
VERIFIED SUPPLEMENTAL DIRECT TESTIMONY OF PATRICK N. AUGUSTINE

1 **Q1. Please state your name, professional position, and business address.**

2 A1. My name is Patrick N. Augustine. I am a Vice President in Charles River
3 Associates' Energy Practice. My business address is 1201 F Street, NW,
4 Washington, DC 20004.

5 **Q2. On whose behalf are you submitting this supplemental direct testimony?**

6 A2. I am submitting this testimony on behalf of Northern Indiana Public Service
7 Company LLC ("NIPSCO").

8 **Q3. Are you the same Patrick N. Augustine who prefiled direct testimony in this**
9 **Cause?**

10 A3. Yes.

11 **Q4. What is the purpose of your supplemental direct testimony in this proceeding?**

12 A4. The purpose of my supplemental direct testimony is to provide additional
13 information relating to NIPSCO's shift in its proposed in-service date of its
14 proposed natural gas combustion turbine ("CT") peaker plant (the "CT Project")
15 on available property at NIPSCO's R.M. Schahfer Generating Station ("Schahfer")

1 site from end of year 2026 to end of year 2027. Specifically, I (i) explain updated
2 information Midcontinent Independent System Operator, Inc. ("MISO") has
3 provided related to planning reserve margin requirements ("PRMR") and capacity
4 accreditation since submission of my direct testimony; (ii) provide an update
5 about how the PRMR changes impact NIPSCO's supply/demand balance; and (iii)
6 reconfirm that the CT Project is consistent with the Short-Term Action Plan
7 identified in the 2021 IRP.

8 **Q5. Are you sponsoring any attachments to your supplemental direct testimony?**

9 A5. No.

10 **Q6. What is your understanding of drivers for the shift to the in-service date for**
11 **NIPSCO's CT Project?**

12 A6. From discussions with NIPSCO, I understand that, based on updated information
13 related to supply chain and key equipment procurement, NIPSCO is now
14 targeting an in-service date of not-later-than end of year 2027 for the CT Project,
15 rather than end of year 2026 as originally proposed.

16 **Q7. Please explain how the proposed shift to the in-service date for the CT Project**
17 **impacts NIPSCO's recent resource planning conclusions.**

1 A7. The shift to the in-service date will primarily impact NIPSCO's expected supply-
2 demand balance during calendar years 2026 and 2027 without affecting the long-
3 term evolution of NIPSCO's preferred portfolio that was outlined in NIPSCO's
4 2021 IRP and in the 2023 portfolio analysis presented in my direct testimony.
5 While the 2021 IRP and the 2023 portfolio analysis both incorporated the
6 assumption that new gas peaking capacity would be in service in 2026, NIPSCO's
7 2021 IRP explicitly called for the procurement of short-term capacity as needed
8 from the MISO market, and the 2023 portfolio analysis included an expectation
9 that short-term capacity purchase opportunities would be pursued through 2027.
10 Therefore, a 2027 in-service date for the CT Project, accommodated by capacity
11 market purchases to meet reserve margin requirements, remains consistent with
12 NIPSCO's most recent resource planning conclusions.

13 Furthermore, NIPSCO's recent resource planning analyses have identified thermal
14 peaking capacity as a needed portfolio addition based on a variety of key planning
15 objectives and metrics, particularly around reliability and cost. Therefore, the
16 proposed shift to the in-service date only impacts NIPSCO's short-term capacity
17 procurement plans and not the composition of NIPSCO's long-term preferred
18 portfolio.

1 UPDATED INFORMATION FROM MISO REGARDING PRMR, CAPACITY ACCREDITATION,
2 AND NIPSCO'S SUPPLY-DEMAND BALANCE

3 **Q8. You reference MISO's PRMR. What is a PRMR and how does it factor into an**
4 **electric utility's resource planning?**

5 A8. A PRMR represents the amount of capacity a load serving entity must maintain or
6 procure to meet MISO Resource Adequacy Requirements. The reserve margin is
7 generally represented as a percentage above the load serving entity's expected
8 peak load at the time of the MISO coincident system peak. MISO now develops
9 PRMR on a seasonal basis.

