

CenterPoint 2025 IRP 3rd Stakeholder Meeting Minutes Q&A September 11, 2025, 9:30 am – 2:30 pm CDT

<u>Drew Burczyk</u> (Project Manager, Resource Planning & Market Assessments, 1898 & Co.) – Introduced the meeting facilitator and covered meeting protocols and participation.

Shane Bradford (Vice President, Indiana Electric, CenterPoint Energy) – Shared the safety message for the meeting and the updated generation timeline.

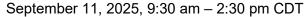
<u>Matt Rice</u> (Director, Regulatory and Rates, CenterPoint Energy) – Provided an overview of the IRP process and summarized stakeholder feedback.

<u>Matt Rice</u> – Discussed the revisions to the scenarios including the comparison of Reference Case and Alternate Reference Case scenarios.

- Slide 20: Reference Case Assumptions
 - Question: When you say 40% capacity, is that operating at 40% capacity or at 100% capacity operating at 40% of the time?
 - Response: The latter.
 - Question: Can you briefly talk about what 111(d) was meant for?
 - Response: It is applicable to existing coal plants, and it was requiring either a 90% carbon capture and sequestration (CCS) by 2032 or retirement of the unit. In the preliminary modeling, it was driving retirements early in the model. The current administration has moved to either rescind 111(d) in full or at least rescind the 90% CCS rule. We have removed this from the reference case and applied an ACE Proxy cost, which targets efficiency for coal units is based on assumptions from the first Trump administrations' 111(d) rule.
- Slide 21: Alternate Reference Case
 - Question: In reference to the large load scenario, are you taking into account that gas turbines are expensive and difficult to obtain, especially considering the renewable projects that are being cancelled? Also, are you considering the feasibility of meeting load with an older coal plant that has had outages before?
 - Response: Yes, we are considering feasibility of generation and transmission to serve this load. For example, the load forecast increases to the current transmission limit for CEI South and then, after anticipated deployment of MISO Tranche 2, the load increases again. Our model also includes operational parameters of generation performance, such as scheduled and forced outages.

<u>Jeffery Huber</u> (Principal, Energy Efficiency, GDS Associates) – Presented a recap of the Market Potential Studies and discussed the energy efficiency and demand response modeling updates.

- Slide 32: EE Overview: Types of Potential Overview
 - Question: Can you differentiate the parameters of what factors are considered technical potential versus economic potential? What is the time frame?
 - Response: The only limitation on technical potential is what is technically feasible and the amount of load that the technology can save. For





example, heat pump water heaters cannot be installed everywhere due to size restrictions, so there is a limit on deployment. Economic potential then takes that technical potential and uses the Utility Cost Test (UCT) to filter out technologies that are not cost-effective. There is generally a small delta between the technical potential and economic potential for this study.

- Question: Has CenterPoint considered the use of any other cost-effectiveness tests other than the Utility-Cost Test for determining "Economic Potential"?
 - Response: The Utility-Cost Test is the primary screening test that is used in Indiana, which is why it is used for this analysis.
- Question: How do you consider the "health cost" in this study?
 - Response: There are other tests, such as the total resource cost test and societal test, which have opportunities to incorporate some of these externalities. However, in Indiana, the test that is utilized by the Commission is the Utility Cost Test, which is why it is the primary test for our market potential study.
- Slide 34: Overall TP/EP/RAP by End Use All Sectors
 - Question: For items such as the lighting, the HVAC, and the building shell, I am assuming you are looking at the installation of equipment instead of making the building shell more efficient. Are factors such as more efficient installation and construction technique and design that increase the efficiency of the building shell being considered?
 - Response: HVAC and lighting are generally equipment, but the building shell category includes items such as improvements to windows, air and duct sealing, and insulation.
- Slide 38: Annual Savings by Bundle
 - Question: Can you explain the purpose of bundling the Residential programs? Is the methodology behind the bundles just economies of scale?
 - Response: From prior experience, there was concern that Residential as a single bundle would be at risk of not getting selected, and that is not a preferred outcome. By bundling into Tiers, there's a higher chance that lower cost residential savings will get selected by the model. No, it is not economies of scale due to some measures (e.g., HVAC, building shell) in each bundle having varying cost; it's more about the mix of measures.
- Slide 42: DR Results
 - Question: For residential DR EV and battery storage, given that potential savings is very small and driven by low adoption of EV and storage, is there a way to look at the analysis and find what adoption rate would be necessary for it to be cost effective? What would the penetration rate need to look like for the EV programs to be cost effective? What is the delta between where the levels currently are and where they need to be?
 - Response: Correct, the potential savings are driven by the forecasted adoption of EV's and solar. We did run a sensitivity where we increased incentives at various levels to increase the participation rate. We also looked at decreasing the incentive in order to lower the cost. In both

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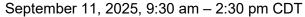


cases, we could not find any incentive level that would make these programs cost-effective.

