

## **Supplemental Attachment to IIEC Questionnaire Responses/Comments**

### **IRP Workshop #3 – Customer Cost Impacts**

#### **I. Introduction and Purpose of Supplemental Comments**

This attachment provides IIEC's supplemental comments on the customer-cost methodology presented in the May 26 Customer Cost Impacts workshop. The questionnaire responses necessarily address the specific prompts posed by Staff and E3, but those prompts do not fully capture the broader methodological issues raised by the workshop materials—particularly the relationship between the proposed revenue requirement cost stack and the broader affordability inquiry needed to fairly compare candidate IRP scenarios and portfolios.

The statutory framework is important here. The governing provisions require that any approved plan supports the provision of adequate, reliable, affordable, efficient, and environmentally sustainable electric service at the lowest total cost over time. They also contemplate the use of comparative metrics such as total system cost on a net-present-value basis, customer rate and bill impacts, and risk metrics when evaluating optimized portfolios. In IIEC's view, those provisions indicate that affordability is not merely a descriptive output appended to system-cost analysis, but an integral part of the comparative framework used to evaluate candidate portfolios.

The Staff/E3 presentation usefully recognizes that modeled system-cost outputs do not directly translate to the costs customers ultimately pay and therefore proposes a separate customer-cost framework built from delivery, supply, and program-fee components. IIEC agrees with that general direction. At the same time, if affordability is to be evaluated in a manner consistent with the statutory framework, the customer-cost impact methodology should do more than report projected rates for a limited subset of scenarios. It should be capable of supporting a consistent, scenario-comparable affordability assessment alongside system-cost effectiveness and the other statutory criteria relevant to portfolio evaluation.

In IIEC's view, the proposed methodology would be strengthened in four principal respects. First, customer-cost analysis should be applied consistently across the relevant comparative scenarios set rather than only to a subset of scenarios after initial screening. Second, the methodology should include a transparent reconciliation of cost-stack boundaries so that delivery, market, and policy/program costs are clearly defined and not omitted or double counted. Third, the methodology should support present-value customer-cost comparison across scenarios and to external benchmarks, rather than relying only on annual projected revenue requirements and average rates. Fourth, the

methodology should better address or account for uncertainty and downside affordability risk.

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## **II. Summary of the Staff/E3 Customer-Cost Methodology**

The workshop materials present a two-part analytical structure. First, Staff/E3 propose a **System Cost Analysis (all scenarios)** consisting of the net present value of each scenario's modeled portfolio, including modeled resource portfolios and incremental transmission built to enable delivery of energy. Second, Staff/E3 propose a **Customer Cost Analysis (subset of scenarios)** consisting of projected utility revenue requirements (URR) used to calculate proxy utility rates and customer-cost impacts for representative residential, commercial, and industrial customer classes.

The workshop materials state that the system-cost analysis does not include all utility costs and, therefore, does not directly translate to the prices customers ultimately would pay, which is why a separate customer-cost framework is proposed. The utility revenue requirement framework itself is presented as a four-step process: starting with current electric cost-of-service values, projecting those costs to future years, allocating the projected revenue requirement to customer classes, and deriving class average rates by dividing class revenue requirement by class sales.

Slide 13 breaks the projected cost stack into Delivery – Base, Delivery – Incremental Transmission, Delivery – Incremental Distribution, Supply – Energy Costs, Supply – Capacity Costs, Supply – REC Costs, and Current Program Fees.

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## **III. Areas of Meaningful Alignment Between the URR Model and the IIEC Present Value of Customer Cost (PVCC) Concept**

The Staff/E3 methodology aligns with the IIEC PVCC concept in one important respect: it expressly recognizes that modeled system-cost outputs from portfolio modeling are not the same as the customer costs ultimately borne through retail energy bills. That distinction is fundamental. In IIEC's view, portfolio-model system costs are necessary but not sufficient for affordability analysis, and the workshop materials appropriately acknowledge that a separate customer-cost lens is needed.