10 **Q9. How is NIPSCO's capacity accredited for purposes of calculating compliance**
11 **with MISO's PRMR?**

12 A9. The capacity accreditation process at MISO is very much in flux, as new
13 methodologies and approaches are developed in response to changing market
14 conditions.¹ However, to support annual planning reserve margin calculations,
15 MISO assigns accreditation to existing resources based on historical performance
16 and publishes analysis associated with the effective load carrying capability

¹ See MISO's recent whitepaper on Resource Accreditation for a review of current challenges and proposed accreditation reforms:
<https://cdn.misoenergy.org/Resource%20Accreditation%20White%20Paper%20Version%201.1630728.pdf>

1 ("ELCC") of intermittent resources to assign capacity accreditation value to wind
2 and solar projects.

3 **Q10. How have the PRMR and resource accreditation expectations been updated by**
4 **MISO since filing of NIPSCO's case-in-chief and your direct testimony in**
5 **September of 2023, and how does this impact NIPSCO's resource planning?**

6 A10. MISO published its final planning reserve margin ("PRM") requirements for the
7 upcoming 2024/25 planning year in December of 2023.² The PRM for summer was
8 increased to 9%, and the PRM for the winter was increased to 27.4%. The prior
9 year's PRMs for summer and winter were 7.4% and 25.5%, respectively. In
10 October of 2023, NIPSCO received updated accreditation information for its
11 portfolio of thermal resources, and ELCC estimates for wind and solar resources
12 were updated, with notable increases in winter accreditation for both solar and
13 wind to 12.8% and 53.1%, respectively.³ Prior assumptions for winter capacity
14 accreditation were 6.6% and 25% for solar and wind, respectively. While NIPSCO

² See Planning Year 2024-2025 Loss of Load Expectation Study Report summary report from MISO's Loss of Load Expectation Working Group from December 5, 2023: <https://cdn.misoenergy.org/LOLE%20Study%20Report%20PY%202024-2025631112.pdf>

³ See summary report from MISO's Loss of Load Expectation Working Group from October 17, 2023 <https://cdn.misoenergy.org/20231017%20LOLEWG%20Item%2003%20PY%202024-25%20LOLE%20Study%20Results630538.pdf>, p. 12.

1 expects future changes to resource accreditation as rules evolve and as actual
2 renewable project performance data is collected and used for future accreditation,
3 the net impact of the changes is an improved supply-demand balance outlook for
4 NIPSCO, particularly during the winter season.

5 **Q11. In your direct testimony, you provided an overview of the 2021 IRP's short-term**
6 **action plan and NIPSCO's progress to implement that plan as of September of**
7 **2023. What period of time does the IRP's short-term action plan cover, and what**
8 **did the 2021 IRP say about a proposed gas-fired generation facility?**

9 A11. Broadly, the short-term action plan covers activities to be undertaken for the two-
10 to-three year period after the submission of NIPSCO's 2021 IRP that are intended
11 to support the development of NIPSCO's preferred plan through 2028.⁴ With
12 regard to a proposed gas-fired generation facility, the short-term action plan from
13 the 2021 IRP called for NIPSCO to "perform deeper diligence on gas peaker and
14 storage projects from the 2021 RFPs, selecting projects that conform to the
15 preferred portfolio's requirements as NIPSCO tracks MISO guidelines,
16 Commission requirements, and system reliability needs" and "as needed, conduct

⁴ Note that the year 2028 is significant because the plan included a variety of actions associated with the anticipated retirements of both the Michigan City 12 coal plant and the existing Schahfer 16 A/B gas peaker units by that date.

1 a subsequent RFP(s) to identify additional resources that may be available with
2 attributes that are consistent with those required to implement the preferred
3 portfolio.”⁵ As noted in my direct testimony, NIPSCO has performed that
4 additional diligence on 2021 RFP projects, conducted additional RFPs, and
5 performed additional portfolio and reliability analysis in line with the IRP’s short-
6 term action plan to support NIPSCO’s application for the CT Project.⁶

7 **Q12. What were the key drivers of the need for a gas-fired resource?**

8 A12. Although I will not repeat everything included in my direct testimony, the
9 primary drivers for the proposed CT Project were as follows. First, as initially
10 identified in the 2021 IRP, NIPSCO will have a significant capacity need upon
11 retirement of Michigan City Unit 12 and Schahfer Units 16 A/B, and new natural
12 gas peaking capacity was identified as a required replacement, along with
13 incremental solar and storage capacity additions. Second, the proposed CT Project
14 provides required reliability attributes that were identified in the reliability
15 analysis performed as part of the 2021 IRP and through the Flexible Resource

⁵ 2021 IRP at p. 2 and p. 266.

