VERIFIED DIRECT TESTIMONY OF DAVID T. WALTER

Q1. Please state your name, business address and title.

A1. My name is David T. Walter. I am the Vice President, Power Delivery for Northern Indiana Public Service Company LLC ("NIPSCO"). My business address is 801 East 86th Avenue, Merrillville, Indiana 46410.

Q2. Please briefly describe your educational and business experience.

A2. I have served as the Vice President, Power Delivery responsible for leading the organization's power delivery since August 2019. I have more than 20 years of experience of strategic problem solving and process improvement in the utility industry and have held a number of leadership and officer roles spanning operations and safety. Prior to serving as Vice President of Power Delivery for NIPSCO, I served as Director of Operations for Electric Generation and then Vice President Electric Generation beginning in September of 2015, and was responsible for NIPSCO's generating stations and fuel procurement. Prior to joining NIPSCO in September of 2015, I was employed by Consumers Energy ("CMS Energy") in Michigan where I last held the position of Plant Manager/Director. I served at CMS Energy for 10 years, where I held numerous positions including Maintenance

Superintendent, Operations Superintendent, Fuel Supply Manager, and Plant Manager/Station Director.

Q3. What are your responsibilities as Vice President of Power Delivery?

A3. As Vice President of Power Delivery, I am responsible for managing NIPSCO's transmission and distribution assets and technical services to provide safe, reliable electricity to NIPSCO's customers. I am also responsible for ensuring NIPSCO operates in compliance with all state and federal environmental regulations. I provide oversight of the Power Delivery department's fleet operating and maintenance expense budgets as well as the fleet's capital improvement projects. I provide oversight of the planning and execution of the fleet's outages and development of long range outage plans. I work closely with the senior management team to develop and implement business plans which align with NIPSCO's goals.

Q4. Have you previously testified before the Indiana Utility Regulatory Commission ("Commission") or any other regulatory commission?

A4. Yes. I previously submitted testimony before the Commission in NIPSCO's Environmental Cost Recovery tracker proceedings in Cause No. 42150-ECR-XX (beginning in ECR-28).

Q5. What is the purpose of your direct testimony in this Cause?

A5. The purpose of my direct testimony is to support NIPSCO's request for a certificate of public convenience and necessity ("CPCN") to construct a natural gas combustion turbine ("CT") peaker plant (the "CT Project") on available property at NIPSCO's R.M. Schahfer Generating Station ("Schahfer") site. Specifically, I describe NIPSCO's current generation fleet and explain the ultimate portfolio NIPSCO currently expects to have in place to serve its customers after its coal-fired generating units are retired over the next five (5) years. I also briefly describe NIPSCO's Integrated Resource Planning ("IRP") process and discuss how the proposed CT Project complements NIPSCO's current fleet of resources and allows NIPSCO to address certain challenges associated with its ongoing generation transition. I describe how the CT Project qualifies as a clean energy project for purposes of Ind. Code ch. 8-1-8.8. I discuss how the proposed CT Project addresses reliability, resiliency, stability, affordability, and environmental stability. I provide a brief explanation of the U.S. Environmental Protection Agency's ("EPA") proposed greenhouse gas ("GHG") emissions standards. Finally, I conclude by explaining why

NIPSCO's request should be approved and a CPCN should be issued by the Commission.

Q6. Are you sponsoring any attachments to your direct testimony in this Cause?

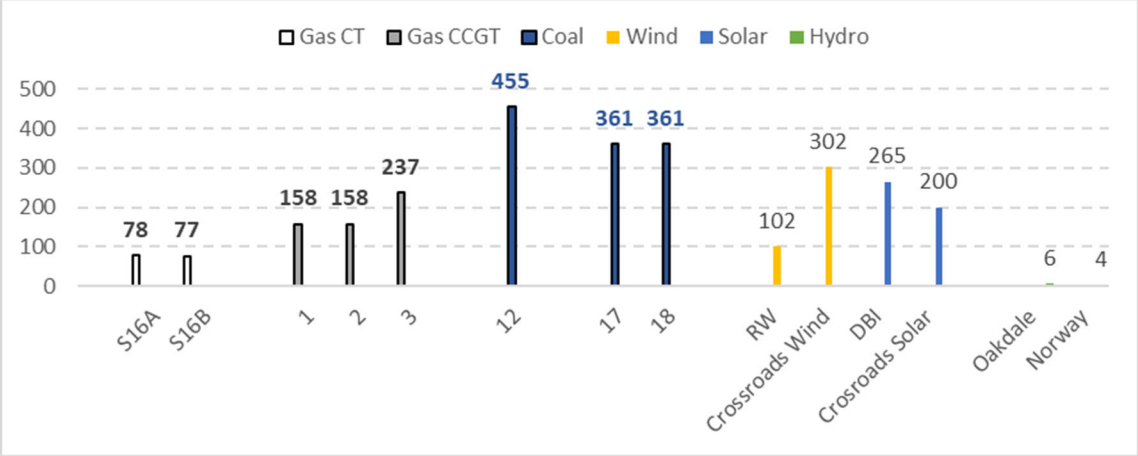
A6. No.

