

State of Illinois Integrated Resource Plan (IRP) + Resource Adequacy Mitigation Plan

Stakeholder Workshop: Customer Cost
Impacts Methodology

May 26, 2026



Energy+Environmental Economics

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Meeting Participation Guidelines

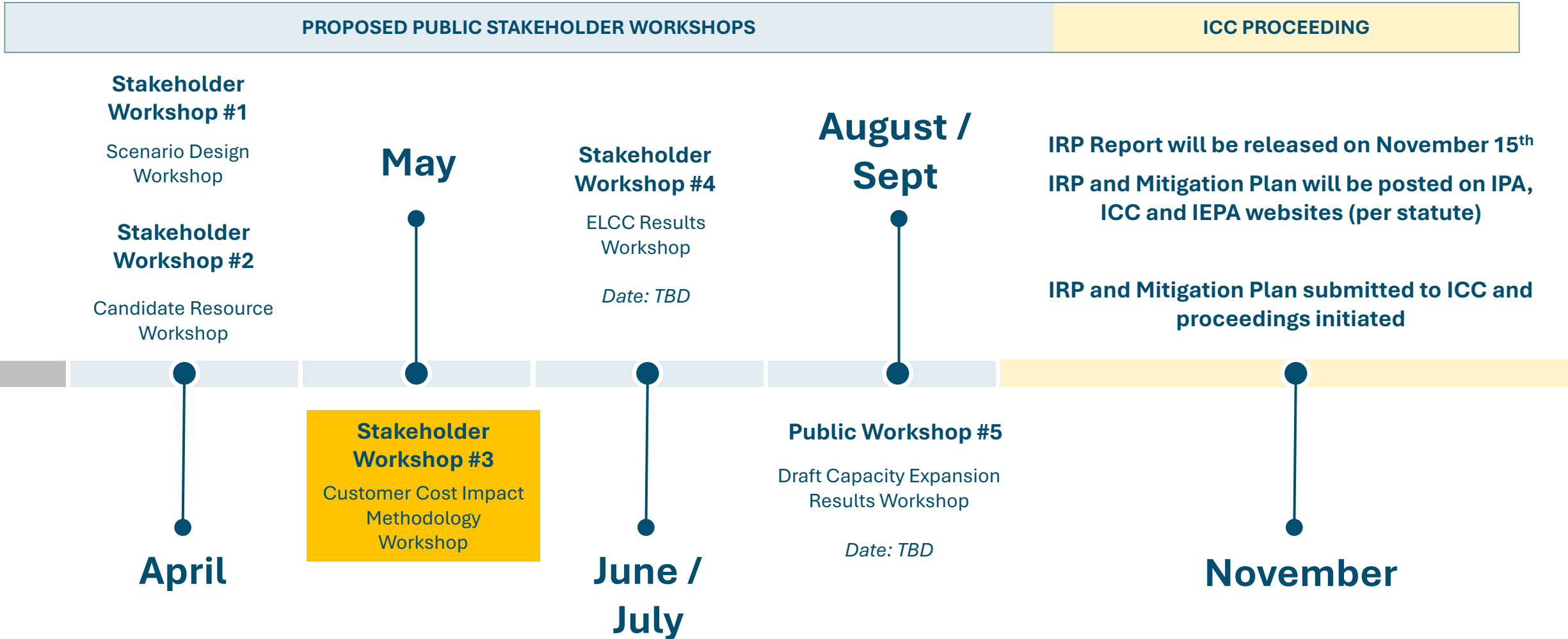
- + Please introduce yourself in the chat and include your name and organization
- + Actively participate
 - Time for questions has been set aside at the end of the presentation. If you have a question or comment about a particular slide, please make note of that slide number in your question
 - Please use the Raise Hand feature to ask a question, provide feedback and comments – unmute when a moderator calls on you and please share your name and organization when you speak
 - You can also use the Chat feature which will be moderated
- + Be respectful of other people’s perspectives
- + Stay concise to allow time for everyone to participate
- + Post-Meeting Feedback
 - Workshop Comment Form: link will be provided at the end
- + This meeting is being recorded. Recording will be posted on the [ICC Integrated Resource Plan Website](#)



