



Northern Indiana Public Service Company LLC
2024 Integrated Resource Planning
Public Advisory Meeting #3
SUMMARY

August 21, 2024

Welcome & Introduction

Tara McElmurry, Communications Manager, NiSource

Kick Off

Vince Parisi, President & COO, NIPSCO

Public Advisory Process and Responses to Second Stakeholder Meeting Comments

Abe Lang, Manager Strategy & Risk, NiSource

Abe Lang, Manager Strategy & Risk at NiSource, provided a summary of stakeholder comments from NIPSCO's second stakeholder meeting and reviewed the impacts of NIPSCO's updated reference case and emerging high case load forecasts on the project supply-demand balance. He then provided an overview of the key inputs and resource assumptions for the IRP's portfolio modeling and closed the section with a review of the scorecard being used in NIPSCO's 2024 IRP.

Developing the Demand Side Management (DSM Study)

Jeffrey Huber, Managing Director of Energy Efficiency, GDS

Jesse Smith, Partner, Demand Side Analytics

Jeffrey Huber, Managing Director of Energy Efficiency at GDS, provided an overview of NIPSCO's demand side management ("DSM") programs and the overall modeling approach for DSM in the 2024 IRP. He then defined the market potential study ("MPS") and provided a detailed review of the key inputs necessary to develop the MPS. Next, Mr. Huber provided an overview of the energy efficiency analysis methodology and a summary of energy efficiency potential across four evaluation categories: technical potential, economic potential, maximum achievable potential ("MAP"), and realistic achievable potential ("RAP"). He closed his section by summarizing cumulative annual potential by end-use across key categories.

Jesse Smith, Partner at Demand Side Analytics, then presented the demand response ("DR") program types evaluated in the DR MPS, summarized how key input assumptions were aligned with others from the IRP, and described how the overall methodologies were deployed for the study. He then reviewed key inputs and outputs associated with eight distinct DR programs along with key cost and benefit benchmarks. Jeffrey Huber then closed the section with a summary of how the DSM study outputs were aggregated and compiled for use in the broader IRP portfolio analysis.

Participants had the following questions and comments, with answers provided after:

- Is NIPSCO still open to stakeholder feedback on the previous slides where you were going through some of the different cost assumptions, as CAC is still waiting on the first big data dump with the modeling files and inputs? My broader point is that we have had a lot of information coming at us in terms of the data centers and also on the MPS front, and we are concerned about having enough time to provide good feedback, understanding how long it can take for NIPSCO to put things through its model, so I just wanted to flag that concern.
 - NIPSCO is open to feedback and has not changed the timing of anything related to its RFP as of now but we are open to feedback and will take your concerns into consideration.
- I am curious about what you are looking at on the Behavioral side? Do you have anything to share?
 - In the energy efficiency study, we are generally looking at one of the historical programs, the Home Energy Reports, which are reports that get offered to customers, telling them how they are using their energy and if their usage is high relative to other homes in the area with similar baseline usage and similar characteristics. These customers receive tips on how to impact their energy usage and also a statistical look at the savings associated with that. As AMI rolls out, there might be ways to use that and break away from the paper format. There are also some Behavioral DR options associated with that on the commercial and industrial (“C&I”) side.
- How exactly is that facilitated on the C&I side, regarding relative usage intensity from one manufacturer versus another manufacturer within the same subsector, how would that be measured and how would those tips improve the efficiency of the user base?
 - I will say that most of the Behavioral savings that we look at are on the Residential side but there is the Strategic Energy Management program on the C&I side, which is a similar type of program for building operators. This program does require going in and performing an audit, looking at usage and the current energy management systems they have. This is a much more extensive program than what I was talking about on the Residential side. This program is still in its early stages and is currently focused on the commercial sector, including grocery stores, schools and healthcare. The Industrial side of this program has been much harder for us to gain traction, as far as finding a core group to participate and benchmark and share best practices and other things of that nature.
- What was the thinking behind using the utility cost test (“UCT”) for screening instead of a total resource cost (“TRC”) test?
 - The UCT test is the primary test that is used in Indiana to look at energy efficiency measures. There are other tests out there like the TRC test, which looks at a little bit broader of a perspective. So there are other perspectives to look at but the UCT is the driving test in Indiana.
- Do any of NIPSCO’s C&I customers participate in MISO DR offerings? If so, does the current study factor in expected DR reductions from these customers in the future?
 - No, not within NIPSCO’s firm load obligation, but there is about 500-600 MW of interruptible, non-firm load amongst NIPSCO’s large industrial Rate 531 customers that participates in the MISO market.
- On the data center slide, there are a lot of unknowns about the details of NIPSCO’s expected data center load. Are there ways that we can throttle up or down the assumptions that you’ve included? How do we deal best with all of the uncertainty?
 - The key assumption that we have in there now is that a data center will have the same responsiveness as an industrial customer. A data center might even have more DR potential than an industrial customer. Right now, industrial demand

response in the Midwest is a mature market and so we are assuming that data centers will respond similarly, but there are unknowns and you would only want to refine these assumptions once you have a better idea of the type of data center load that is coming onto the system.