NIPSCO's Generation Fleet

Q7. Please generally describe NIPSCO's generation fleet.

A7. The NIPSCO generating facilities have a total installed capacity of 2,764 net MWs and consist of nine (9) separate generation sites, including Schahfer (Units 16A, 16B, 17 and 18), Michigan City Generating Station ("Michigan City") (Unit 12), Sugar Creek Generating Station ("Sugar Creek") (SC1, SC2, and SS1), Rosewater Wind Farm, Indiana Crossroads I Wind Farm, Dunn's Bridge I Solar Farm, Indiana Crossroads Solar Farm, and two (2) hydroelectric generating sites (Oakdale and Norway). Of the total capacity, 42.6% is from coal-fired units, 25.6% is from natural gas-fired units, 14.6% is from wind, 16.8% is from solar, and 0.4% is from hydroelectric units. Figure 1 illustrates the installed net capacity and unit identification of NIPSCO's generating units.

Figure 1. Installed net capacity of generating units (MW)



Integrated Resource Planning Process

Q8. Please provide an overview of NIPSCO's IRP process.

A8. As required by Ind. Code ch. 8-1-8.5, at least every three years, NIPSCO undertakes development of an IRP. Its most recent IRP cycle began in the fall of 2020 and resulted in NIPSCO submitting its 2021 IRP to the Commission on November 15, 2021. The overall purpose of the IRP is to ensure NIPSCO can deliver safe, reliable, and affordable electricity to all its customers at just and reasonable rates. The 2021 IRP explains how NIPSCO will use existing and future resources to meet customer demand and outlines how NIPSCO considered a broad range of potential future conditions and variables to select a combination that would provide reliable service in an efficient and cost-effective manner.

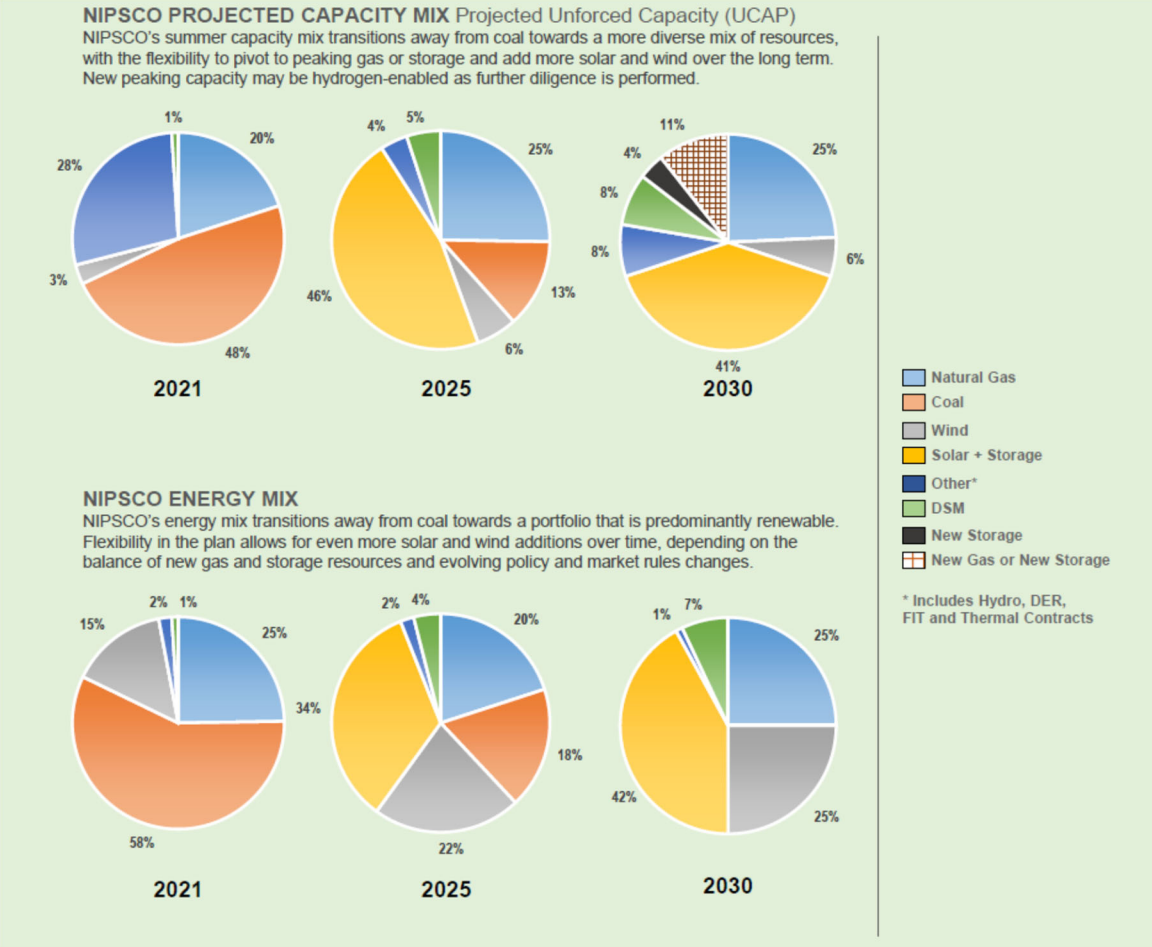
Although the IRP process is discussed in greater detail by NIPSCO Witness Augustine, I would emphasize that this process includes numerous opportunities for feedback from and engagement with NIPSCO's various stakeholders, as well as a process for stakeholders and the Commission's Director of Research, Policy, and Planning Division to offer formal comments in response to NIPSCO's 2021 IRP.