- Question: Absent of incentives, what does deployment have to be for the EV and battery storage programs to be cost-effective?
 - Answer: I don't have that number currently, but of the customers that have rooftop solar, only 8% have batteries. The deployment would have to be significantly higher than current levels.
- Question: Do we know what percentage of participation there is in Commercial & Industrial customers as compared to residential customers? On slide 43, it says that the residential savings in the Spring are 2.6 MW, but C&I savings are 0.7 MW. Why does the C&I program not have a larger impact?
 - Response: The C&I thermostat program is somewhat limited to smaller businesses that have a traditional smart thermostat installed. Larger customers typically have a different configuration that does not connect to a smart thermostat. Those MW savings would be captured in the DR Aggregation.

General Questions

- Question: For DR, are you considering a carrot and stick approach to the Commercial & Industrial customers, such as raising rates during peak hours to disincentivize C&I customers during peak hours and then lowering rates during off-peak?
 - Response: There is a time-of-use rate included in the market potential study. There are other alternatives of that described approach included in the DR Aggregation.
- Question: Was there any acknowledgement that some of the renters in the area aren't in control of whether to participate in these programs? Are there any new programs or outreach in place to reach out to the owners of rental units? Do these programs require landlord approval to get the installation done?
 - Response: We do break out the potential between single family and multiple family households with varying assumptions for adoption rates. We do offer programs such as the Income Qualified Weatherization program where if a customer does not have a smart thermostat, there is one installed at the time of the assessment for no cost to the customer. In the plan that was approved for 2025-2027, CEI South did roll out a multifamily direct install program to specifically target that segment and install equipment to help electric and gas savings. These programs do require approval from the property owner.
- Question: What line loss assumptions are you using?
 - Response: It's the peak line loss from the latest study, and it starts at 8.4% and is grossed up to 9 or 10%. This is used as a proxy for the marginal losses.
- Question: Does this 20-year plan represent a percentage increase in participation both on the residential and industrial side? Have you factored in how increasing incentives would increase participation?
 - Response: Yes, the starting point is informed by what percentage of customers are currently signed up for programs. Then, the percentages





are increased over time. Also, we have a maximum achievable potential, which is the maximum participation case as well as a realistic achievable potential.

- Question: You mentioned that you bundled the EE and DR programs strategically so that programs wouldn't be completely ignored by the model. I would like to point out that the model does not have morality and programs that could make a significant impact in the lives of customers should not be discounted just because the model did not select it.
 - Response: The programs included in the income qualified bundle generally come with an incentive level that would cover up to 100% of the measure cost. We recognize that this program is advantageous and therefore it is treated as a hardcoded, forced in resource rather than a selectable resource.

<u>Drew Burczyk</u> – Shared the portfolio development methodology and steps and draft scenario optimization results.

- Slide 48: Portfolio Development Methodology, Step 2: Key Near-Term IRP Decisions
 - Question: What specific "other resource options" are considered when it is stated that "F.B. Culley 3 option selection is a larger capacity block strongly tied to other resource selections."?
 - Response: The FB Culley 3 decision is largely tied to the pathway at AB Brown 5 and 6 conversion to a CCGT. In the modeling, there are instances when having the AB Brown conversion and FB Culley 3 online, CEI South is long on capacity and energy. While the decisions are not explicitly linked, they are both larger resources that influence each other.
- Slide 50: Portfolio Development Methodology, Step 3: Resource Alternatives
 - O Question: Are you looking at hybrid systems (like solar plus storage)?
 - Response: Yes, we are considering both solar plus storage as well as wind plus storage hybrid resources.
- Slide 51: Storage Resource Options
 - Question: You mentioned that the energy goes back to the grid, which would mean that the energy is not stored at CenterPoint. If a battery is charging from solar during the day, you're not necessarily storing it for eight hours since you're using it over that entire period of time. Is that part of how this works?
 - Response: The hours that are listed for battery duration is representative of the number of continuous hours that a battery can discharge at maximum output. The battery can store the power for longer. So, the battery can charge during low prices and then wait to discharge and sell energy back to the grid when it is economical to do so.
 - Question: Looking at all the generation sources, is there acknowledgement that if CenterPoint's own resources are not getting dispatched it might end up costing the customers more if CenterPoint's resources aren't running as much?
 - Response: Yes, the dispatch of different units is a fundamental piece of the IRP modeling. We are looking at how each of the different resources is valued on both the energy and capacity basis.

