VERIFIED DIRECT TESTIMONY OF ROSALVA ROBLES

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

A1. My name is Rosalva Robles. I am the Manager of Planning – Regulatory Support for Northern Indiana Public Service Company LLC ("NIPSCO" or "Company"). My business address is 1500 165th Street, Hammond, Indiana 46320.

Q2. Please describe your educational and employment background.

A2. I graduated from Purdue University Calumet with a Bachelor of Science in Accounting and minor in International Business (2004), along with a Master of Business Administration with an Accounting Concentration (2006). In addition, in 2016, I began doctorate course work with Indiana Wesleyan University toward earning my Ph.D. in Organizational Leadership. I began my employment with NIPSCO in 2012 as a Senior Budget Analyst overseeing the capital budgets and accruals of various NIPSCO departments. In 2014, I transitioned to the role of Senior Operations Analyst and was later named Lead Operations Analyst, where I was responsible for the electric generation forecast modeling among other

month-end close and regulatory support reporting duties. In June 2019, I was promoted to my current managerial role. Prior to joining NIPSCO, I worked in the steel and food manufacturing industries, where I performed tax, procurement, and accounting functions. As part of my previous role in the steel industry with supporting state and local taxes, I became a Level I and Level II Assessor Appraiser certified with the State of Indiana through the Department of Local Government Finance. My certification is not active at this time.

Q3. What are your responsibilities as Manager of Planning – Regulatory Support?

A3. As Manager of Planning – Regulatory Support, I am responsible for various planning, analytical, and support functions for both NIPSCO's electric and gas portfolios and NIPSCO's Fuel Adjustment Clause ("FAC"), Gas Cost Adjustment (GCA), Regional Transmission Organization (RTO), and Resource Adequacy (RA). This includes oversight responsibilities with generation forecasting and reporting for NIPSCO's electric assets, coordinating the reporting and forecasting for both internal and external parties and entities, and market support functions for NIPSCO's market forecasting models.

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

A4. Yes. I routinely testify before the Commission in NIPSCO's FAC quarterly filings in Cause No. 38706-FAC-XXX (beginning in FAC-126) and previously testified in NIPSCO's RA semi-annual adjustment filings in Cause No. 44155-RA-XX (RA 16 through RA 20).

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

A5. The purpose of my direct testimony is to support NIPSCO's request for approval of a (1) Solar Energy Purchase Agreement between NIPSCO and Appleseed Solar, LLC ("Appleseed") dated January 24, 2023 ("Appleseed Solar PPA") for a project being developed in Cass County, Indiana with an installed capacity of approximately 200 megawatts ("MW") (nameplate capacity, alternating current) (the "Appleseed Solar Project");[1] and (2) Wind Energy Purchase Agreement between NIPSCO and Templeton Wind Energy Center, LLC ("Templeton") dated February 13, 2023 ("Templeton Wind PPA") for a project being developed in Benton County, Indiana with

[1] All nameplate capacity MW values in my testimony are stated in alternating current. In various exhibits to the PPAs, MW values may be referenced in direct current which will appear higher than the alternating current equivalent.

an installed capacity of 200 MW (nameplate capacity, alternating current) (the "Templeton Wind Project").[2] The PPAs provide NIPSCO with 100% of the electrical output of the Projects and any environmental attributes associated with the projects for a term of 20 years beginning at the Commercial Operation Date ("COD").

I describe NIPSCO's generation transition plan, including the process NIPSCO followed that led to the execution of the PPAs, and discuss how NIPSCO will integrate the PPAs into NIPSCO's and the Midcontinent Independent System Operator, Inc.'s ("MISO") operations and the viability of renewable energy resources generally. I discuss the terms of the PPAs, including NIPSCO's rights to the production, capacity, and environmental attributes and the related benefits in the form of Renewable Energy Credits ("RECs"). Finally, I describe NIPSCO's proposal for recovering the costs associated with the PPAs. I also support NIPSCO's responses to the Commission's General Administrative Order ("GAO") 2022-01.

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

[2] The Appleseed Solar PPA and Templeton Wind PPA are collectively referred to as the "PPAs." The Appleseed Solar Project and Templeton Wind Project are collectively referred to as the "Projects."

A6. Yes. I am sponsoring the following attachments, all of which were prepared by me or under my direction and supervision.

Attachment 1-A	Verified Petition
Confidential Attachment 1-B	Appleseed Solar PPA
Confidential Attachment 1-C	Templeton Wind PPA
Attachment 1-D	NIPSCO's 2023 Generation Portfolio
Attachment 1-E	GAO 2022-01 Requirements
Attachment 1-F	Customer Bill Impact

Q7. Please describe the Appleseed Solar PPA.