The URR model is also directionally compatible with PVCC because it builds customer costs from a componentized cost stack that includes delivery, supply, and program-fee elements. That structure is conceptually consistent with the boundary discipline needed

for a more complete customer-cost metric. In addition, the workshop materials repeatedly emphasize that the resulting costs and rates are intended as indicative projections to support understanding of cost drivers and tradeoffs, rather than as literal forecasts of future bills. IIEC agrees with that framing.

IIEC, therefore, views the URR framework as a workable starting point for evaluating customer-cost impacts, provided it is refined so that the resulting cost stack captures customer-funded obligations consistently and transparently.

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#### **IV. Why the URR Model Is Not Yet a Complete Affordability Framework**

Although the proposed URR model is directionally useful, it is not yet equivalent to a complete affordability framework. As presented, the URR model primarily projects annual revenue requirement components, allocates those components to broad customer classes, and derives class average rates. Those outputs are useful, but they are not a complete present-value customer-cost metric that can be used to address affordability across candidate scenarios and portfolios on a comparable basis.

This distinction matters because the workshop materials frame customer-cost analysis as part of the toolkit used to understand cost drivers, compare scenarios, and inform tradeoffs among modeled outcomes. If customer-cost analysis is to serve that comparative role, it should support more than annual projected rates alone. It should also support present-value comparison across alternatives, rely on clearly defined customer-cost boundaries, and be structured so that affordability can be assessed consistently across the entire scenario set.

Put differently, the URR model as presented is an explanatory cost-projection framework. PVCC is intended to provide a comparative affordability framework. The two concepts are compatible, but they are not identical.

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#### **V. Mapping the Slide 13 Cost Stack to a PVCC Framework**

Slide 13 provides a useful starting point for mapping the workshop methodology into a PVCC framework because it identifies the major categories of customer-funded cost obligations that would need to be considered in a broader affordability metric. Delivery – Base, Delivery – Incremental Transmission, and Delivery – Incremental Distribution all fall within the delivery portion of customer-funded cost. Supply – Energy Costs and Supply – Capacity Costs fall within the market-driven supply portion of customer-funded cost.

Current Program Fees represent a policy or program-related customer-cost category that also belongs within the broader customer-funded cost boundary.

At the same time, the mapping is not yet fully resolved. For example, the workshop materials define **Supply – REC Costs** as the residual amount needed to cover eligible renewable and zero-emission resource costs after accounting for energy and capacity revenues. Based on IIEC’s review of the workshop materials, that category appears to function more as a broader policy or attribute-support layer than the label “REC Costs” alone may suggest. Similarly, the workshop materials indicate that **Current Program Fees** are held flat in real dollars, which appears to be a simplifying assumption rather than a scenario-sensitive treatment and likely is not accurate, as the law calls for escalation and termination of some of the fees. For purposes of a broader affordability framework, both categories benefit from clearer boundary definitions so that policy, program, and market-cost layers can be assigned consistently and without double counting.

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## **VI. Gap 1: Customer-Cost Analysis Should Not Be Limited to a Subset of Scenarios**

The most significant methodological gap between the URR model as presented and an effective affordability framework is that Staff/E3 propose to apply customer-cost analysis only to a subset of scenarios, while performing system-cost analysis across all scenarios. If customer-cost impacts are intended to inform an understanding of affordability and tradeoffs among candidate portfolios, they should be evaluated across the same comparative scenario set used for broader portfolio review rather than only after a narrower subset has been selected for additional analysis.

For IIEC, this is not simply a sequencing question. **Affordability should not be treated as a follow-on consideration applied only to scenarios that have already advanced under a different cost lens.** A customer-cost framework intended to inform tradeoffs and portfolio comparison should itself be capable of being applied consistently across all the alternatives under review. At minimum, customer-cost analysis should be carried through for all scenarios advancing to comparative evaluation; ideally, it should be calculated across all optimized candidate portfolios so that affordability is not screened too late in the analytical process.