- You mentioned that you used the solar projection to input the universe of potential NIPSCO customers that could participate in this program (behind the meter solar plus storage) and you also mentioned that this has been informed historically by net metering and now excess distributed generation (“EDG”), which has much lower compensation. Would the outcome of the model change if there were more solar owners and could that potentially influence an argument for different compensation for solar, or other incentives, to get more solar deployed by customers to feed into a program like this?
 - It could, but one of the big things that this program has a hard time overcoming is the fixed costs, which would include things like a program manager, so when your participation is only in the hundreds, rather than the thousands, it is tough to overcome your fixed costs. We keyed off of the Reference Case solar forecast but there are alternative forecasts as well, which were presented in the last meeting, which included potential changes to policy design, such as a return to net metering. The Reference Case shows about half the penetration of the high-end alternative modeling. We would be willing to swap into the model the most aggressive solar forecast alternative for a sensitivity analysis, to see what the results look like and if that would be enough to overcome the fixed costs of the program to make it cost-effective.
- How much are the UCT results sensitive to the assumed 20-year time horizon used in the study?
 - I would say they are not terribly sensitive because everything gets a full life. There are certain capital investments, like a water heater, where we will let the measure stretch out past the 20-year horizon to the full life of the equipment, just so that you do not have any truncation. Everything gets the full life of the equipment, so the horizon is not really a factor.
- Are all DR reductions considered ‘net’?
 - Yes, they are.

Incorporating New Resource Options in the IRP and Overview of Portfolio Modeling Approach

- **DSM Bundles**
- **2024 Request for Proposals (RFP) Tranche Review**
- **Other Resource Options**

Abe Lang, Manager Strategy & Risk, NiSource

Pat Augustine, Vice President, CRA

Patrick d’Entremont, Manager Planning Commercial Support, NIPSCO

Abe Lang provided a summary of the new resource types NIPSCO is evaluating as part of the 2024 IRP and their general availability and timing before handing the presentation to Pat Augustine, Vice President at CRA. Mr. Augustine first provided an overview of the DSM bundles to be deployed in the portfolio modeling, summarizing the potential and cost information reviewed in the earlier session by Mr. Huber and Mr. Smith. He explained that the IRP’s portfolio analysis would focus on the RAP bundles, with an Enhanced RAP analysis for energy efficiency and a MAP analysis for DR also to be performed via select sensitivity testing.

Patrick d’Entremont, Manager Planning Commercial Support at NIPSCO, then provided a review of NIPSCO’s 2024 RFP and a high-level summary of the offers received and their costs. Mr. Augustine then discussed how the RFP bids were turned into resource tranches for IRP portfolio modeling purposes and reviewed tranche-level detail for stand-alone storage, solar, hybrid solar

plus storage, and thermal and zonal resource credit (“ZRC”) tranches. He then provided a summary of additional generic supply-side resource options being evaluated in the IRP process and their associated costs and operational characteristics, including tax credit eligibility. Abe Lang then closed the section with an overview of the portfolio concepts that NIPSCO will be evaluating and the next steps in the analysis.

Participants had the following questions and comments, with answers provided after:

- How are the block sizes defined on the previous screen? Are they fixed or variable?
 - They are variable. Each tranche has a specific size based on the information provided via the RFP. We're not dividing the bids into equal sets of megawatts, but we're trying to organize them into natural characteristics and similar prices and attributes. So, as you can see on this slide, you've got a big tranche of storage PPA at about \$12 per kilowatt-month representing almost 770 megawatts, whereas the next tranche is at a higher price with a size of 200 megawatts. So, it is really dependent on the characteristics of the bids.
- Are these prices before or after the ITC/PTC?
 - These are prior to the ITC so all the prices that are noted here, at least for the ownership/sale tranches, are prior to any tax credits. So, this is the price that NIPSCO could acquire the project for, and then there would be a tax credit available for NIPSCO that would be taken after that acquisition price. So, the price is prior to any adjustment that could be made for the tax credit. I will note, however, that there is no further tax credit adjustments for the PPAs because the developer is presumed to monetize that tax credit as they would see fit. That net cost that is being offered in the RFP is essentially net of that tax credit. So, any PPAs here are post tax credit because we don't have visibility on how the developer is monetizing or taking that tax credit or calculating it into their ultimate offer price.
- For the two ZRCs, I thought I heard you say that there is a financial product associated with them. Can you please elaborate on that?
 - Yes, the offer that is being made is for capacity or zonal resource credits (“ZRCs”). I think I used the term “financial” just to note that this type of transaction would be NIPSCO paying the counterparty for rights to the ZRCs without a specific asset commitment. Thus, they are essentially financial transactions for capacity credits.
- Oftentimes, when we see assumptions around these IRA credits with other IRPs, they tended to assume all or nothing depending on the scenario that we're talking about. And, I think the reason for that is because that's oftentimes what had happened in the past. Therefore, it is essentially two different scenarios: one where you've had the tax credits available throughout the study period, and then one would expire--let's say 2035-- and they are not renewed. I do not see a scenario, or it does not seem likely to me that you would have a scenario, in which the value of the PTC and ITC would go down over a period of years. And then, CCS and Hydrogen credits would only be available over that short period of time. That seems like a big risk for these industries, and one I do not think would be politically possible. So, I think it makes more sense to extend these credits throughout the study period and then do a second sensitivity where you let them lapse, say in 2035.
 - This table here is aligned with the current law of the land, contingent upon certain nationwide CO2 emission reductions being achieved. I think you make a fair point that in the future, these could be further extended. I guess the long-term impacts may be somewhat muted in terms of what NIPSCO is looking at for its near and mid-term implementation plan. But, that's a fair comment and it is actually an easier modeling setup to just extend them over the full horizon if you want to look at it that way. We will consider this during the portfolio modeling phase.

- In terms of your--I know we're here on the electric side, but for NiSource and your gas business—have you guys done any assuming that perhaps that gas customer base would move to electric?
 - We have an electrification set of assumptions, which we reviewed at our June stakeholder meeting on June 24. So that deck is out there, where you can see how much electrification we're assuming within NIPSCO service territory. But we do not do a detailed call out of what is moving from gas to electric, we just have broader assumptions around electrification as it relates to our electric service territory.

2024 Public Advisory Process Next Steps
Tara McElmurry, Communications Manager, NiSource

Closing & Stakeholder Comments