A7. The Appleseed Solar PPA is attached hereto as Confidential Attachment 1-B. Under the Appleseed Solar PPA, Appleseed commits to provide NIPSCO energy generated from approximately 200 MW of installed solar panel capacity at a [redacted] (with no adjustments) over a term of 20 years beginning at the COD. The price includes the renewable energy, accredited capacity, generation benefits, and all RECs associated with the energy generated by the Appleseed Solar Project and metered at the point of delivery. Appleseed will receive and retain existing and future tax credits or tax benefits as the owner and operator of the solar energy project. The Appleseed Solar PPA provides that if cost recovery is not approved by the Commission, then either NIPSCO or Appleseed may

terminate the PPA. Attachment 1-E provides additional information related to the Appleseed Solar PPA.

Q8. Please describe the Templeton Wind PPA.

A8. The Templeton Wind PPA is attached hereto as Confidential Attachment 1-C. Under the Templeton Wind PPA, Templeton commits to provide NIPSCO energy generated from approximately 200 MW of installed wind capacity at a [redacted] (with no adjustments) over a term of 20 years beginning at the COD. The price includes the renewable energy, accredited capacity, generation benefits, and all RECs associated with the energy generated by the Templeton Wind Project and metered at the point of delivery. Templeton will receive and retain existing and future tax credits or tax benefits as the owner and operator of the wind energy project. The Templeton Wind PPA provides that if cost recovery is not approved by the Commission, then either NIPSCO or Templeton may terminate the PPA. Attachment 1-E provides additional information related to the Templeton PPA.

Q9. Are the PPAs clean energy projects for purposes of Ind. Code § 8-1-8.8-2 and therefore eligible for financial incentives under Ind. Code § 8-1-8.8-11?

A9. Yes. The Appleseed Solar PPA is for products generated from a solar energy project. The Templeton Wind PPA is for products generated from a wind energy project. Both PPAs are a clean energy resource under Ind. Code § 8-1-37-4, a renewable energy resource under Ind. Code § 8-1-8.8-10, and a clean energy project under Ind. Code § 8-1-8.8-2(2). NIPSCO is a public utility engaged in the production, transmission, delivery or furnishing of heat, light or power, and an eligible business under Ind. Code § 8-1-8.8-6.

Viability of Renewable Resources

Q10. Are solar and wind energy viable energy resources?

A10. Yes. Solar and wind energy projects do not use fossil or nuclear fuel in operation, which means no mining or drilling for fuel, no radioactive or hazardous wastes, no use of water for steam or cooling, and no emissions of greenhouse gases or other pollutants. The absence of fossil or nuclear fuel also means the price of solar and wind power is not impacted by the volatility of commodities. Due to meteorological and resource diversity of

the MISO footprint, the location of solar and wind projects influences the capacity accreditation and available solar and wind energy for NIPSCO's customers.

The Templeton Wind Project is located in Indiana, more specifically the part of Indiana with advantageous meteorological and resource diversity conditions in the MISO footprint. For these reasons, and with advances in wind technology in areas such as wind turbine availability, capacity factor, design and size, and wind mapping,[3] wind energy has become a viable source of renewable energy resources on a per megawatt-hour ("MWh") basis.

The Appleseed Solar Project is also located in Indiana and is expected to have a production level consistent with its geographic location. In a general sense, within the continental United States, solar production improves the further south and west a project is located. However, with advances in solar technology in areas such as, capacity factor, efficiency, and design and size, solar energy has become a viable source of renewable energy resources

[3] Mapping refers to the process of assessing impacts of existing wind resources, restrictions on land use, and other sensitivities that may affect wind energy.

on a per megawatt-hour ("MWh") basis in the Midwest.

Generation Transition Plan

Q11. Please provide an overview of NIPSCO's preferred portfolio as set forth in its Integrated Resource Plan submitted to the Commission on October 31, 2018 ("2018 IRP").

A11. The 2018 IRP resulted in a preferred portfolio for NIPSCO's generation that called for (a) the retirement of 75% of NIPSCO's coal-fired generation by 2023 and 100% of the coal-fired generation by 2028, (b) the continued operation of NIPSCO's gas-fired Sugar Creek Generating Station ("Sugar Creek"), and (c) replacement of certain retired generation units largely with wind, solar, and energy storage. Section 9.4 of the IRP described a Short-Term Action Plan, which outlined the key steps NIPSCO should take to select and implement resources to replace the 2023 retirements. The Short-Term Action Plan contemplated an all-source request for proposal ("All-Source RFP"), which NIPSCO undertook on May 14, 2018 and additional RFPs, which NIPSCO undertook in 2019 (the "Phase II RFPs"). Together, the All-Source RFP and Phase II RFPs are referred to as the "2018 IRP RFPs".

Q12. Did NIPSCO perform any additional portfolio analysis after the 2018 IRP to support those resource acquisition approval requests?

A12. Yes. As further described by NIPSCO Witness Augustine, NIPSCO performed a portfolio analysis in 2020 ("the 2020 portfolio analysis") as part of its ongoing and periodic review of its generation portfolio. The 2020 portfolio analysis demonstrated that when considering the latest expectations for NIPSCO's load requirements, commodity market prices, and expected market rules changes, the Phase II RFPs provided sufficient renewable capacity at a competitive cost to confirm the direction of the 2018 IRP's preferred portfolio.