⁶ Note that the short-term action plan also explicitly called for NIPSCO to “perform additional reliability analysis within the NIPSCO system as needed to ensure evolving portfolio meets all reliability needs and requirements.”

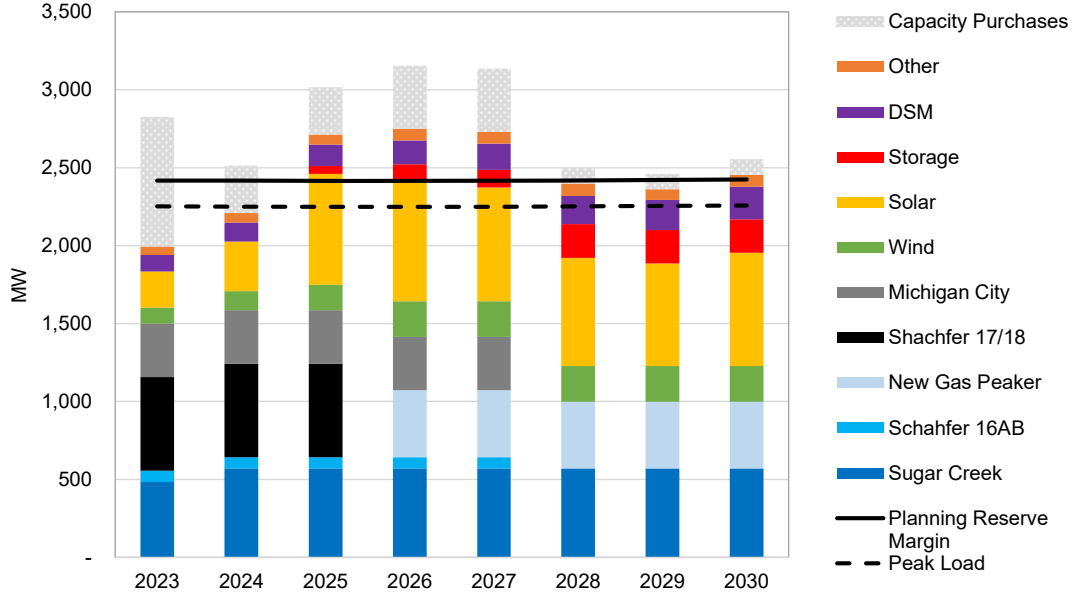
1 Analysis that NIPSCO performed subsequent to the completion of the 2021 IRP.
2 Importantly, there was nothing in the 2021 IRP or 2023 portfolio analysis that
3 identified 2026 as the date by which a gas-fired resource must be operational in
4 order to meet the need being filled by the CT Project.

5 **Q13. From a *capacity* perspective,⁷ when was the CT Project needed to reach**
6 **commercial operation?**

7 A13. From a capacity perspective, the expected retirements of Unit 12 at the Michigan
8 City Generation Station and Units 16 A/B at Schahfer by 2028 were the driving
9 factors for the addition of significant additional capacity like the CT Project. In my
10 direct testimony, I included two charts that showed NIPSCO's "summer supply-
11 demand balance" and "winter supply-demand balance." For sake of comparison,
12 I am including these same charts here.