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- Slide 53: Preliminary Project Selections Scenarios
 - Question: Under high regulatory scenario, for the solar and wind projects, are any of the projects that have gone away are in the table on this slide?
 - Response: The previous projects that Shane was talking about earlier today are not included in this table. The solar and wind projects that are seen in this table are generic resources that CEI South does not have a contract in place for.
- General Questions
 - Question: Given that FB Culley 3 has experienced an 8-month outage, are there
 any modeling efforts that take into consideration reducing the impact to
 customers if another prolonged outage occurs at FB Culley 3?
 - Response: In the model, there are costs for maintenance to help prevent outages. Also, the reliability of each unit is accounted for in its accreditation.

<u>Drew Burczyk</u> – Discussed the deterministic modeling approach, portfolios, and draft results.

- General Questions
 - Question: Can you remind me of what the existing AB Brown units are? What is AB Brown 7?
 - Response: AB Brown 7 is the conversion of the existing AB Brown 5 and 6 simple cycle gas units into a Combined Cycle Gas Turbine.

<u>Drew Burczyk</u> – Shared the portfolio development methodology including results from the draft portfolios.

- Slide 64: Modification of Scenario Portfolios to Align with Reference Case Load
 - Question: Why are manual modifications necessary? If you wanted to compare based on the same load, wouldn't you just run with the same load and let the model pick?
 - Response: The scaling of the alternate scenario buildouts is so those portfolios can meet the reference case need. The removal of resources for higher load scenarios or addition of resources for lower load scenarios attempts to allow the portfolios to compete on an even playing field. Otherwise, some portfolios could be advantaged/disadvantaged when going through the risk analysis process.
 - Question: Is the load forecast for the scenario runs different than the reference case load forecast? Why would you not run each scenario with the same load forecast rather than running the model with different load forecasts and making manual adjustments?
 - Response: Yes. Slide 53 shows an arrow representing the load level for each scenario as compared to the reference case load. We ran the scenarios with their different load forecasts because the different load level influences the decisions that are made during capacity expansion.
 - Question: If load is varying, can you compare the net present value of the given portfolio?
 - Response: Correct. We used the scenarios with different load levels to generate a portfolio for each scenario, made manual adjustments to scale

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up or down the buildout, and then locked in that portfolio and ran it through the reference case load.

- Question: Why is the capacity surplus highlighted? How did you come to the decision to take away solar and wind?
 - Response: The highlighted capacity surplus is a visual aid to show how the portfolio is long on capacity and thus drives the need for the portfolio to be scaled down to be closer to the capacity need for the reference case. When selecting which resources to remove, we tried to preserve the direction of the scenario buildout and removed resources that had multiple units and ability to be scaled up/down.
- Question: Why wouldn't it make sense to re-run the capacity expansion simulation instead of just the production cost simulation?
 - Response: We could look into running the alternate high scenario with the reference case forecast and see if the optimization produces anything different.

[Based on portfolio development concerns, related to adjusting portfolios raised in the meeting, CEI South does not plan to make manual adjustments to scenario-based portfolios. Rather, these portfolios will be run in the stochastic modeling as developed, whether rooted in higher or lower load than the reference case.]

Slide 65: Draft Portfolios

- Question: If each portfolio has its own set of variables and those change with time, there are an infinite number of possible forecasts for all of the variables (e.g., coal costs may go up or down and some of the O&M costs could go up while others go down). With all of that uncertainty, you're just using a baseline forecast, how is any of that variability being considered?
 - Response: As we get into the risk analysis, we will run each of these portfolios through 200 different families of inputs. Each family of input will be different to represent 200 different futures, but each portfolio will be simulated with the same 200 families of inputs. [The 200 different futures represent the full probabilistic range.]

• Slide 69: Portfolio 4

- Question: The in-service date for an SMR in 2035 seems very early. Can you speak to the decision to allow for the early in-service date?
 - Response: These are not final portfolios and are still being developed. The 2035 in-service date is what we have determined as the earliest possible date that nuclear can come online in the model, and it happens to align with the timing of the FB Culley 3 retirement in that portfolio.

General Questions

- Question: Can you provide the documents that make it clear what changes are being made to these portfolios?
 - Response: Yes, we can provide documentation surrounding what changes were made. [Documentation posted to IRP File Share site for technical stakeholders]

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- Question: In your modeling, are you considering a swing with the high regulatory approach? In the last 20 years, there have been a lot of swings in regulations.
 - Response: Yes, there are three draft portfolios that take inspiration from the portfolios generated by the scenario that corresponds to the portfolio name. For instance, portfolio 10 was developed under the Alternate High Regulatory scenario, which has an expanded Clean Air Act and different assumptions for IRA tax credits. All portfolios will be stress-tested under the different scenarios with different regulatory assumptions.
- Question: Comparing Portfolio 6 & 10 and their installed capacity of solar, it seems there needs to be less concern for regulatory requirements. Why are the numbers so low for a renewable heavy portfolio?
 - Response: For portfolio 6, the renewable heavy portfolio, the solar installed capacity as a percentage of the resource mix is decreasing over time because other resources (wind and storage) are coming online.