Q13. What is the status of NIPSCO's renewable projects to implement NIPSCO's 2018 Short Term Action Plan?

A13. Attachment 1-D shows the projects approved to implement NIPSCO's 2018 Short Term Action Plan, which lists each of the projects, certain relevant statistics,[4] and the current status of each of the projects.

Q14. Please provide an overview of NIPSCO's preferred portfolio as set forth in its Integrated Resource Plan submitted to the Commission on November 15, 2021 ("2021 IRP").

[4] Attachment 1-D excludes the Roaming Bison Project, which was approved in Cause No. 45196 but later canceled because of local zoning changes. The Green River Project was approved in Cause No. 45472, as amended in Cause No. 45818.

A14. As in its 2018 IRP, NIPSCO's 2021 IRP included a retirement analysis to assess different retirement dates for different elements of its existing fleet. The 2021 IRP continued to affirm the retirement of coal-fired capacity as the most cost-effective pathway for customers. As explained further by NIPSCO Witness Augustine, the 2021 IRP concluded that additional solar capacity and a diverse mix of other resources including storage, flexible thermal generation resources/emerging technologies, and market purchases/capacity were necessary additions to the portfolio.

Q15. Please provide an update on the planned coal retirements at NIPSCO's R.M. Schahfer Generating Station ("Schahfer").

A15. On February 17, 2021, NIPSCO announced the retirement of two coal-fired units at Schahfer (Units 14 and 15) by the end of 2021. Both Units 14 and 15 were retired in October 2021. On May 4, 2022, NIPSCO announced that NIPSCO would be extending the operation of two coal-fired units at Schahfer (Units 17 and 18) through 2025.

Q16. What led NIPSCO to the decision to extend the operation of Schahfer Units 17 and 18 through 2025?

A16. NIPSCO's decision to extend the operation of Schahfer Units 17 and 18 through 2025 was based on delays to solar projects that had originally been expected to be online in 2022 and 2023. These delays were caused by factors beyond NIPSCO's control, including Section 201 Tariffs on imported solar panels, a United States Department of Commerce Investigation into anti-dumping and anti-circumvention of such tariffs, and a review of compliance with new forced labor prevention rules, along with general global supply chain and labor availability as a result of the COVID-19 pandemic. As further discussed by NIPSCO Witness Augustine, based on these broader market dynamics, NIPSCO engaged in additional analysis that led to this decision to delay the retirement of Schahfer Units 17 and 18.

Q17. Based on supply chain and other market dynamics over the last couple years, what steps is NIPSCO taking to ensure it can reliably and adequately serve its customers?

A17. First, as mentioned above, NIPSCO has already announced a delay in the retirement of Schahfer Units 17 and 18. Second, NIPSCO is continuing to work with developers for its approved projects to advance the projects to

commercial operation as promptly as possible.[5] To be clear, disruptions in the solar supply chain have already impacted expected in-service dates, and there are likely to be cost impacts to several of these projects as well. In fact, on March 29, 2023 in Cause No. 45818, the Commission approved amendments to the Green River Solar PPA resulting in revised pricing and other negotiated commercial terms.[6] Third, as described below, NIPSCO issued a pair of RFPs in August 2022, seeking potential projects or contractual arrangements to address any identified capacity needs.

Q18. Please describe the 2022 RFPs.

A18. NIPSCO retained CRA International d/b/a Charles River Associates, Inc. ("CRA") to assist in the design, administration and bid evaluation of two separate requests for proposals: (1) an RFP for renewable facilities and energy storage options (the "2022 All-Source RFP") and (2) an RFP targeted to procure a resource(s) intended to provide peaking, black start

[5] NIPSCO is also seeing zoning and permitted challenges with two of its approved solar PPAs.

[6] *See also* Cause No. 45832 (AES Indiana petition for approval of increases relating to its Petersburg Energy Center Project approved in Cause No. 45591); Cause No. 45839 (CenterPoint petition for approval of increases relating to its Warrick County Solar Project approved in Cause No. 45501 and Vermillion County Solar Project approved in Cause No. 45600); and Cause No. 45847 (CenterPoint petition for approval of increases relating to its Posey County Solar Project approved in Cause No. 45501).

capabilities, and other reliability attributes (the "Schahfer Development RFP") (together, the "2022 RFPs"). The 2022 RFPs included the latest information associated with MISO's seasonal resource adequacy construct, IRA tax credits, and resource costs, as further discussed by NIPSCO Witness Augustine. The 2022 RFPs also provided information related to the latest costs of storage resources and the viability of alternative natural gas peaker options.

Q19. Did NIPSCO perform any additional portfolio analysis after the issuance of the 2022 RFPs?

A19. Yes. NIPSCO performed a portfolio analysis in 2023 ("the 2023 portfolio analysis") to incorporate market shifts and changes that have occurred since the 2021 IRP, specifically MISO market rule updates, passage of the federal Inflation Reduction Act, updated market pricing from the 2022 RFPs, and portfolio needs. This is further described and discussed by NIPSCO Witness Augustine.