Agenda

Topic	Time
Agenda and Norms	10 min
Customer Cost Impacts Methodology	30 min
Stakeholder Q&A and Discussion	50 min

2026 Proposed Stakeholder Meetings for IRP and Mitigation Plan









Customer Cost Impacts Methodology



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CRGA Requires the IRP to Address Six Key Areas

Illinois law directs the Illinois Commerce Commission, in consultation with other agencies, to develop an IRP that evaluates how the State can maintain a reliable, affordable, and clean electric system over time.

Load and System Outlook 	Resource Adequacy and Reliability 	Evaluation of Resource Options 	Scenario Analysis 	Cost and Consumer Impacts 	Environmental and Policy Outcomes 
<ul style="list-style-type: none"> Forecast future electricity demand and peak load Consider impacts of electrification, economic growth, and large new loads Identify expected resource retirements and additions 	<ul style="list-style-type: none"> Assess whether sufficient resources are available to maintain reliability Evaluate potential capacity shortfalls and system constraints relative to the system changes over time 	<ul style="list-style-type: none"> Analyze potential roles for clean energy resources, storage, demand response, and transmission Assess how different resources could meet future system needs 	<ul style="list-style-type: none"> Evaluate multiple scenarios reflecting different assumptions about demand, technology development, and resource availability 	<ul style="list-style-type: none"> Assess total system costs and customer cost impacts Use cost assessment as part of evaluating tradeoffs between cost, reliability, and environmental outcomes <p>Today's Focus</p>	<ul style="list-style-type: none"> Evaluate emissions impacts and environmental outcomes Identify strategies that support Illinois clean energy and reliability goals

IRP Customer Cost Impacts Scope

- + The IRP must assess total system costs and customer cost impacts
- + Key questions that will be explored in the customer cost impacts analysis:
 - What are the total system costs for each IRP scenario?
 - What are the largest drivers of total system costs? (i.e., transmission, distribution, supply, customer programs)
 - How do total system costs compare across IRP scenarios?
 - What are the allocated total system costs by customer class (residential, commercial, industrial)?
 - How might the IRP scenarios affect electricity rates for these customer classes?
 - What are the largest drivers of changes in electricity rates?
- + Future electric system costs and **rates are indicative** projections intended to **support an understanding of cost drivers and tradeoffs** among modeled scenarios to inform decision-making.
- + These projections are not a forecast of what electric system costs and rates will be in the future.

Overview of IRP System Cost and Customer Cost Impacts Analysis

E3 proposes to conduct a two-part analysis to consider the **system costs** and **customer cost impacts** of different IRP scenarios.

System Cost Analysis (all scenarios)

- Calculate the **net present value of each scenario's modeled portfolio**
- Includes costs of modeled resource portfolios as well as incremental transmission built to enable delivery
- Does not include all utility costs or translate directly to the pricing in rates that customers ultimately pay
(see *customer cost analysis*)

Customer Cost Analysis (subset of scenarios)

- **Projection of utility revenue requirements** to meet system investment needs and to calculate utility rate and customer cost impacts
- Translates revenue requirement to **representative customer class archetypes**
- Supply costs reflect market costs that are included in customer bills (energy, capacity, REC markets)
- **Targeted analysis of a subset of IRP scenarios**