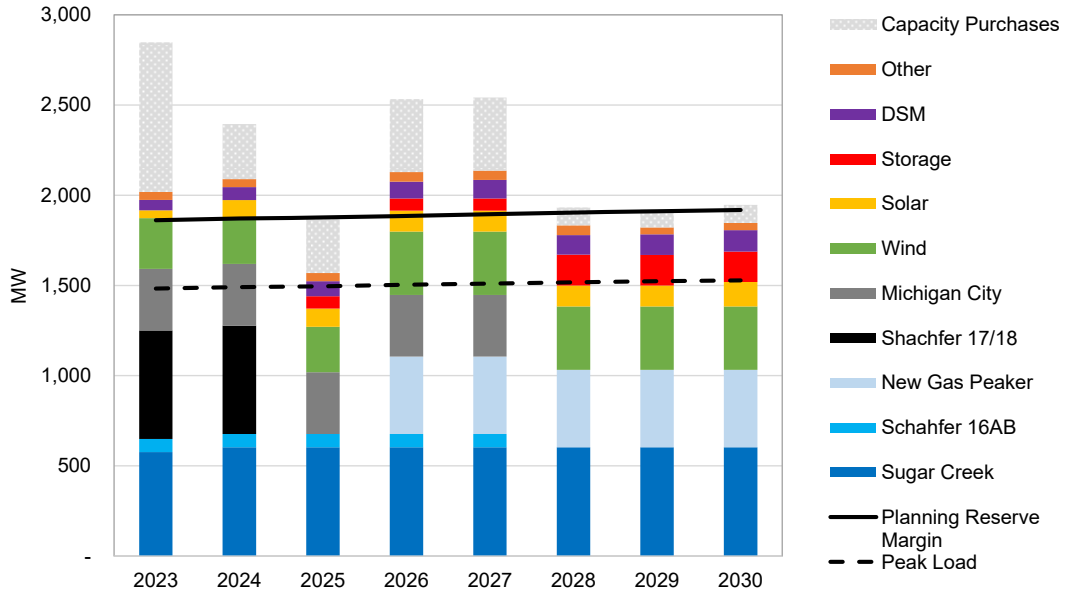
⁷ As discussed throughout NIPSCO's case-in-chief, the CT Project is driven by several factors, only one of which is capacity.

Summer Supply-Demand Balance



1

Winter Supply-Demand Balance



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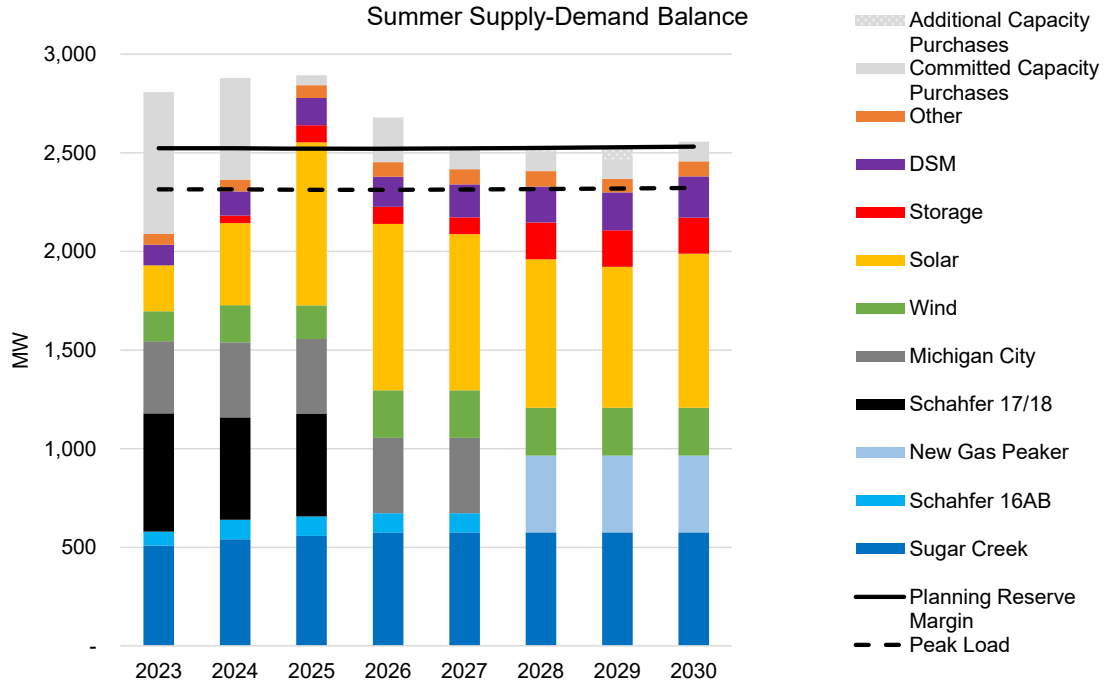
1 My direct testimony noted that the “capacity purchases” block was not all firm
2 and subject to changes in NIPSCO’s year-to-year capacity procurement strategy,⁸
3 but in both charts, NIPSCO’s capacity position was expected to be generally well
4 covered through 2027, while Michigan City Unit 12 (the dark grey portion of each
5 bar for 2023-2027) remains in service. As shown, however, a much bigger need for
6 new capacity is expected by 2028 when Unit 12 retires. Thus, an in-service date of
7 not-later-than the end of 2027 is consistent with the 2021 IRP and its short-term
8 action plan and presents no concerns from a resource planning perspective.