Q20. What changes were made in the 2023 portfolio analysis relative to the 2021 IRP?

A20. As explained in greater detail by NIPSCO Witness Augustine, changes to NIPSCO's resources and other market conditions were made in the 2023 portfolio analysis relative to the 2021 IRP, including (1) near-term adjustments to NIPSCO's generation resource portfolio to reflect updated projects costs, PPA prices, and online dates for new solar and solar plus storage resources and the retirement date for Schahfer Units 17 and 18, as well as plant capacity ratings and other operation parameters for NIPSCO existing resources; (2) latest information related to MISO's seasonal resource adequacy construct; (3) updated commodity price inputs; (4) resource costs based on the 2022 RFPs; and (5) clean energy and storage tax credit extensions as outlined in the Inflation Reduction Act.

Q21. Is NIPSCO confident that it will be able to reliably and affordably serve its customers during and upon completion of its generation transition?

A21. Yes. NIPSCO's 2021 IRP, which included an expanded analysis of reliability, affirmed the early retirement of coal is still cost-effective for customers and replacement resources containing a diverse, flexible, and scalable mix of incremental resources support continued reliability. As outlined by NIPSCO Witness Augustine, and as noted above, the 2023 analysis incorporates market shifts and changes that have occurred since

the 2021 IRP. These changes point to the increased need for capacity advantaged resources in the portfolio. Solar still has high value in the summer season, but with higher capital costs. As demonstrated in the 2022 RFPs, wind has improved economics given the IRA and MISO market rules.

NIPSCO is effectuating the generation transition by reviewing at risk projects that may no longer be viable, pursuing solar and wind PPAs, seeking cost and structure updates that take advantage of IRA incentives, and building a gas peaker at Schahfer. NIPSCO is confident that through its own resource planning efforts and its participation in the MISO market it will be able to serve all its customers reliably and affordably during and upon completion of its generation transition.

Overview of the Projects

Q22. Please briefly describe the Projects.

A22. Appleseed and Templeton are both Delaware limited liability companies with their principal place of business in Juno Beach, Florida. Appleseed and Templeton are both an indirect, wholly owned subsidiary of NextEra, which is the renewable energy subsidiary of NextEra Energy, Inc.

Q23. Please describe NextEra Energy, Inc.

A23. NextEra Energy Resources, with approximately 28,940 MW of total net generating capacity at December 31, 2021, is one of the largest wholesale generators of electric power in the U.S., across 38 states and 4 Canadian provinces. This includes over 19,520 MW of Wind (total generating capacity), over 3,466 MW of operational solar and over 755 MW of battery storage. Since 2017, NextEra Energy Resources' subsidiaries have been helping fuel the State of Indiana's economic growth and quality of life and moving our country toward energy independence, with investment over $734.8 million in the state, annual payroll in the state of approx. $1.8 million and provide $2.2 million in annual landowner lease payments.[7] NextEra is also the parent company / developer for seven of NIPSCO's approved renewable projects.

Q24. Please describe the Appleseed Solar Project.

A24. Appleseed expects to construct, own, and operate a 200 MW solar energy project in Cass County, Indiana that will interconnect to the 345 kV Walton substation owned by Duke Energy Indiana. The Solar Project will be within the footprint of MISO. The Appleseed Solar PPA allows for important

[7] Response to 2022 All-Source RFP dated September 16, 2022.

capacity accreditation as well as energy production during the summer months while still providing important energy production in the fall, winter, and spring MISO seasons. Appleseed has a fully executed Generation Interconnection Agreement ("GIA") (J992). Further, the Appleseed Solar Project is fully permitted through a special use permit granted by the Cass County Board of Zoning Appeals and all local permitting has been completed. The fully executed GIA and favorable permitting status are two factors that reduce the development risk of the Appleseed Project in terms of other solar projects evaluated in the 2022 RFP.

Q25. Please describe the Templeton Wind Project.

A25. Templeton expects to construct, own, and operate a 200 MW wind energy project in Benton County, Indiana that will interconnect to the 345 kV Westwood substation owned by Duke Energy Indiana. The Templeton Wind Project will be within the footprint of MISO. Templeton is in the Definitive Planning Phase I of the MISO GIA process (J1966). MISO is performing system impact studies and Facility Studies to determine whether transmission upgrades will be necessary. The GIA is expected to be executed by December 2023.

Q26. How will NIPSCO account for the energy provided by the PPAs?

A26. NIPSCO will take delivery of the energy provided by the PPAs at specified metering points. NIPSCO will be the Market Participant and will make the energy available in the MISO energy market. NIPSCO will pay the seller the contract price per MWh and count this energy as used in the NIPSCO system. NIPSCO will "settle" the sale price for the energy sold into MISO against the price paid for the energy. NIPSCO offers its generation and bids its load into the MISO energy and ancillary services markets daily, along with other sales and purchases, in the end "settling" the costs against revenues. MISO treats these types of renewable projects as dispatchable intermittent resources. As such, the PPAs will be subject to real-time Revenue Sufficiency Guarantee and Excessive Deficient charges assessed under the Open Access Transmission, Energy and Operating Reserve Markets Tariff ("MISO Tariff").