Q9. At a high level, what actions did the 2021 IRP call for, and what actions has NIPSCO taken in response to the 2021 IRP?

A9. Each NIPSCO IRP includes a "preferred portfolio," which is the preferred mix of generation resources for NIPSCO based on consideration of numerous factors, including (1) affordability, (2) rate stability, (3) environmental sustainability, (4) reliable, flexible, and resilient supply, and (5) positive social and economic impacts.[1] Figure 2 below shows NIPSCO's expected capacity and energy mix by 2025 and 2030 per the 2021 IRP.

[1] See Section 2.3 of the 2021 IRP for more information on each of these.

Figure 2[2]



Each IRP also includes a "short term action plan," which outlines the steps NIPSCO needs to take over the next several years as it seeks to move towards the Preferred Portfolio. Figure 3 below lists the actions NIPSCO expected to undertake between 2022 and 2028.

[2] This chart is from page 14 of the Executive Summary included in NIPSCO's 2021 IRP, attached to NIPSCO Witness Augustine's testimony as Attachment 7-A.

Figure 3[3]

	NEAR TERM ACTIONS (2022-2025)	MID-TERM ACTION (2026-2028)
RETIRE	• Schahfer Units 17 and 18 (by 2023)	• Michigan City Unit 12 • Schahfer Units 16A and 16B
PREPARE	• MC12-related transmission projects • Further diligence to optimize quantities and resource types • Secure approvals for replacement projects	• Full implementation of Transmission projects • Secure approvals for replacement projects • Optimize quantities/resource types
REPLACE	• ~3,000MW of wind/solar projects approved by the IURC • Currently approved DSM plan and future approved DSM plan • NIPSCO Owned DER (up to 10MW) • Short term Capacity Contracts (150MW) • Storage (135-370MW*)	• Sugar Creek Uprate (30-53MW) • Solar (100-250MW) • Storage (135-370MW*) • Gas Peaking (up to 300MW) • Hydrogen Electrolyzer Pilot (20MW**)
ONGOING		
MONITOR	• Actively monitor changing federal/state policy, MISO market rules and technology advancements	

* Exact Storage ICAP MW to be optimized
**Assumes Green Hydrogen; Quantities to be optimized

For the first time, NIPSCO's 2021 IRP also included a formal "Non-Economic Reliability Assessment," which evaluated each potential portfolio based on the following reliability criteria and metrics: (1) blackstart capability, (2) energy adequacy, (3) dispatchability, (4) operational flexibility and frequency support, (5) volt-ampere reactive ("VAR") support, (6) location, (7) predictability and firmness, and (8) short circuit strength. This is discussed at length in section 9.2.7 of the 2021 IRP (Non-Economic Reliability Assessment) and is discussed in detail by

[3] This chart is from page 15 of the Executive Summary included in NIPSCO's 2021 IRP, attached to NIPSCO Witness Augustine's testimony as Attachment 7-A.

NIPSCO Witness Austin.

Q10. Over the next several years, what changes are expected to NIPSCO's generation fleet?

A10. This is an incredibly dynamic time in the electric industry generally and for NIPSCO specifically, as NIPSCO is in the midst of its transition from a heavily coal-fired generation portfolio to one that is more affordable, diverse, reliable, resilient, and sustainable. Although NIPSCO cannot predict the future, NIPSCO is tasked with identifying the best suite of resources to serve its customers and executing on those identified needs to ensure reliability and resiliency of its system. By the end of 2028, NIPSCO expects all its coal-fired generation to be retired, with Schahfer Units 17 and 18 retiring by the end of 2025 and Michigan City Unit 12 retiring by the end of 2028. NIPSCO's gas-fired peaking units at Schahfer (Units 16A and 16B) are also projected to retire by the end of 2026.