9 **Q14. Based on the changes presented in NIPSCO’s supplemental testimony—**
10 **including the change to the CT Project’s in-service date, updated PRMR and**
11 **capacity accreditation information from MISO, and capacity purchases**
12 **discussed by NIPSCO Witness Stanley—what do the summer and winter**
13 **supply-demand balances look like for NIPSCO?**

14 A14. The summer and winter supply-demand balances, inclusive of the latest
15 information associated with updated MISO PRMR and capacity accreditation
16 information, along with the capacity purchases already made by NIPSCO, are

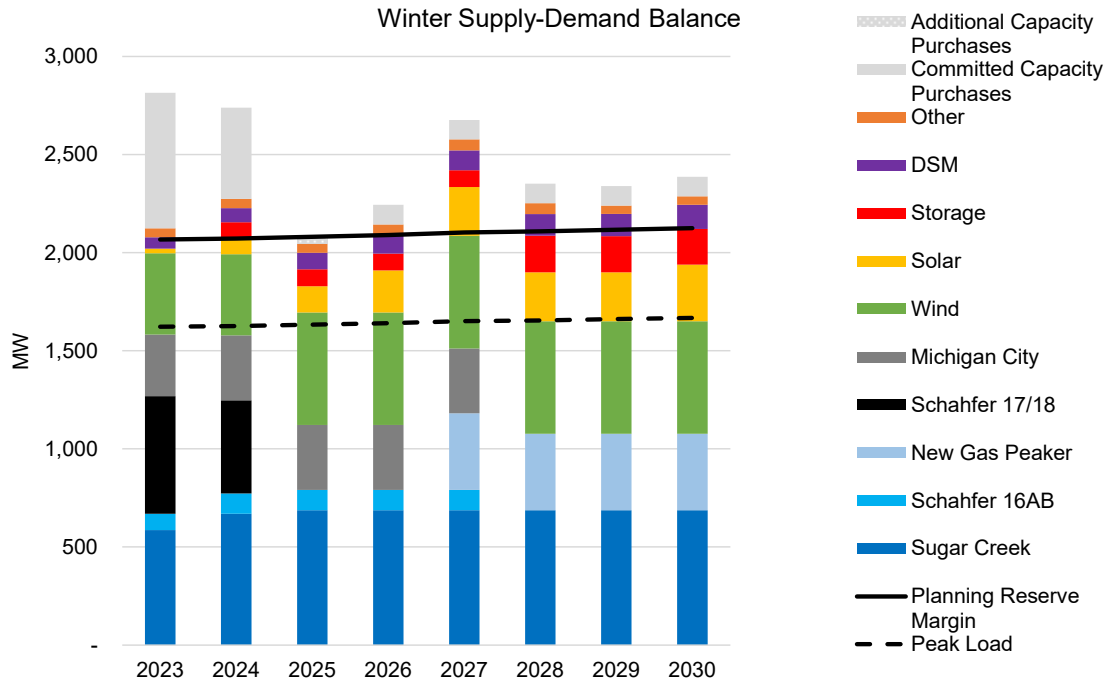
⁸ See footnote 27 in my direct testimony.