Q27. Will NIPSCO be able to designate the PPAs as network resources under the MISO Tariff?

A27. Yes. The MISO generator interconnection agreement related to the Projects will have network resource interconnection service ("NRIS") available for their full injection once any required transmission system upgrades at their

respective points of interconnection are complete. Having NRIS will allow NIPSCO to designate each generation facility as a network resource to receive Network Integration Transmission Service (NITS) without further study.

Q28. Will Appleseed and Templeton request the Commission decline to exercise jurisdiction over each of the Projects?

A28. Yes. Both Appleseed and Templeton will make a filing to request the Commission decline to exercise jurisdiction over the Projects. NIPSCO anticipates that Appleseed will make its filing on or about May 17, 2023, with Templeton making its filing in mid-June.

Q29. What due diligence did NIPSCO conduct when evaluating the creditworthiness of potential counterparties?

A29. As part of NIPSCO's due diligence, when evaluating the creditworthiness of potential counterparties, NIPSCO gathered and reviewed credit information during the pre-qualification process in the 2022 RFPs. Counterparties that were investment grade based on their unsecured senior debt rating met the credit requirements. If a bidder did not meet the debt rating requirement or did not have a rating, they were required to post

collateral upon executing a definitive agreement. Appleseed and Templeton satisfy this collateral posting requirement. The financial ability to complete construction, along with the ability to continue successful operation of the project during the term of the PPAs, is key to NIPSCO. NIPSCO has taken this into consideration by including performance security provisions in the PPAs. The PPAs require such performance security be provided to NIPSCO, no later than 30 days after NIPSCO receives state regulatory approval of the PPAs, in the form of either: (1) a guaranty from a qualified guarantor; (2) a letter of credit from a qualified financial institution; or (3) cash (collectively "Security Fund"). In the event Appleseed or Templeton is in default of any obligation under the respective PPA or NIPSCO is otherwise entitled to indemnification or damages under the respective PPA, NIPSCO has a right to access the Security Fund directly to reimburse NIPSCO for any damages or costs incurred as a result of Appleseed's or Templeton's failure to comply with their obligations under the respective PPA.

Q30. How were congestion risks of the Projects assessed?

A30. Congestion risks of the Projects were assessed by Quanta Technology, LLC in performing a nodal congestion analysis. Quanta used the available

PROMOD cases from MISO to simulate hourly market operations for a sample of years. The output was then used to determine the expected curtailments, total revenue, congestion, and loss charges for each site under consideration. Sites with greater congestion risk have been appropriately discounted in NIPSCO's site analysis. Consistent with the 2022 RFPs project evaluations, CRA has incorporated expected congestion impacts (positive or negative) into the Locational Marginal Price (LMP) of the 2022 RFPs projects into the Levelized Cost of Energy ("LCOE") calculations supported by NIPSCO Witness Augustine.

Q31. How will NIPSCO protect customers against curtailed (non-compensable) energy charges?

A31. NIPSCO, Appleseed, and Templeton have agreed to (1) [redacted], (2) work together through an on-going operating committee process to establish Automatic Generation Control set points that attempt to minimize any charges, and (3) collaborate on any disputes prior to any formal legal process.

Q32. What will be the general timeline for construction of the Projects?

A32. Pre-construction activities for Appleseed will be ongoing until the first or second quarter in the year prior to the COD. At that point, project construction will ramp up, with the majority of the construction activity occurring over the summer, fall, and early winter. Pre-construction activities for Templeton will be ongoing until the third or fourth quarter in the year prior to the COD. At that point, project construction will begin and continue until winter fully sets in. The following spring, construction ramps up quickly, with the majority of the construction activity occurring over the late spring, summer, and early fall. Generally, projects are expected to be complete in the fourth quarter of the year. [redacted].

Q33. Please describe the environmental attributes that NIPSCO will obtain in conjunction with the Projects.

A33. As used in the PPAs, the phrase "environmental or renewable characteristics or attributes" is contained within the definition of the term

RECs and is intended to capture any changes to governmental rules, regulations or law, or changes to registration systems put in place over the term of the PPA. I refer to the environmental attributes acquired pursuant to the PPAs as RECs, which are tradable credits corresponding to each MWh of electricity generated by a renewable-fueled or environmentally friendly source. NIPSCO anticipates the RECs it receives pursuant to the PPAs will be tracked through the Midwest Renewable Energy Tracking System ("M-RETS"). M-RETS is a database that tracks relevant information about renewable energy produced and delivered in the Upper Midwest, including the MISO footprint, to verify for subscribers in states with mandatory or voluntary renewable portfolio standards, or for utility and other participants, the RECs made available to them through REC purchases and sales. M-RETS tracks the ownership of RECs and generation attributes that result from the generation of renewable electricity.

Q34. How will the costs of the PPAs be recovered?