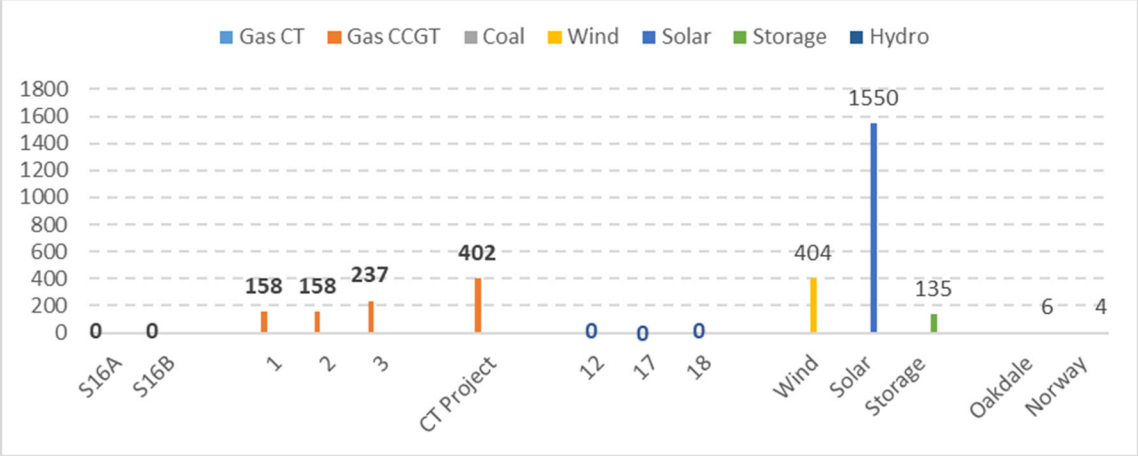
In addition to the substantial solar and wind generation that has come online between 2021 and present, NIPSCO has several other wind, solar, and storage projects that are in various stages of development but that will be in service by the time NIPSCO's coal-fired generation retires. This is

further discussed by NIPSCO Witness Campbell. Additionally, Sugar Creek is undergoing an "uprate" that is expected to be complete by late 2023, which will increase the capacity of this station by 40 MW to 46 MW. The CT Project NIPSCO is proposing at this time is expected to be in service by the end of 2026, and it will increase NIPSCO's gas-fired generation total by about 400 MW.[4]

Following all of the currently-planned retirements and additions, by the end of 2028, NIPSCO expects its generating facilities to have a total installed capacity of approximately 3,054 net MWs. Of the total capacity, 0% will be from coal-fired units, 31.3% is from natural gas-fired units, 13.2% is from wind, 55.2% is from solar and solar + storage, and 0.3% is from hydroelectric units. Figure 4 illustrates the anticipated installed net capacity by resource at the end of 2028.

[4] As discussed by NIPSCO Witness Augustine, NIPSCO's generation resource planning is guided by its IRP process. NIPSCO expects to complete a 2024 IRP and a 2027 IRP before the end of 2028, and its ultimate resource mix will be informed by such analysis. NIPSCO Witness Augustine also discusses how NIPSCO's current and future generation projects are informed directly by its IRP.

Figure 4. Anticipated installed net capacity of generating units (MW)



This is generally consistent with NIPSCO's 2021 IRP's short-term action plan, although NIPSCO Witness Augustine discusses changes that have occurred in the last 18 to 24 months and the portfolio analysis that Charles River Associates ("CRA") and NIPSCO performed in 2023 (the "2023 portfolio analysis"), which have both informed NIPSCO's current path forward, including the appropriate size of the proposed CT Project.

Q11. What challenges is NIPSCO currently facing or expecting to face as it undergoes this transition, while also ensuring the delivery of safe and reliable electricity to its customers?

A11. As is being further explained by several witnesses, a challenge faced by all electric utilities across the Midcontinent Independent System Operator, Inc. ("MISO") footprint is having a generation portfolio that complements the

rapidly expanding role of renewable resources. Renewable resources are a tremendous development in power generation, and they play a significant role in NIPSCO's generation transition. But renewable resources are intermittent and are not dispatchable. The availability of energy from renewable resources does not follow the load. In order to have generation available when the load is there but sufficient energy from renewable resources is not, it is critical to have sufficient fast-starting, quick-ramping dispatchable generation. That is the need the CT Project fills.

CT Project

Q12. Please provide a brief overview of the CT Project NIPSCO is seeking approval of in this proceeding.

A12. The CT Project is planned to be approximately 400 MW and is expected to consist of one larger industrial frame unit with three smaller aeroderivative or similarly sized industrial frame units. This combination of units will complement each other and allow NIPSCO flexibility in how the units are dispatched. The CT Project will be located on available property at NIPSCO's Schahfer site, which will allow NIPSCO to utilize the interconnection rights associated with Units 17 and 18, which will be retiring by the end of 2025, and is expected to be in service by the end of

2026. NIPSCO Witness Campbell discusses the interconnection rights at Schahfer, which provide customers a more timely and cost effective outcome.

Q13. Is the CT Project consistent with NIPSCO's 2021 IRP and the 2023 portfolio analysis?