1 summarized below, with supporting detail provided in the workpaper filed with
 2 this supplemental testimony.⁹



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⁹ Note that committed capacity purchases already made by NIPSCO are shown in solid light gray towards the top of the stacked bar, while additional required capacity purchases not yet secured by NIPSCO are shown in the patterned light gray at the very top.



1

2 **Q15. The new charts provided immediately above show some level of capacity**
 3 **purchases or the summer season in 2026 through 2029. Is this consistent with**
 4 **the 2021 IRP and NIPSCO's historical resource planning?**

5 **A15. Yes. NIPSCO has historically purchased short-term capacity from the market to**
 6 **meet capacity requirements as needed. In fact, purchases of over 500 MW were**
 7 **made for the 2023 and 2024 summer seasons to accommodate delays in solar**
 8 **projects after two coal units at the Schahfer site were retired, and NIPSCO's recent**
 9 **IRPs have included short-term bilateral capacity purchases as part of the preferred**
 10 **portfolio. For example, NIPSCO executed a 10-year 100 MW bilateral capacity**
 11 **purchase from the 2021 RFP based on the 2021 IRP's preferred portfolio, and the**

1 short-term action plan explicitly noted that NIPSCO should “procure short-term
2 capacity as needed from the MISO market or through short-term bilateral capacity
3 transactions.”¹⁰

4 **Q16. Earlier in your supplemental testimony, you discussed changes to MISO’s**
5 **PRMR and capacity accreditation. Have there been any other material changes**
6 **that required changes or updates to the analysis you presented in your direct**
7 **testimony?**

8 A16. Any resource plan is a “snapshot in time” based on the best available information
9 and certain assumptions about potential future outcomes across a wide range of
10 factors. For example, my direct testimony included an entire section titled
11 “Additional Developments since the Submission of NIPSCO’s 2021 IRP” for this
12 very reason. As NIPSCO’s planned in-service date was being updated, I evaluated
13 whether any key factors or inputs had changed *materially* to require the analysis
14 presented in my direct testimony to be updated. Ultimately, I determined that the
15 updated MISO guidance associated with PRMR and capacity accreditation which

¹⁰ 2021 IRP at p. 3 and p. 266.

1 impacted the supply/demand balance (discussed immediately above) was the only
2 such material change.

3 CONSISTENCY WITH THE 2021 IRP

4 **Q17. How does the relief requested in this proceeding continue to support the**
5 **conclusions of NIPSCO's 2021 IRP and short-term action plan, as well as the**
6 **subsequent analyses undertaken by NIPSCO?**

7 A17. The change in in-service date does not impact the operational and cost
8 characteristics of the CT Project, which were shown to be fully consistent with the
9 assumptions for new peaking thermal resources used in the 2023 portfolio
10 analysis. Meanwhile, the conclusions of NIPSCO's Flexible Resource Analysis and
11 the 2021 IRP's reliability analysis, which identified the need for long-duration,
12 dispatchable capacity such as the CT Project in NIPSCO's preferred portfolio, still
13 hold. The change in in-service date primarily alters the amount of capacity
14 purchases required during 2026 and 2027, but the 2021 IRP's short-term action
15 plan explicitly called for making such purchases as needed, and NIPSCO has
16 regularly done so in recent years to meet year-to-year capacity needs. Based on
17 the latest information from MISO regarding PRMR and capacity accreditation, the
18 capacity purchase requirements through 2027 should be manageable and in line

1 with historical levels, although NIPSCO will need to continue to actively monitor
2 market conditions and evolving MISO rules as part of its ongoing capacity
3 procurement plans. Overall, the addition of the CT Project to NIPSCO's portfolio
4 continues to be fully supported by and consistent with the conclusions of
5 NIPSCO's Flexible Resource Analysis, the 2023 portfolio analysis, and the
6 flexibility embedded in the short-term action plan from NIPSCO's 2021 IRP.

7 **Q18. Does this conclude your prefiled supplemental direct testimony?**

8 A18. Yes.

VERIFICATION

I, Patrick N. Augustine, Vice President, Charles River Associates, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information, and belief.

A handwritten signature in cursive script, appearing to read "Patrick N. Augustine", written over a horizontal line.

Patrick N. Augustine

Dated: January 16, 2024