Approach to System Costs by Portfolio / Scenario

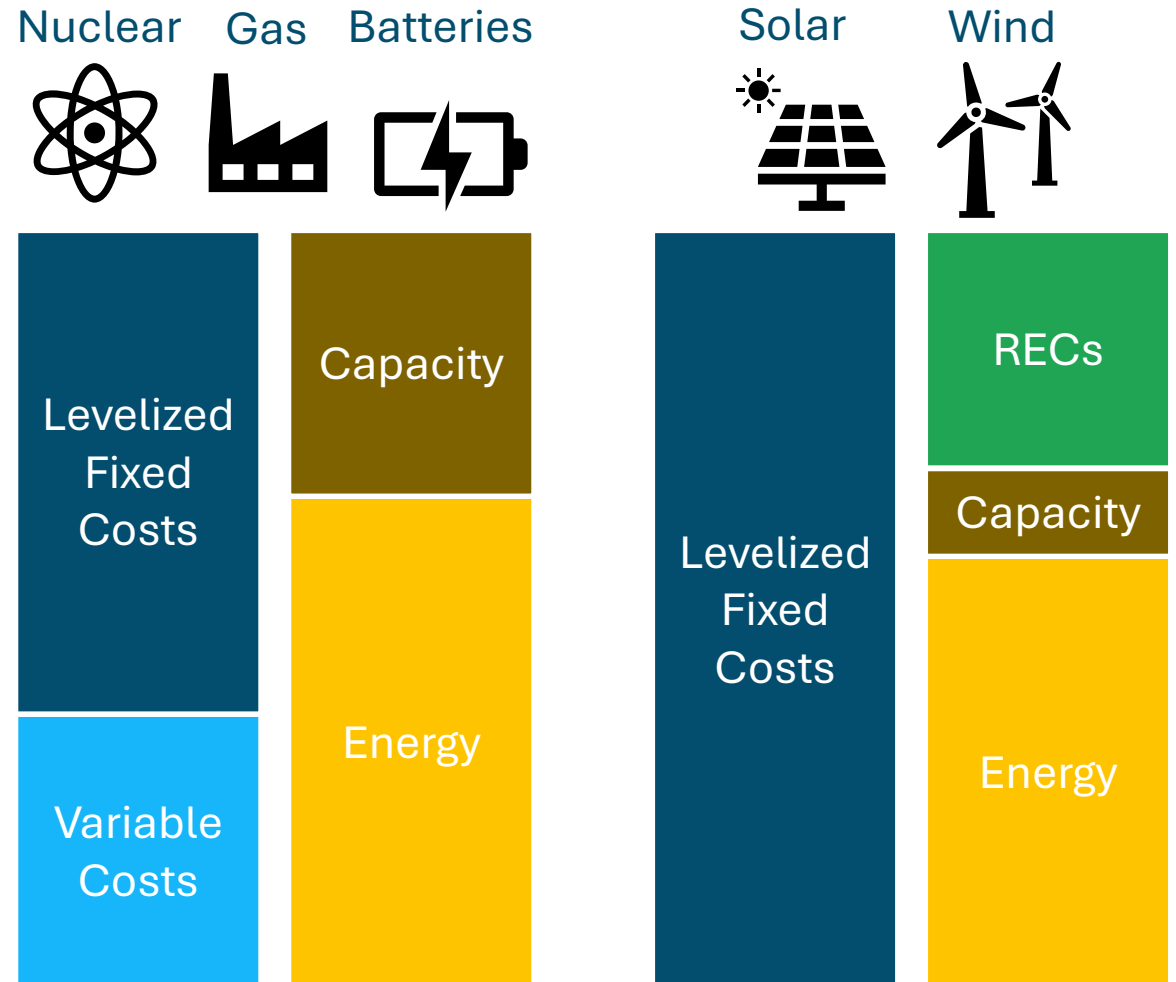
- + Electricity consumers in Illinois (as in any wholesale market) pay market prices for supply:**
 - Energy: set by locational marginal prices within the PJM and MISO markets
 - Capacity: set by annual prices through the PJM and MISO reliability auctions
 - Renewable and zero emission attributes (e.g., RECs and any other costs): set in contract awards from bilateral or competitive procurements
- + Each resource in each portfolio will have fixed and variable costs modeled. The model will select resources to meet all constraints (requirements) in each scenario at the lowest total cost over the forecast horizon.**
 - Fixed costs include capital costs, financing, taxes, interconnection, and fixed O&M.
 - Variable costs will be calculated through dispatch simulations within the PLEXOS model, which will also produce zonal energy prices for each scenario.

Approach to System Costs by Portfolio / Scenario

Different resources have different cost profiles which map to the values they provide to the grid.