A13. Yes. NIPSCO's 2021 IRP concluded that new generation additions should be predominantly renewable resources, supplemented by a diverse mix of other technologies, including an uprate to NIPSCO's existing Sugar Creek combined cycle, new thermal peaking capacity, new energy storage capacity, new distributed energy resources, and additional demand side management programs. Specifically, the 2021 IRP preferred portfolio calls for the addition of gas peaking capacity in 2026. As NIPSCO Witness Augustine explains in more detail, these conclusions were informed by review of all metrics on NIPSCO's integrated scorecard, including cost to customer, scenario and stochastic-based cost risk, carbon emissions, resource optionality, impacts on the local economy, and a comprehensive quantitative reliability assessment. NIPSCO Witness Austin also describes NIPSCO's 2021 analysis of ancillary services, dispatchability, and other technical reliability parameters, which support the CT Project request. The

2021 IRP also considered evolving MISO market rules related to intermittent resource accreditation, seasonal reserve margin planning, and other reliability planning considerations, and concluded that additional dispatchable resources like thermal peaking capacity and storage were necessary additions to the portfolio. The operational and cost characteristics of the CT Project are also fully consistent with the assumptions for thermal resources used in the 2023 portfolio analysis, which developed a preferred portfolio with between 400 MW and 442 MW of new nameplate thermal capacity additions in the near-term.

Q14. Is the CT Project consistent with the Commission's statewide analysis for the expansion of electric generating capacity?

A14. Yes. As has been explained by the Commission, the statewide analysis is ongoing. The most recent report of that analysis is somewhat dated, as multiple IRPs have been completed since that most recent report. In my view, NIPSCO's proposed CT Project is consistent with the current status of the Commission's statewide analysis of the expansion of electric generating capacity.

Q15. What benefits are associated with a natural gas combustion turbine peaker plant generally?

A15. The 2023 portfolio analysis demonstrated that NIPSCO can achieve cost savings for its customers relative to the 2021 IRP's preferred plan by pivoting towards a thermal resource, as this resource serves to ensure reliability and resiliency of NIPSCO's electric operations, to provide stronger winter capacity accreditation under MISO's new seasonal resource adequacy construct, and to provide a hedge against high energy market pricing in a growing number of days. As discussed by NIPSCO Witnesses Austin and Augustine, there are also certain attributes that currently can only be provided by thermal resources, such as a gas-fired combustion turbine.

Q16. Will the CT Project displace electricity generation from an existing coal fired generation facility?

A16. Yes. The CT Project will displace electricity generated from the coal-fired generating facilities at Schahfer Units 17 and 18 (when retired by the end of 2025) and Michigan City Unit 12 (when retired by the end of 2028).

Q17. Please explain the keys factors NIPSCO must keep in mind as it operates its current generation fleet and plans for its future generation fleet, as well as how NIPSCO evaluated the CT Project in light of those factors.

A17. The list of factors that could be considered is numerous. But there are some key factors that are top of mind for NIPSCO as it looks to serve its electric customers, which align with the "Five Pillars" recently put forth by Indiana's 21st Century Energy Policy Development Task Force.

Reliability[5] and Resiliency[6]

Reliability is about ensuring customers have the power they need when they need it. Electric utilities must ensure they have energy available to meet customers' needs every hour of every day—including periods of peak demand and times when any given generation unit(s) may be in outage.

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[5] Under Ind. Code § 8-1-2-0.6(1), Reliability includes:
(A) the adequacy of electric utility service, including the ability of the electric system to supply the aggregate electrical demand and energy requirements of end use customers at all times, taking into account:
(i) scheduled; and
(ii) reasonably expected unscheduled; outages of system elements; and
(B) the operating reliability of the electric system, including the ability of the electric system to withstand sudden disturbances such as electric short circuits or unanticipated loss of system components.

[6] Under Ind. Code § 8-1-2-0.6(3), Resiliency includes:
the ability of the electric system or its components to:
(A) adapt to changing conditions; and
(B) withstand and rapidly recover from disruptions or off-nominal events.

Reliability also includes operating in compliance with applicable Federal Energy Regulatory Commission orders and North American Electric Reliability Corporation ("NERC") Reliability Standards, something discussed further by NIPSCO Witness Austin.

Resiliency is a similar but distinct concept that is concerned with ensuring availability of electricity under changing or extraordinary system conditions. This would include the system's ability to respond to an acute system emergency or unexpected outage, as well as longer-term resiliency based on evolving market rules, changing weather patterns, or climate-related phenomena.

The Non-Economic Reliability Assessment, included as Confidential Appendix E to NIPSCO's 2021 IRP, evaluated each potential portfolio based on the following reliability criteria and metrics: (1) blackstart capability, (2) energy adequacy, (3) dispatchability, (4) operational flexibility and frequency support, (5) VAR support, (6) location, (7) predictability and firmness, and (8) short circuit strength. This list of criteria was explicitly focused on both reliability and resiliency. Additionally, reliability and resiliency of NIPSCO's electric operations was a driving factor in

undertaking the Non-Economic Reliability Assessment, which directly led NIPSCO to seek approval of the CT Project. NIPSCO has a need for additional winter capacity, and the CT Project will be a key part of ensuring both the reliability and resiliency of NIPSCO's electric operations.