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## **VII. Gap 2: The URR Model Needs a Present-Value Comparative Metric, Not Only Projected Rates**

The URR model culminates in annual projected class revenue requirements and average rates. Those outputs are helpful, but by themselves they do not provide a complete, comparative affordability metric. In IIEC's view, the existing Staff/E3 pipeline is structurally compatible with adding a PVCC layer—one that converts the projected customer-funded cost stream into a present-value, comparable metric across scenarios while preserving the annual URR and rate outputs as explanatory detail.

A present-value customer-cost metric is important because it allows long-lived cost trajectories to be compared on a common basis rather than relying solely on snapshots of annual projected rates. It also allows delivery, supply, and program or policy obligation costs to be evaluated together as parts of a single customer-funded cost stream. The better approach is to retain the URR framework as the mechanism for constructing customer-cost components, but to supplement it with a present-value comparative metric that can be used to assess affordability across candidate scenarios and portfolios.

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## **VIII. Gap 3: Clear Cost-Boundary and Reconciliation Rules Are Needed**

A third gap is the lack of an explicit boundary and reconciliation framework for the slide 13 cost stack. The workshop materials identify the major categories of projected customer cost, but they do not provide a fully explicit reconciliation showing how the various delivery, supply, policy, and program components relate to one another, how residual categories are defined, and how double counting is prevented when portfolio-model outputs are translated into customer-cost obligations.

This issue is especially important for categories such as REC Costs and Current Program Fees. As noted above, the REC-cost category appears to include more than traditional REC pricing alone and may function as a broader residual support category for eligible renewable and zero-emission resources after accounting for energy and capacity values. Current Program Fees, meanwhile, are treated as a flat real-dollar category even though some customer-funded program obligations and costs may evolve differently across scenarios. Without clearer reconciliation of these categories, the URR model does not yet provide the transparency needed for a broader affordability metric.

**Illinois-specific mapping recommendation.** In IIEC's view, the most workable Illinois mapping may be to avoid treating **Supply – REC Costs** as an isolated customer-cost layer and instead incorporate mandatory customer-funded policy and program charges within a

broader **Program Fees** category that varies by scenario where appropriate. That approach would not remove renewable-attribute costs from the affordability framework; rather, it would place them within a clearer policy/program boundary that is more consistent with how customer-funded obligations and costs are recovered in Illinois. It would also better support scenario-based analysis because procurement plans and related program structures may evolve over time and may differ depending on the resource pathway ultimately evaluated in the IRP.

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#### **IX. Gap 4: Downside Risk and Affordability Robustness Are Still Missing**

IIEC's reference to downside risk does not imply that the IRP must adopt a highly complex stochastic optimization framework. The point is narrower and more practical. Because the statute contemplates the use of risk metrics, affordability should not be evaluated solely on a single base-case or expected-path result. A portfolio that appears affordable only under favorable assumptions about market prices, capacity conditions, load growth, or policy-cost trajectories, may not provide durable affordability for customers. Certainly, such a portfolio may not result in the lowest total cost over time.

This concern can be addressed within the proposed revenue requirement framework without displacing that framework. The same URR cost stack could be carried through a limited set of downside sensitivities and reported as a range, stress band, or other transparent indicator of dispersion around the base-case result. This would be especially useful for customer-cost components that are most exposed to uncertainty, including market-based supply costs and scenario-sensitive policy/program charges. In IIEC's view, that type of reporting would materially improve the selection process by distinguishing among portfolios that remain reasonably affordable across plausible futures from those where affordability is influenced by a narrower set of assumptions.

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#### **X. Gap 5: Customer-Class Results Should Support Benchmarking and Competitiveness Analysis**

IIEC also believes customer-class affordability has two dimensions of comparability: comparability across scenarios and comparability to external benchmark data. The workshop materials already propose class-specific revenue requirement allocation and average-rate outputs for residential, commercial, and industrial classes. IIEC agrees that class differentiation is necessary. However, if those class results are to be informative for

non-residential affordability and competitiveness, they should be structured in a way that supports external benchmarkability rather than existing only as internal model categories.