- + We will calculate the system costs as the Net Present Value (NPV) of the sum of fixed and variable costs for each resource serving Illinois customers from 2027-2047 in each scenario.
- + We will also break down each portfolio into energy, capacity, RECs, and any other carrying costs of policy-driven resources in a scenario to estimate costs and average rates by customer class.

Illustrations of \$ / year Breakdown by Technology



From System Costs to Customer Costs and Rates: Electric Revenue Requirement Modeling

- + The electric revenue requirement model calculates the total cost to provide electric service. This cost must be recovered through customer rates.
- + The modeling process includes the following steps:
 1. Determine starting values for the current electric cost of service (i.e., total utility revenue requirement including supply costs, transmission & distribution delivery costs, and program fees)
 2. Project the electric cost of service to future years, considering changes to generation-related costs (energy, capacity and REC markets) and incremental delivery costs (transmission and distribution system investments)*
 3. Allocate the revenue requirement to customer classes (residential, commercial, industrial) reflecting existing allocations and changes to class usage profiles over time (e.g., energy and peak load metrics)
 4. Calculate average rates for each customer class (residential, commercial, industrial) by dividing the total class revenue requirement by total class sales



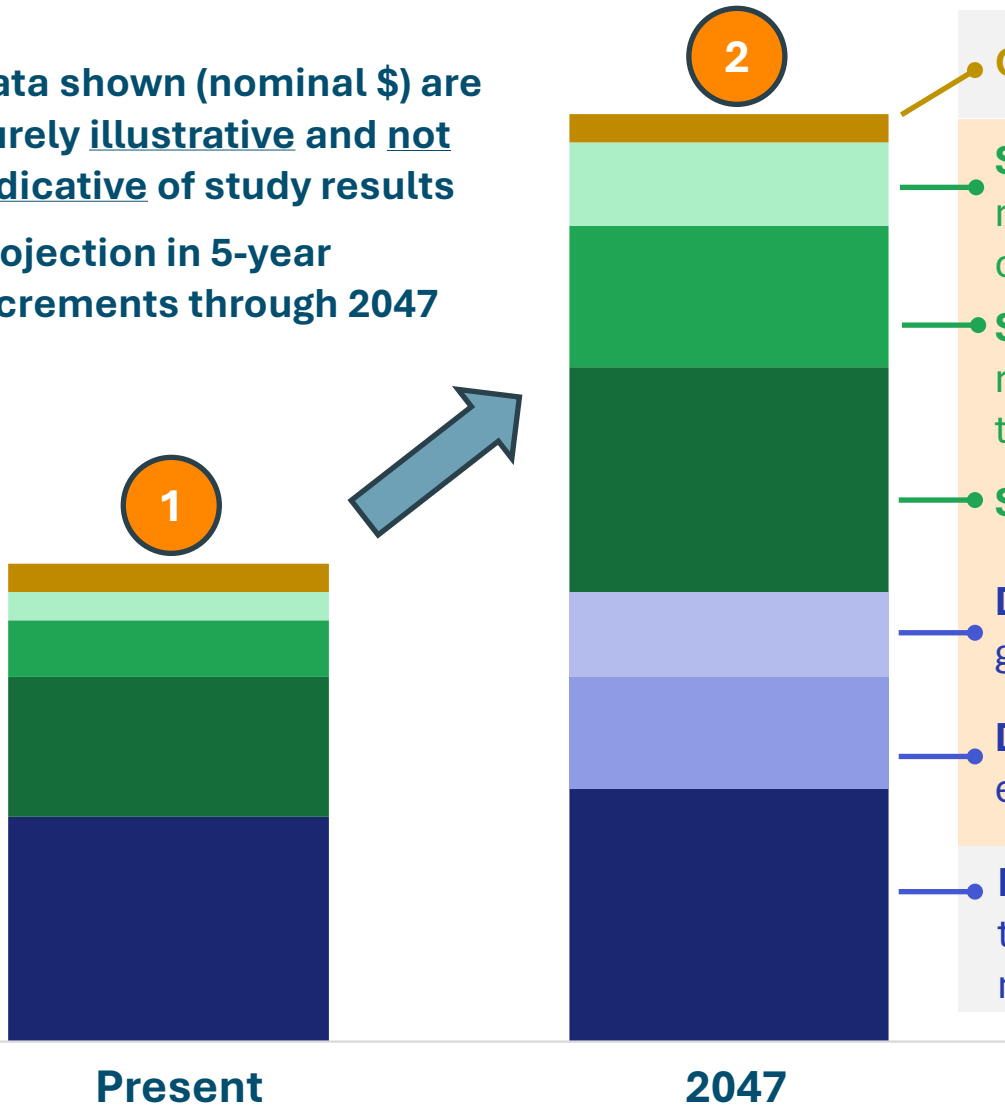
* Note: Future electric delivery costs and rates are intended to be an indicative projection reflecting scenario-based modeling rather than a forecast of what electric delivery costs and rates will be in the future.