Stability[7]

There are at least two aspects to stability. One relates to the stability of the rates customers pay and is discussed below in the "Affordability" sub-section. The other is stability of the electric system itself and is closely related to concepts or Reliability and Resiliency discussed immediately above. With regard to system stability, as more fully discussed by NIPSCO Witness Austin, while renewable resources have a role to play in future generation, it is essential for NIPSCO to maintain dispatchable generation for grid reliability and stability. Integrating flexible, dispatchable resources that quick-start and fast-ramp will be paramount as renewable resources increase.

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[7] Under Ind. Code § 8-1-2-0.6(4), Stability includes:
the ability of the electric system to:
(A) maintain a state of equilibrium during:
(i) normal and abnormal conditions; or
(ii) disturbances; and
(B) deliver a stable source of electricity, in which frequency and voltage are maintained within defined parameters, consistent with industry standards.

Affordability and Rate Stability[8]

Whether it be a residential customer who needs air conditioning in the summer or heat in the winter, or a large manufacturing customer whose market competitiveness is impacted by the cost of each kilowatt-hour of electricity consumed to make their product, customers rely on NIPSCO to provide the energy they need at a price they can afford. As NIPSCO began its generation transition following its 2018 IRP, the move away from coal-fired to renewable generation was driven primarily by the estimated monetary savings for customers over the life of the generating assets NIPSCO would be investing in. As further discussed by NIPSCO Witness Augustine, "affordability" and "rate stability" were key considerations for NIPSCO under the 2021 IRP and 2023 portfolio analysis. Mr. Augustine also details how the 2023 portfolio analysis pointed towards a larger gas peaker (and additional wind resources) as leading to lower costs for customers, as compared to the short term action plan from the 2021 IRP.

Important as well, the CT Project is an essential part of NIPSCO's overall generation portfolio, as NIPSCO would be significantly challenged to

[8] Under Ind. Code § 8-1-2-0.6(2), Affordability includes:
ratemaking constructs that result in retail electric utility service that is affordable and competitive across residential, commercial, and industrial customer classes.

maintain reliability and resiliency as it moves towards a more renewable-heavy portfolio without this resource. Thus, the CT Project is at least partially responsible for unlocking the long-term customer savings that are expected from NIPSCO's overall generation transition.

Environmental Sustainability[9]

Throughout the Your Energy, Your Future campaign, which is the title NIPSCO attached to its generation transition, NIPSCO has sought to bring a sustainable balance of cleaner, lower-cost renewable energy to its portfolio. NIPSCO is on track to retire all its coal-fired generation by 2028 and to reduce its carbon emissions from its electric operations by 90%, measuring from a 2005 baseline. As noted above, cost-to-customer and affordability were the driving force behind NIPSCO transitioning to more renewable generation, but the reduction in carbon dioxide ("CO_2") emissions, elimination of byproducts from continuing to burn coal, and other positive environmental effects are also important. NIPSCO's transition to more renewable generation resources has also been informed

[9] Under Ind. Code § 8-1-2-0.6(5), Environmental Sustainability includes:
(A) the impact of environmental regulations on the cost of providing electric utility service; and
(B) demand from consumers for environmentally sustainable sources of electric generation.

by the growing desire of many customers—including large customers—to be served by zero-carbon resources.

NIPSCO expects that some stakeholders would prefer that NIPSCO only implement renewable generation resources going forward. However, as NIPSCO's evidence in this case demonstrates, that is not the most prudent or cost-effective path for NIPSCO and its customers. The CT Project will enable NIPSCO to continue down the path to a more diverse, reliable, resilient, affordable, and sustainable portfolio. Even with the addition of the CT Project, NIPSCO is on target to achieve its goal of reducing CO_2 emissions by 90% by 2030.

The CT Project will also complement NIPSCO's growing renewable portfolio and is needed so that NIPSCO can have generation that can quickly ramp and follow load, as intermittent resources cannot always be ramped up or down when load is changing. NIPSCO does not expect the CT Project to run like a "base-load" generation unit; instead, it will be utilized during shorter periods of time. Given that dispatch, NIPSCO expects the CT Project to have a relatively low capacity factor when compared to NIPSCO's Sugar Creek facility, which means it will have lower

emissions as well. Finally, as discussed below, the CT project will also be equipped to blend some level of zero-carbon hydrogen as a fuel source in the future.

Q18. Is the proposed CT Project consistent with the Five Pillars codified in Ind. Code § 8-1-2-0.6?

A18. Yes. In addition to myself, NIPSCO Witnesses Augustine, Austin, and Campbell address the reliability attributes of the CT Project. Overall, as part of NIPSCO's preferred generation portfolio, the CT Project will address both reliability concepts described in Ind. Code § 8-1-2-0.6 by providing adequate, dispatchable capacity that complements NIPSCO's renewable generation by providing fast-starting/quick-ramping dispatchable generation that will follow the load and will also meet the planning reserve requirements of the MISO seasonal resource adequacy construct. The CT Project will further enhance the ability of the system to withstand sudden disturbances. As noted above, the CT Project is consistent with NIPSCO's 2021 Non-Economic Reliability Assessment, performed in conjunction with and included as Confidential Appendix E to NIPSCO's 2021 IRP.

