RPS Budget Forecast Model Workshop

May 22, 2025

Agenda

- **Housekeeping**

- **Background on the RPS Budget Model**

- **Why We're Here**

- **Goals of RPS Budget Model Update**

- **Live Demonstration**

- **Questions & Answers**

Housekeeping

- **A recording of this workshop will be posted on the IPA's website**

- **Disclaimers**
  - **Changes to RPS Budget Model inputs shown today are for _example purposes only_, providing stakeholders with an improved understanding of how results flow within the model.**
  - **Example scenarios and results are _purely illustrative_ and do not indicate a preference or conclusion by the Agency**

- **Resources**
  - **May 2025 RPS Budget Model:**
    - https://ipa.illinois.gov/content/dam/soi/en/web/ipa/documents/rpsbudgetmodel51225.xlsx
  - **May 2025 RPS Budget Forecast**
    - https://ipa.illinois.gov/content/dam/soi/en/web/ipa/documents/rpsbudgetupdate51225.pdf
  - **Prior RPS Budget Forecasts and Models**
    - https://ipa.illinois.gov/renewable-resources/rps-budget-forecasts.html

Why We're Here

- Today's workshop is to explore how the RPS Budget Model spreadsheet works, providing stakeholders with an improved understanding of the tool and how it can be used

- Stakeholders should walk away with and understanding of:
  - The models organization
  - Where various inputs are located
  - How data flows throughout the model
  - How scenarios can be run and built upon

- We are _not here to discuss_ any policy implications or alterations to the model itself. This includes discussion on input reasonableness, feedback on additional inputs, changes to methodology, etc.

Background on the RPS Budget Model

- **Before the Future Energy Jobs Act (2107), RPS budgeting was an annual exercise contained in the Agency's Annual Electricity Procurement Plan**
  - **RPS Budget calculated each year based on eligible retail load only (and thus subject to customer switching risk)**
  - **RPS compliance was through annual procurements of spot market RECs**
- **FEJA Budget Modeling**
  - **2018 and 2020 Long-Term Plans contained basic summary tables of RPS goals and funding**
  - **RPS budget structure included planned refund to customers of unspent funds after four years, creating a "funding cliff" in 2021**
    - *Note: IPA released budget forecast updates in December, 2020 and June, 2021 highlighting the pressure on budget availability caused by COVID-related project delays*

Background on the RPS Budget Model, cont.

- **CEJA (2021)**
  - **2022 Long-Term Plan**
    - First plan to include RPS Budget Model spreadsheet as an appendix

  - **2024 Long-Term Plan**
    - Added modeling of Indexed REC procurements and forward price curves
    - Updates to RPS Budget Forecast released in October, 2024, February, 2025, May, 2025
      - Updated inputs
      - Formula corrections
      - 2024 Plan versus future Plans toggle (October, 2024)
      - Multiple Forward Price Curves (February, 2025)
      - Overhaul of model format (May, 2025)

  - **2026 Long-Term Plan**
    - Draft scheduled for release on August 15, 2025
    - Will include input updates and further refinements

Goals of May 2025 RPS Budget Model Update

1. Perform regular cycle of updating inputs

2. Standardize data formatting

3. Develop a model that is easier for Stakeholders to understand and use

4. Incorporate the ability to conduct scenario modeling

Functionality Updates - New RPS Budget Model

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Structural Re-organization

The new model follows an "inputs-calculations-outputs" structure

Inputs → Calculation → Outputs
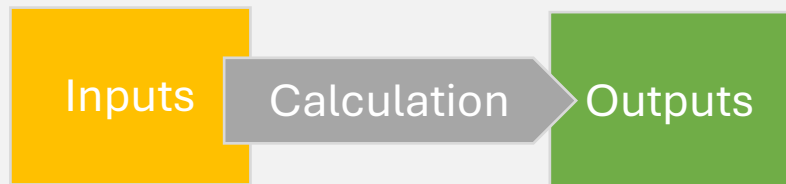
User Customization

Can accommodate various dynamically adjustable variables and multiple scenarios

Examples:
- Annual projections for Illinois Shines and Indexed REC procurements
- REC pricing scenarios
- Forward energy prices
- Strike prices

Consistent Color Coding

All cells in the new model follow consistent color coding

Input
Dropdown Input
Calculation
Calculation with Different Format
Sum of entities' values to state
Break down from state to entity
Source and other explanatory text

Methodology Update & Error Correction

Aligns REC procurement timeline and corrects calculation inconsistencies

The New RPS Budget Model – Four Main Sections

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SECTIONS

DESCRIPTIONS

Cover	Description of cell color coding and general inputs
Outputs	Summary tables and graphs of key outputs and dashboard for illustrative scenarios
Indexed REC	Calculations of contracted and projected indexed REC deliveries and spending
ABP	Calculations of contracted and projected ABP/Illinois Shines REC deliveries and spending

New RPS Budget Model Overview – Cover

SECTIONS

TABS

DESCRIPTIONS

Cover

General Inputs

Core inputs assumptions flowing through the model

Outputs

Indexed REC

ABP

New RPS Budget Model Overview – Outputs Section

SECTIONS

Cover

Outputs

Indexed REC

ABP

TABS

Scenario Dashboard

Chapter 3 Tables and Graphs

REC Deliveries by Group

RPS Balance

REC Deliveries

REC Spending

DESCRIPTIONS

Tab for testing different procurement volumes, forward price and rate collection cases

Underlying data tables and graphs used for Chapter 3 of the Report

Data and graph depicting Annual REC Deliveries by Long-Term Plan

Summary tables of REC deliveries, REC spending, and their respective balances, surpluses, or shortfalls

Summary tables of REC deliveries by entity, program, and procurement status

Summary tables of REC spending by entity, program, and procurement status

New RPS Budget Model Overview – Indexed REC Section

SECTIONS

Cover

Outputs

Indexed REC

ABP

TABS

Indexed REC Deliveries

Indexed REC Spend

Indexed REC Prices

Indexed REC Strike Price

Inputs_Indexed REC

DESCRIPTIONS

Summary tables of Indexed REC deliveries by resource and procurement status

Summary tables of Indexed REC spending by resource and procurement status

Indexed REC prices by resource

Indexed REC strike prices by resource

Inputs assumptions specific to Indexed REC tabs

New RPS Budget Model Overview – ABP Section

SECTIONS

Cover

Outputs

Indexed REC

ABP

TABS

| ABP REC Deliveries |
| ABP REC Spend |
| ... |
| ABP REC Prices |
| Inputs_ByPrg |
| Inputs_ByYear |
| ABP Under Contract |

DESCRIPTIONS

| Summary tables of ABP REC deliveries by program and entity |
| Summary tables of ABP REC spending by program and entity |
| *Backend calculations* |
| ABP REC prices by program, entity, and size (kW) group |
| ABP inputs assumptions on percent of program block capacity share and capacity factors by program and entity |
| Inputs assumptions specific to ABP tabs |
| Tables of currently under-contract ABP REC deliveries and spending |

Live Model Demo

1. **Walk through the main outputs**

2. **Tutorial on how to change scenarios**

3. **Tutorial on how to change various inputs**
   - **Procurement activities and volumes**
   - **Forward price curves**
   - **RPS rate**
   - **Strike prices and ABP REC prices**

4. **Any other requests?**