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Revenue Requirement Model Overview

Cost of Service Starting Values and Projections

- Data shown (nominal \$) are purely illustrative and not indicative of study results
- Projection in 5-year increments through 2047



- **Current Program Fees:** Existing program costs held flat in real \$
- **Supply – REC Costs:** Calculated to cover costs for eligible renewable/zero-emission resources after accounting for energy and capacity revenues
- **Supply – Capacity Costs :** Calculated based on capacity prices set to reflect the net cost of new entry (CONE) of the marginal resource needed to meet reliability requirements
- **Supply – Energy Costs:** Output of PLEXOS production cost modeling
- **Delivery – Incremental Distribution:** Calculated based on peak load growth cost multiplier
- **Delivery – Incremental Transmission:** Output of PLEXOS capacity expansion modeling, including regional and local renewable deliverability
- **Delivery – Base:** Existing delivery revenue requirement escalated over time using growth rate based on historical trends to reflect system maintenance and replacement

Changes by scenario **Does not change by scenario**

PLEXOS Outputs to Select Revenue Requirement Components

PLEXOS Electric System Modeling (select outputs)

Capacity Expansion Model

Zonal Transmission Builds (IL only)

Resource Portfolios and Costs

Production Cost Model

Hourly Dispatch Simulation and Energy Market Prices

Delivery Costs*

New Tx Investments

Transmission builds for renewable deliverability in IL zones



Supply Costs

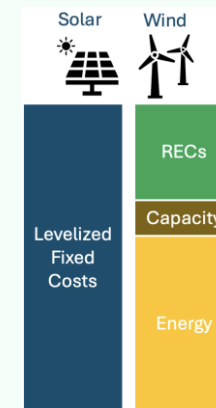
Capacity Costs

Expected clearing prices for MISO and PJM capacity markets



REC Costs

Recovers costs net of capacity & energy revenues



Energy Costs

Sum-product of hourly generation and energy market prices

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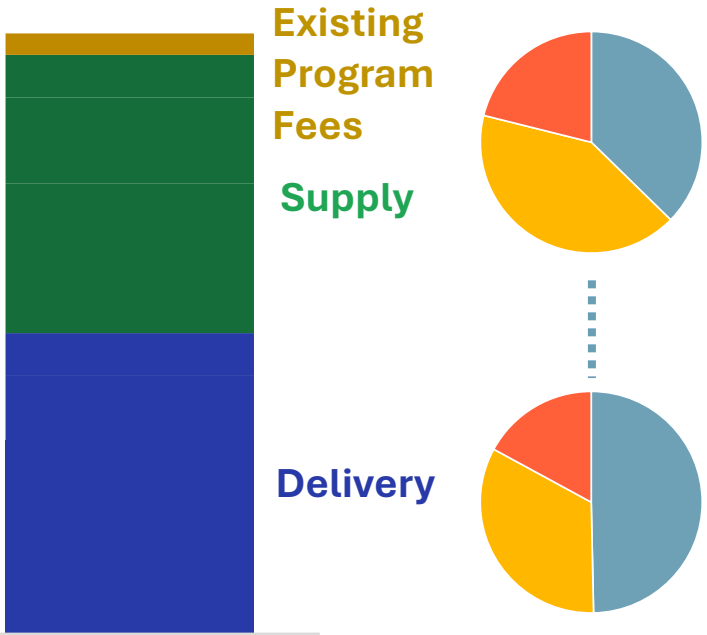
Revenue Requirement Model Overview