A34. NIPSCO is proposing to recover the costs of the PPAs throughout the full 20-year term of the agreement through a rate adjustment mechanism pursuant to Ind. Code §§ 8-1-2-42(a) and 8-1-8.8.11. For administrative efficiency and simplicity, NIPSCO proposes the timely cost recovery be

administered through NIPSCO's FAC proceedings (or successor mechanism). Furthermore, NIPSCO is seeking approval of power purchases pursuant to the PPAs as reasonable throughout the entire term of the agreement and therefore also seeking confirmation that the costs thereof are recoverable through the FAC proceedings (or successor mechanism) without regard to the Ind. Code § 8-1-42(d)(1) test or any other FAC benchmarks.

Q35. Please describe the expected value of the RECs and how NIPSCO intends to pass that value back to its customers.

A35. The qualitative versus quantitative value of the RECs associated with the energy delivered is discussed by NIPSCO Witness Lee. NIPSCO will monitor and evaluate the marketability for the RECs. Any proceeds from the sale of the RECs will be passed back to NIPSCO's customers in its FAC proceedings. In 2022, approximately $12.8 million in proceeds from the sale of RECs associated with NIPSCO's renewable energy was passed back to NIPSCO's customers in its FAC proceedings.

Q36. Why did NIPSCO decide to contract for the 200 MWs of solar energy made available through the Appleseed Solar PPA?

A36. The decision to contract for the solar energy coming out of the 2022 All-Source RFP was based upon NIPSCO's and CRA's analysis that doing so was in the best interest of NIPSCO's customers under the 2021 IRP. As described by NIPSCO Witness Lee, the Appleseed Solar PPA received one of the strongest LCOE scores of all the solar and solar plus storage capacity proposals NIPSCO received in response to its 2022 All-Source RFP. The Project has low development risk, as it has met 5 out of 6 major milestones and it is being developed by NextEra, a significant and sophisticated player in the renewable development space. As mentioned above, the Appleseed Project has a fully executed GIA and favorable permitting status in Cass County, Indiana. As such, the Appleseed Solar Project plays an important role in satisfying NIPSCO's electric planning goals and objectives in the best interest of NIPSCO's customers.

Q37. Why did NIPSCO decide to contract for the 200 MWs of wind energy made available through the Templeton Wind PPA?

A37. Again, the decision to contract for the wind energy coming out of the 2022 All-Source RFP was based upon NIPSCO's and CRA's analysis that doing so was in the best interest of NIPSCO's customers under the 2021 IRP. Two recent developments make wind energy an attractive option for NIPSCO's

generation portfolio: (1) approval of MISO's seasonal resource adequacy construct, in which load serving entities must meet different reserve margin targets for each of the four seasons with varying capacity accreditation by season and (2) the expansion of available tax credits to wind resources through the passage of the federal Inflation Reduction Act ("IRA"). NIPSCO Witness Augustine explains that the 2022 All-Source RFP contemplated the seasonal resource adequacy construct, and he describes how MISO's winter reserve margin target is higher than its summer reserve margin, which means resources like solar will receive lower winter capacity accreditation. This makes wind resources an important component of winter reserve margin planning. I describe the IRA's tax credit provisions below; these tax credits have improved the economics of wind resources relative to the assumptions in NIPSCO's 2021 IRP, making wind projects more competitive. These two developments, taken together, make contracting for wind resources an important and reasonable option for NIPSCO and its customers.

In addition, as NIPSCO Witness Lee explains, the Templeton Project was among the highest scoring projects in NIPSCO's 2022 All-Source RFP. A

GIA is expected to be executed by December 2023, and the Project is also being developed by NextEra.

Q38. Please briefly explain the tax incentives associated with the Projects.

A38. As part of the 2023 portfolio analysis, clean energy and storage tax credit extensions as outlined in the IRA were incorporated for new NIPSCO resource options, which included 10-year extensions for the PTC and ITC, extension of the ITC to stand-alone storage projects, and bonus credit eligibility for projects sited in "energy communities." The IRA awards a 10% bonus (a 10% adder to the ITC or a 10% increase in the PTC level in $/MWh) if a project is located within a newly defined "energy community." Energy communities are (i) census tracts containing or adjoining to tracts containing retired coal mines or coal-fired electric generating units; (ii) areas with historical employment in fossil industries and a higher unemployment rate than the national average; or (iii) properties with the potential presence of hazardous substances, pollutants, or contaminants.

Q39. Were the Projects found to be located within an energy community?

A39. The Appleseed Project was found to be located within an energy community and thus qualifies for a 10% increase in the ITC level or a 10%

increase in the PTC level in $/MWh. The Templeton Project does not qualify for additional bonus credits based on its geographic location.

Q40. Does the addition of the Appleseed Solar PPA and Templeton Wind PPA support the conclusions of NIPSCO's 2021 IRP and 2023 portfolio analysis?

A40. Yes. As more fully described by NIPSCO Witness Augustine, the addition of the Appleseed Solar PPA and Templeton Wind PPA to NIPSCO's portfolio is fully supportive of and consistent with the conclusions in NIPSCO's 2021 IRP and 2023 portfolio analysis.