NIPSCO Witness Augustine addresses NIPSCO's 2021 IRP and preferred portfolio, which reflects a diverse resource mix to meet current and future load and reserve margin requirements. The preferred portfolio, of which the CT Project is an important component, enhances the resiliency and stability of NIPSCO's system by minimizing the risk of sustained disruptions. This balanced approach will ensure NIPSCO continues to have sufficient dispatchable generation that will follow NIPSCO's load in all four seasons.

NIPSCO Witness Augustine also addresses how the preferred portfolio, which includes the CT Project, was among the most affordable for customers, particularly in light of the supply chain and solar tariff-related challenges the industry has faced in recent years. The preferred portfolio is also environmentally sustainable; it reduces lifecycle greenhouse gas emissions, as compared to continued operation of NIPSCO's coal-fired fleet and provides the flexibility to adapt to future environmental regulations or upward shifts in fuel prices relative to other reference case assumptions.

Q19. Did NIPSCO consider the potential of converting Schahfer Units 17 and 18 to gas-fired units?

A19. As discussed by NIPSCO Witness Augustine, in a prior IRP, NIPSCO considered converting Schahfer Units 17 and 18, which are currently baseload coal-fired units, to natural gas. NIPSCO's 2018 IRP determined this would have been a much more costly solution for customers. Further, it would not have been a viable solution for the needs identified in the IRP—such as for quick-start, fast-ramping, or other reliability-related attributes.

Q20. Understanding that NIPSCO has another IRP planned for the fall of 2024, why is NIPSCO not waiting until that IRP is complete to seek approval of the CT Project?

A20. In short, NIPSCO's decision to seek approval of the CT Project now is driven by NIPSCO's need to have the asset in service by the end of 2026. If NIPSCO were to wait until sometime after the fall of 2024 to seek approval, the needed units could not be in service until late 2027 at the earliest. For example, even assuming an RFP for gas-fired generation was run concurrent with the 2024 IRP, a regulatory filing likely would not be feasible until early 2025, and with a 240-day procedural schedule, it is unlikely NIPSCO could have Commission approval and issuance of a CPCN until late 2025. Additionally, as explained in detail by NIPSCO Witness Augustine, NIPSCO proactively worked with CRA to complete the

2023 portfolio analysis, and this very recent analysis both supports and informs NIPSCO's proposed CT Project.

Q21. In Figure 3 above (the chart showing the 2021 IRP short term action plan), it indicates the need for gas peaking up to 300 MW. Why is NIPSCO seeking approval of a facility that is larger than 300 MW?

A21. As more fully described by NIPSCO Witness Augustine, the 2023 portfolio analysis developed a preferred portfolio with between 400 MW and 442 MW to better mitigate against high-priced hours in the market, which are estimated to increase. Based on that analysis, NIPSCO determined it was prudent to seek approval of the CT Project at approximately 400 MW.

Q22. Did NIPSCO evaluate whether battery storage was an option to fill the identified resource need, instead of gas-fired generation?

A22. In short, yes. Both as part of the 2021 IRP and subsequent to it, NIPSCO has issued an "all-source RFP" seeking potential resource options from any-and-all resource types. These RFPs are discussed further by NIPSCO Witness Campbell, but responses to them included bids from wind, solar, and storage resources, which were all evaluated based on the needs identified in the 2021 IRP and confirmed in the 2023 portfolio analysis.

NIPSCO Witness Augustine also discusses the 2023 portfolio analysis in detail, including the fact that the portfolio option that relied more heavily on thermal peaking resources to the exclusion of new gas-fired generation was more costly.

Most importantly, gas-fired generation is best suited to provide the suite of characteristics/attributes that were identified by the 2021 IRP.[10] NIPSCO Witness Austin discusses this further, but it was essential for NIPSCO to rely on a proven, reliable technology to fill the identified need.

Additionally, the preferred portfolio resulting from the 2023 portfolio analysis includes additional, economic storage resources but indicates that storage resources are not the best technological or economic option for the need that has been identified and which the CT Project is filling.

Q23. What related investments in electric and gas infrastructure will be required to bring the CT Project online?

A23. Part of the benefit of locating the CT Project at NIPSCO's Schahfer site, where Units 16A, 16B, 17, and 18 will be retiring in the short-term, is that much of the same infrastructure can be utilized by the CT Project. As

[10] These eight (8) criteria/metrics are listed above.

discussed by NIPSCO Witness Baacke, interconnecting the CT Project to the broader transmission system requires a small portion of the investment included in the project cost.

With respect to gas infrastructure, because Units 16A and 16B are being retired, NIPSCO will be able to utilize much of the gas infrastructure to serve the CT Project. A modest investment of $1.2 million is expected, and a similarly-sized investment in water infrastructure is also expected.

Q24. Please briefly explain the EPA's proposed GHG emissions standards for fossil fuel-fired power plants ("GHG Rules") and how, if at all, the proposed GHG Rules would apply to the CT Project.