Customer Class Allocation and Rates

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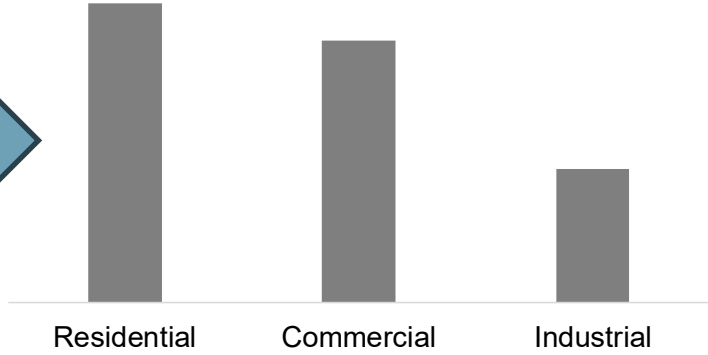
The total revenue requirement is allocated to each customer class, with separate allocation factors for core cost of service components

Annual Revenue Requirement (\$) \times Class Allocation Factors (%)



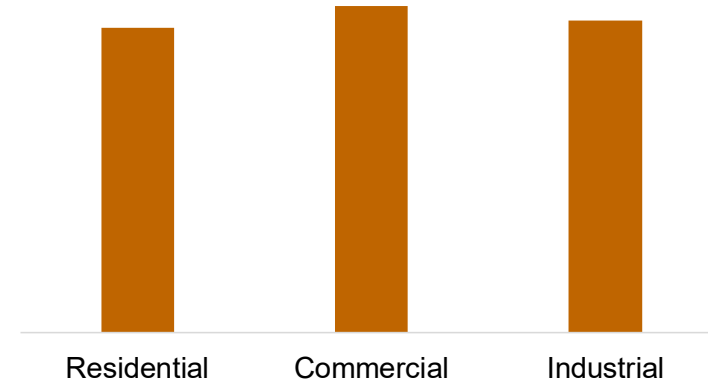
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Class Revenue Requirements (\$)



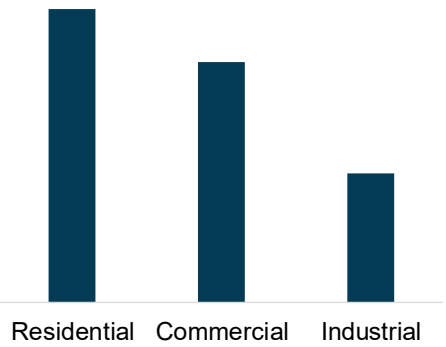
Divided By

Class Retail Sales (kWh)
Based on Forecasted Loads



- Data shown are purely illustrative and not indicative of study results
- Projection in 5-year increments through 2050

Class Avg. Rates*
(\$ / kWh)



* Also calculated for all classes overall

Next Steps

- + Finalize methodology, incorporating stakeholder feedback to the extent possible
- + Finalize data inputs and develop modeling toolkit
- + Incorporate PLEXOS modeling outputs into modeling toolkit to produce system cost and projected revenue requirements, average rates, and affordability across modeled scenarios



Stakeholder Q&A and Discussion



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How Can Stakeholders Submit Comments?

+ Submit comments in response to this workshop

- Comments should be submitted within **by June 9th, 2026**
- Stakeholder Meeting #3 Comment Form
 - [IRP Stakeholder Workshop #3: Customer Cost Impacts Methodology](#)
- Additional IRP-Related Questions for the ICC can be submitted via e-mail:
 - Joy Nicdao-Cuyugan: joy.nicdao-cuyugan2@illinois.gov
 - Subject Line – IRP Stakeholder Comments – Workshop #3

IRP Stakeholder Workshop #3:
Customer Cost Impacts
Methodology



Q&A



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