For commercial and industrial customer classes in particular, affordability is not only a question of relative differences among IRP scenarios. It is also a question of how Illinois' customer-cost outcomes compare to broader sector benchmarks over time. For that reason, customer-class definitions and outputs should align, to the extent practicable, with comparable categories from external sources. The IIEC recommends using EIA 861 as the best source of externally benchmarkable data. EIA-861 is a census of all U.S. electric utilities, and it contains revenue, sales (MWh), and customer count of electricity delivered to end-use customers by state and sector. It is also public, nationally standardized, and already organized around the residential/commercial/industrial end-use sectors. Customer classes used in revenue requirement analysis in the IRP process should align with customer class definitions used in EIA-861 data collection. A stronger affordability framework is one that supports both internal scenario comparison and external competitiveness comparison.

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## **XI. Illustrative Milestone Matrix for Integrated Present Value of System Cost (PVSC), Levelized Cost of Electricity (LCOE), and PVCC Reporting**

The workshop framework already distinguishes between a system cost analysis and a customer cost analysis, and IIEC agrees that those are separate but equally important dimensions of portfolio evaluation. In IIEC's view, the IRP record would be strengthened if candidate portfolios advancing to comparative review were reported through a consolidated cost analysis matrix that presents, in one place, a system-side fixed-cost metric, a broader supply-side energy cost metric, and a customer-affordability metric over time. That type of presentation would allow the IRP process to compare candidate portfolios using multiple relevant cost perspectives rather than relying on any single indicator alone. The summary analysis template developed by IIEC (Figure 1) already reflects this structure by presenting a full-horizon PVSC-Levelized Fixed Costs (PVSC (LFC)) measure, a full-horizon LCOE measure, a full-horizon PVCC measure, and milestone PVCC values in a single comparative table.

For purposes of this attachment, IIEC uses PVSC and LFC synonymously to refer to the present-valued system-side fixed-cost metric. IIEC also recommends reporting LCOE as a complementary supply-side energy-cost metric. These two metrics serve related but different functions. PVSC (LFC) provides a view of the fixed-cost burden associated with a candidate portfolio, while LCOE provides a broader view of modeled supply-side energy

cost. Neither metric, however, is the same as PVCC, which is intended to capture the present-valued customer-cost implications of a candidate portfolio. Presenting these metrics together would therefore clarify that the IRP should consider not only the fixed-cost and total supply-side characteristics of a portfolio, but also the affordability consequences borne by customers. The IIEC template is already structured to reflect that distinction by placing PVSC (LFC), LCOE, and PVCC side by side rather than collapsing them into a single composite number.

IIEC further recommends that the affordability portion of this matrix should include both a full-horizon PVCC value and milestone PVCC values at intermediate planning intervals. That structure would allow the process to identify not only which portfolios appear comparatively favorable on a full-horizon basis, but also when customer-cost pressure emerges over time. In practical terms, a portfolio may appear acceptable when viewed only through a single horizon-wide measure yet still produce materially different affordability outcomes at earlier or intermediate checkpoints. The milestone approach helps make those differences visible and therefore improves the usefulness of the customer-cost analysis for comparative IRP decision-making. The template IIEC has developed already embodies that logic by including milestone PVCC columns alongside full-horizon PVSC (LFC), LCOE, and full-horizon PVCC.

In IIEC's view, the value of this matrix is that it preserves the distinct role of each metric while allowing them to inform portfolio selection on a coordinated basis. PVSC (LFC) provides the system-side fixed-cost perspective. LCOE provides a broader supply-side energy-price perspective. PVCC provides the customer-affordability perspective, including the timing of customer-cost effects through milestone reporting. Those measures are not interchangeable, and they need not be expressed in the same denominator to be decision-useful. To the contrary, maintaining separate metrics helps underscore that IRP portfolio selection should not reduce all cost considerations to a single undifferentiated measure. A consolidated matrix of this kind would therefore improve transparency, sharpen scenario comparison, and provide a more decision-relevant framework for evaluating the tradeoffs among candidate portfolios. The structure reflected in the IIEC summary table is consistent with that objective because it includes each of these measures as a separate comparative lens within one integrated reporting format.

