration as we continue to implement CEJA.

The CJC commends the IPA for the improvements introduced in the April 2023 Budget Update and for seeking additional input on ways to improve the usefulness of the analysis in the upcoming LTRRPP Update. Specifically, Question 3.2 (Question 2 of Topic 3) requests feedback on the high-low method and regression analysis.

The high-low method is a simple technique used to determine the fixed and variable components of a company's costs. It's often employed in cost accounting, but it can also be used to create budget estimates. We understand this method to involve identifying the highest and lowest levels of activity, calculating the variable cost per unit by comparing the total costs at these levels, and then determining the fixed costs by subtracting the total variable costs from the total costs. While this method's simplicity makes it appealing, its accuracy can be affected if the highest and lowest activity levels aren't representative of typical conditions. Given the volatility of energy markets, using this method may not provide the most likely or probable outcomes.

There are important insights that can be gleaned from regression. Regression analysis would allow for the simultaneous consideration of multiple variables and their interactions, which could provide a more accurate and detailed picture of potential future scenarios. Some of the benefits of regression analysis would be:

- Regression can help to identify the relationships between variables. This can be
  helpful in understanding how changes in one variable can affect another variable.
  For example, regression analysis can be used to identify how changes in the
  price of RECs can affect clean energy adoption, both behind the meter and by
  energy suppliers.
- Regression can help to quantify the impact of changes in variables. This can be helpful in making decisions about how to allocate resources. For example,

- regression analysis can be used to understand tradeoffs between different types of resources.
- Regression can help to identify the most important variables. This can be helpful
  in focusing attention on the most important factors that need to be considered
  when making decisions. For example, regression analysis can be used to identify
  the factors that have the greatest impact on the cost of renewable energy.

In addition, the CJC suggests some discussion of the sensitivities of key variables to driving budget and development outcomes. For example, key variables under the control of the state include REC prices, procurement targets, and REC price structures; while examples of key exogenous variables include energy prices, renewables costs, renewables development timelines, grid constraints, and inflation. Sensitivity analysis could be used to explore many of the same types of relationships and interactions:

- Sensitivity analysis can be used to identify the variables that have the greatest impact on the outcome of a scenario. This can be done by changing the values of the variables one at a time and observing how the outcome changes. For example, the IPA could change the price of RECs, the timeline for project energization, and the availability of other government incentives to see how these changes affect the state's ability to meet its renewable energy goals.
- Sensitivity analysis can be used to identify the combinations of variables that are
  most likely to lead to different outcomes. This can be done by creating a grid of
  possible values for the variables and then calculating the outcome for each
  combination of values. For example, the IPA could create a grid of possible
  values for the price of RECs, the timeline for project energization, and the
  availability of government incentives and then calculate the state's ability to meet
  its renewable energy goals for each combination of values.

It is important to note that sensitivity analysis in the high-low method is not a substitute for regression analysis. Regression analysis can provide more accurate estimates of the impact of changes in variables. However, sensitivity analysis can be a useful tool for exploring the potential impacts of different scenarios.