Q41. Do the PPAs described herein represent prudent, valuable, and reasonably priced renewable energy resources for NIPSCO?

A41. Yes. The PPAs described herein will provide NIPSCO's customers with more affordable and cleaner energy resources. This is supported by the 2023 portfolio analysis, as further described by NIPSCO Witness Augustine.

Q42. What is the estimated bill impact for a typical residential customer?

A42. As shown in Attachment 1-F, the estimated bill impact for a residential customer that uses 700 kWh per month resulting from the Appleseed Solar

PPA is $1.49 and resulting from the Templeton Solar PPA is $2.02. These bill impacts do not include offsets such as renewable energy credit sales or any other savings/credits such as off-system sales, which are expected to lower customer bills or provide other savings associated with NIPSCO's generation transition strategy. These bill impacts also do not take into account the cost of energy that would be otherwise incurred without including these PPAs as a part of the generation portfolio.

Q43. Is NIPSCO willing to provide performance data for the PPAs to the Indiana Office of Utility Consumer Counselor ("OUCC") as part of NIPSCO's quarterly FAC filings?

A43. Yes. Consistent with NIPSCO's commitments reflected in the Commission Orders in Cause Nos. 45195 (Jordan Creek), 45403 (Brickyard and Greensboro), 45472 (Green River), 45489 (Gibson), and 45541 (Crossroads Wind II), NIPSCO is willing to provide performance information and data for the PPAs to the OUCC through the standard OUCC audit package in NIPSCO's quarterly FAC filings for the duration of the PPAs.

Q44. Are you familiar with GAO 2022-01?

A44. Yes. GAO 2022-01 provides guidelines for additional evidence to be provided in connection with petitions regarding electric generation under Ind. Code ch. 8-1-8.5 that request a certificate of public convenience and necessity for new electric generation and under Ind. Code ch. 8-1-8.8 that request approval of a multi-year PPA for electric generation. The required information as it pertains to NIPSCO's request for approval under Ind. Code ch. 8-1-8.8 in this Cause is provided in Attachment 1-E.

Q45. Does this conclude your prefiled direct testimony?

A45. Yes.

REDACTED

VERIFICATION

I, Rosalva Robles, Manager of Planning – Regulatory Support for 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.

Rosalva Robles

Rosalva Robles

Dated: May 16, 2023

Attachment 1-A
[Verified Petition - Not Duplicated Herein]

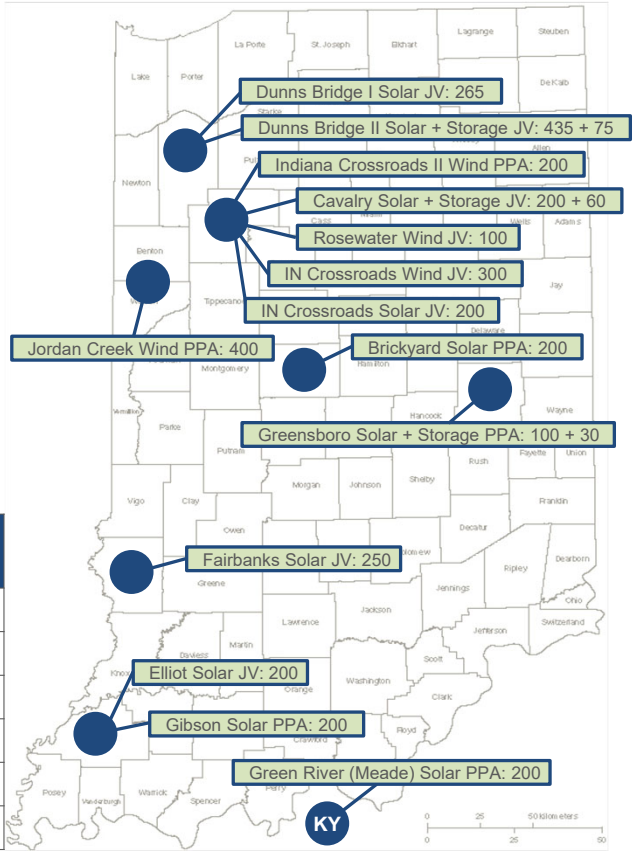
Confidential Attachment 1-B (Redacted)

Confidential Attachment 1-C (Redacted)

Current Portfolio Update

BTA Projects	Installed Capacity (MW)	Estimated In Service	Status
Rosewater Wind	100	2020	Complete
Indiana Crossroads Wind	300	2021	Complete
Dunns Bridge I Solar	265	Q2 2023	Construction
Crossroads Solar	200	Q2 2023	Construction
Cavalry Solar + Storage	200 + 60	Q2 2024	Started Construction
Dunns Bridge II Solar + Storage	435 + 75	Q4 2024	Started Construction
Fairbanks Solar	250	Q2 2025	Approved
Elliott Solar	200	2025	At Risk
Transmission Projects		Q2 2023	Construction