Accordingly, IIEC recommends that candidate portfolios advancing to comparative review be reported through a consolidated cost analysis matrix showing: (1) full-horizon PVSC (LFC), (2) full-horizon LCOE, (3) full-horizon PVCC, and (4) milestone PVCC values at defined planning checkpoints, together with any benchmark comparison information used to place modeled customer-cost outcomes in context. This would not require Staff to

abandon the existing system cost framework. Rather, it would provide a more complete and transparent way to compare portfolios by showing, in a single table, the fixed-cost characteristics of each portfolio, the broader supply-side energy-cost perspective, and the present-valued affordability implications for customers over time. IIEC believes that such a presentation would materially improve the usefulness and defensibility of the IRP portfolio comparison process. The summary template provided by IIEC is designed to serve precisely that illustrative function.

Figure 1 – IIEC Summary Analysis Template

IRP Consolidated Cost Analysis Matrix								
	Supply Cost Projections		Customer Cost Projections				Benchmark	
Scenario / portfolio	Full-horizon PVSC (LFC)	Full-horizon LCOE	Full-horizon All Sector PVCC	All Sector PVCC @ 5 Years	All Sector PVCC @ 10 Years	All Sector PVCC @ 15 Years	All Sector PVCC @ 20 Years	EIA-861 2025 All Sector Average
Scenario 1	\$/MW-year	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh
Scenario 2	\$/MW-year	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh
Scenario 3	\$/MW-year	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh
Scenario 10	\$/MW-year	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh

Note 1 - All values are base-case using central or expected modeling assumptions. Actual values will fall within a range around these values. Material upside price risk exists due to electricity demand inelasticity and administrative scarcity pricing measures implemented by wholesale market operators. This table is meant to provide comparative information and indicative projections.

Note 2 - All PVCC numbers will be conditionally formatted againsts EIA Benchmark with color coding

## XII. Recommended E3-Implementable Path Forward

IIEC believes a practical path forward that builds on, rather than replaces, the analytical structure proposed by Staff/E3 is preferred. Portfolio modeling can continue to provide scenario outputs such as production-cost results, zonal energy prices, resource portfolios, and incremental transmission builds. In contrast, the URR modeling toolkit can continue to serve as the mechanism for translating those scenario-specific outputs into customer-funded cost obligations through delivery, supply, and program-fee categories and allocating those obligations to customer classes.

The refinement IIEC proposes is to add a PVCC layer on top of that structure. That layer would apply a consistent customer-funded cost boundary, convert the projected cost stream into a present-value comparative metric, and extend customer-cost analysis across the relevant scenario set rather than restricting it to a subset. Over time, that framework could also incorporate a more explicit treatment of downside affordability risk. In this way,

the URR model would remain the practical translation mechanism from system outputs to customer obligations, while PVCC would provide the comparative affordability metric needed to evaluate candidate scenarios and portfolios more completely.

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### **XIII. Conclusion**

The May 26 workshop materials take an important step by recognizing that modeled system costs and customer costs are not the same and by proposing a revenue requirement framework to translate scenario outcomes into customer-facing cost metrics. IIEC agrees with that basic direction. The proposed URR model identifies the major cost-stack components, provides a framework for class allocation, and offers a more customer-relevant perspective than system-cost outputs alone. Those are meaningful strengths and provide a workable foundation for further development.

At the same time, IIEC believes the methodology should be strengthened before it can serve as a full affordability framework for IRP portfolio comparison. In particular, customer-cost analysis should not be limited to a subset of scenarios; the cost-stack boundary should be more explicitly reconciled; the framework should support present-value comparison across alternatives rather than only annual projected rates; and the methodology should evolve to better address uncertainty and downside affordability risk.

For those reasons, IIEC recommends that Staff and E3 retain the URR framework as the operational foundation for customer-cost translation but refine and extend it into a PVCC-based affordability framework that can more fully inform IRP scenario and portfolio evaluation.