Brian Despard (Sr. Project Manager, Resource Planning and Market Assessments, 1898 & Co.) – Presented updates to the methodology for capturing uncertainty in model inputs via stochastic modeling.

- Slide 83: Uncertainty Variables
 - Question: For the uncertainty variable, why wouldn't regulatory environment be on the uncertainty variable list? What is the relationship between the uncertainty variable and the 200 families of inputs?
 - Response: The overall approach is based on the overall statistical variability of the variables and not based on a single qualitative measure (like policy) that causes uncertainty. We use statistical measures for each variable, such as mean and standard deviation, along with their correlations and let the variables randomly change within those parameters. The 200 draws of these variables, such as coal prices, gas prices, technology costs, and so on then make up the family of inputs. [Additionally, CEI South is varying the regulatory environment, as it relates to CO₂.]
 - Question: If each variable influences other variables, isn't there an infinite number of possibilities?
 - Response: Technically, yes. However, there are two different types of uncertainty that we are capturing in two different ways. The first is scenario uncertainty, where we identify future worldviews which can help inform the portfolios. Then there is risk analysis, which is primarily looking at uncertainty of the reference case. The 200 families of inputs then show how much the production cost of the portfolios change as these variables change.
- General Questions:
 - Question: Is it safe to assume you won't be applying stochastics to the large load portfolio(s)?
 - Response: Yes.

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Drew Burczyk – Presented the sensitivity inputs and early model outputs.

- Slide 100: Distributed Generation (DG) Solar Incentive
 - Question: How many total megawatts of solar are included in this incentive and what percentage of CenterPoint's total capacity need? How much is the \$54MM going to buy against the total capacity needs?
 - Response: For each of the portfolios, there is a different resource mix and therefore a different capacity gap to solve for, so the capacity need is different across each of the 12 portfolios. For the first pass of this sensitivity, the overall resource mix did not change, meaning that CEI South would have to build the same resources to serve its' load and also pay the DG Solar incentives. [Over 20 years, the DG solar incentive is applied to 137 MW of rooftop solar.]

General Q&A Section

- General Questions
 - Question: Can you explain MISO DLOL accreditation and the 2035 smoothing?
 - Response: MISO is moving to the direct loss of load (DLOL) methodology of accrediting resources. We used MISO provided information to inform an accreditation curve for each resource over time. Based on stakeholder feedback, we extended the decline from the initial DLOL inputs from 2028 to 2035 to avoid the sharp drop off of solar and wind accreditation in 2028.
 - Question: Why is MISO able to set the rules for the accreditation of resources?
 How does this relate to the price per kilowatt hour of electricity?
 - Response: Because CEI South is a member of the MISO market, CEI must meet the planning requirements set by MISO, which includes using their resource accreditation values. By being a MISO member, CenterPoint is able to lean on market energy and capacity supply as needed and not build as many resources.
 - Questions: Would you consider a study with FB Culley 3 retiring in 2030?
 - Response: [Thank you for your feedback]
 - Questions: Why does smoothing end in 2035?
 - Response: Stakeholders suggested the 2035 smoothing and this process was reasonable, so it was incorporated.
 - Questions: How do the issues at Salt Creek in Iowa affect the project?
 - Response: All problems have been solved. There has no impact to the project timeline or to CenterPoint.
 - Questions: Can CenterPoint itemize their bills to customers?
 - Response: Please see the CenterPoint website, where is shows an explanation of the bills. [https://www.centerpointenergy.com/en-us/residential/customer-service/resource-hub/understanding-your-bill?sa=in]
 - Question: Can CenterPoint explain the extra fees that are increasing bills?



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- Response: We're happy to speak to anyone interested in an explanation of their bills. [Please see the website above for and explanation of recent bill format changes.]
- Question: At some point, will CenterPoint make its rate impact model (for the scorecard metric) available for review?
 - Response: Yes. We will be able to share that with technical stakeholders who have an NDA signed.
- o Comment: I [stakeholder] have made a portfolio to share.
 - [Stakeholder provided comments posted to <u>Integrated Resource Plan</u> (IRP) website]
- Comment: [Stakeholder request for inclusion of renewable energy sources in IRP]
 - Response: [Stakeholder provided comments posted to <u>Integrated</u> <u>Resource Plan (IRP)</u> website]