PPA Projects	Installed Capacity (MW)	Estimated In Service	Status
Jordan Creek Wind	400	2020	Complete
Crossroads II Wind	200	2023	Under Construction
Brickyard Solar	200	2024	At Risk
Greensboro Solar + Storage	100 + 30	2024	At Risk
Gibson Solar	200	2024	Approved
Green River Solar	200	2024	Amendment Approved



GAO 2022-01 Information for Multi-Year Purchase Power Agreement Projects

GAO 2022-01 Guideline	Witness	Appleseed Solar PPA	Templeton Wind PPA
The name of the RTO to which the generation will be connected.	Robles	The project will be connected to Duke Energy Indiana's 345 kV Walton substation in MISO (J992). See Q/A 24.	The project will be connected to Duke Energy Indiana's 345 kV Westwood substation in MISO (J1966). See Q/A 25.
A description of the new generation's anticipated impact on the submitting utility's resource adequacy and reliability.	Robles	For a description of how these projects will help fulfill NIPSCO's capacity needs identified in its 2021 IRP, which was confirmed by the results of NIPSCO's 2023 portfolio analysis, see Q/As 14 through 21. These projects are expected to contribute to meeting resource adequacy requirements and contribute to the overall reliability of NIPSCO's system. See Q/As 36 and 37.	
An explanation regarding whether the generation is required to be in the RTO's interconnection queue and, if so, its status in the queue.	Robles	The Appleseed Solar Project has a fully executed Generation Interconnection Agreement (J992) with MISO. See Q/A 24.	Templeton is in the Definitive Planning Phase I of the MISO GIA process (J1966). MISO is performing system impact studies and Facility Studies to determine whether transmission upgrades will be necessary. A Generation Interconnection Agreement is expected to be executed by December 2023. See Q/A 25.
A description of the generation's expected capacity factors, dispatchability, and accreditation characteristics.	Robles	The project will provide 200 MW of nameplate capacity (ICAP), at an expected annual capacity factor of 23.6%. Calculation of an accredited unforced capacity (UCAP) for the facility is the product of the effective nameplate capacity and the applicable capacity credit factor. For new solar resources, MISO will award capacity credit factors of 50%, 50%, 5% and 50% for Summer, Fall, Winter and Spring, respectively. Following the first year of operation for a full MISO Planning Year, the solar resource will be awarded a	The project will provide 200 MW of nameplate capacity (ICAP), at an expected annual capacity factor of 36.4%. Calculation of an accredited unforced capacity (UCAP) for the facility is the product of the effective nameplate capacity and the applicable capacity credit factor. For wind resources, MISO will award accredited capacity factors for the Summer, Fall, Winter and Spring seasons derived from the historical performance of wind facility.

GAO 2022-01 Guideline	Witness	Appleseed Solar PPA	Templeton Wind PPA
		capacity factor commensurate with past performance during peak periods. The project is expected to provide approximately 100 MW, 78 MW, 18 MW and 100 MW of UCAP accredited capacity in the Summer, Fall, Winter and Spring MISO planning seasons respectively. The project will be a variable resource. For a description of Quanta's nodal congestion analysis see Q/A 30.	The project is expected to provide approximately 36 MW, 46 MW, 81 MW and 46 MW of UCAP accredited capacity in the Summer, Fall, Winter and Spring MISO planning seasons, respectively. The project will be a variable resource. For a description of Quanta's nodal congestion analysis see Q/A 30.
A description of how the generation is expected to perform at the relevant RTO's peak pursuant to its capacity construct.	Robles	As noted above, this project is expected to provide 100 MW of UCAP accredited capacity in all seasons except for winter (10MW) in the first MISO planning year. After that, the project is expected to provide approximately 100 MW, 78 MW, 18 MW and 100 MW of UCAP accredited capacity in the Summer, Fall, Winter and Spring MISO planning seasons respectively	As noted above, the project is expected to provide approximately 36 MW, 46 MW, 81 MW and 46 MW of UCAP accredited capacity in the Summer, Fall, Winter and Spring MISO planning seasons respectively.

NORTHERN INDIANA PUBLIC SERVICE COMPANY

200 MW Appleseed Solar and 200 MW Templeton Wind PPAs
Estimated Year 1 Impact of a Change in Fuel Cost Adjustment (FAC)
on the Bill of a Residential Standard Customer Using 1000 kWh per Month

LINE NO.	DESCRIPTION	Appleseed Solar	Templeton Wind
1	Gross Capacity - MWac	200	200
2	Total Estimated Year 1 Cost (Ln. 3 * Ln. 4)	$25,015,157	$33,961,254
3	2026 Annual Forecasted Residential Sales - kWH	3,468,477,622	3,468,477,622
4	FAC Residential Allocation Percentage	29.44%	29.44%
5	Estimate Monthly Bill Impact per 1,000 kWh (Ln. 4 * Ln. 2/Ln. 3 * 1000)	$2.12	$2.88
6	Estimate Monthly Bill Impact per 700 kWh (Ln. 4 * Ln. 2/Ln. 3 * 700)	$1.49	$2.02