A24. On May 23, 2023, EPA published its proposed GHG Rules under Section 111 of the Clean Air Act to revise "new source performance standards" ("NSPS") for new fossil fuel-fired power plants, which include standards for new stationary CTs.[11] The EPA rulemaking process will continue, including opportunity for public comment before a final rule is published.[12] Final rules are expected sometime in 2024.

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[11] Information regarding the proposed rule can be found at https://www.epa.gov/stationary-sources-air-pollution/greenhouse-gas-standards-and-guidelines-fossil-fuel-fired-power.

[12] Information regarding EPA's general rulemaking process can be found here

As currently proposed, for newly-constructed simple cycle CTs that are expected to have a "low-load capacity factor" (defined as equal to or *less than* 20% on a 12-operating-month rolling average basis), EPA has proposed a "best system of emissions reduction" ("BSER") consisting of the use of fuels with low carbon intensity and the latest, most efficient CT design.[13] EPA is proposing that affected sources that commence construction or reconstruction after May 23, 2023, would need to meet the requirements of the GHG Rules upon startup of the new or reconstructed affected facility or the effective date of the final rule, *whichever is later*.

Q25. What impact does NIPSCO anticipate that the proposed GHG Rules will have on the CT Project, and has NIPSCO taken the GHG Rules into account for the CT Project?

https://www.epa.gov/laws-regulations/basics-regulatory-process.

[13] For simple cycle CTs operating at *greater than* a 20% capacity factor but below the Base Load category, BSER establishes an Intermediate Load category with certain emission limitations (1,150 lb CO2/MWh through 2031 and 1,000 lb CO2/MWh with 30% (by volume) low-GHG hydrogen blending starting in 2032). Extensive comments have been provided to EPA on the proposed rule requesting modification of the Intermediate Load emission limits to allow for slightly higher limits reflective of the "latest, most-efficient design." If these comments are incorporated into the final GHG Rule, it is expected that the CT Project would be able to operate above a 20% capacity factor.

A25. With respect to impact, the CT Project as designed is capable of achieving compliance with the low-load capacity factor through installation of the latest, most efficient design and use of natural gas, which is considered "low carbon intensity" under the GHG Rules. Additionally, the CT Project will be enabled to blend hydrogen.[14] NIPSCO currently projects capacity factors below 20%, except in the initial months of operation. During these initial months, based on the proposed GHG Rules, either the capacity factors must be limited to 20% or the CTs must achieve the Intermediate Load emission limitations (described in the footnote above). Current CTs available on the market that are considered "latest, most efficient" designs can have emissions slightly higher than the Intermediate Load emission limits proposed by EPA. NIPSCO will (and has plans to) further assess compliance with the GHG Rules when they are finalized. Based on the proposed rules, NIPSCO fully expects the CT Project will comply.

[14] The CTs being considered are capable of operating on natural gas fuel blended with between 15 and 35% hydrogen. However, specific hydrogen capabilities are dependent on the results of the CT original equipment manufacturer ("OEM") bid event. OEMs are working towards goals of 100% hydrogen capability with further modifications in the future.

Conclusion

Q26. Please summarize NIPSCO's request for approval of the CT Project and why it should ultimately be approved by the Commission.

A26. Since issuance of its 2021 IRP, NIPSCO has continued to evaluate and analyze its generation needs considering ongoing changes in market rules, supply chain, and other broader market changes. NIPSCO's most current analysis identifies a need for a gas-fired resource between 400 MW and 442 MW. Based on the needs associated with the retirement of the majority of NIPSCO's coal-fired generation by the end of 2025 and the addition of more renewable resources, NIPSCO needs to construct and operate the CT Project as a part of its overall, diverse portfolio of generation assets. Once operational, the facility will be a key part of NIPSCO's electric generating fleet, as it will provide key reliability attributes and additional capacity (especially in the winter season) and help mitigate customers' price exposure on the hottest and coldest days of the year.

In terms of project development, NIPSCO began with a competitive RFP and engaged the assistance of Sargent and Lundy. Based on available information in the market, NIPSCO has determined the best path forward is to self-build the CT Project, leveraging the available interconnection

rights from retiring generation at Schahfer, and will competitively bid key components and contracts to ensure a reasonable cost for customers. The cost estimate provided is the best estimate currently available and will be updated as the project proceeds, consistent with the Commission's requirements and NIPSCO's request for ongoing review. While NIPSCO Witness Becker discusses the applicable statutory requirements, based on the evidence NIPSCO has included as part of its case-in-chief, the Commission should approve NIPSCO's request and issue a CPCN for the CT Project.

Q27. Do the public convenience and necessity require the construction of the CT Project?

A27. Yes, for all of the reasons explained in my testimony, the public convenience and necessity require the construction of the CT Project.

Q28. Does this conclude your prefiled direct testimony?

A28. Yes.

VERIFICATION

I, David T. Walter, Vice President of Power Delivery of Northern Indiana Public Service Company LLC, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information, and belief.

/s/ David T. Walter
David T. Walter

Dated: September 12, 2023