FILED February 24, 2025 INDIANA UTILITY REGULATORY COMMISSION

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Petitioner's Confidential Exhibit No. 1 Northern Indiana Public Service Company LLC

Page 1

Cause No. 46198

VERIFIED DIRECT TESTIMONY OF PATRICK M. D'ENTREMONT

1	Q1.	Please state your name, business address and title.
2	A1.	My name is Patrick M. d'Entremont. I am the Director of Portfolio
3		Planning and Origination for NiSource Corporate Services Company
4		("NCSC"). My business address is 290 W. Nationwide Blvd., Columbus,
5		Ohio 43215.
6	Q2.	On whose behalf are you submitting this direct testimony?
7	A2.	I am submitting this testimony on behalf of Northern Indiana Public
8		Service Company LLC ("NIPSCO").
9	Q3.	Please describe your educational and employment background.
10	A3.	I graduated from The University of Calgary, with a Bachelor's Degree in
11		Economics (2006). My past employment with NCSC was as a Planning
12		Analyst, Energy Supply and Optimization (2019-2021) and Manager of
13		Planning and Commercial Support (2021-2024). I accepted my current
14		position of Director of Portfolio Planning and Origination in January, 2025.
15		Prior to NCSC, I was employed at Huntington National Bank in
16		Columbus, Ohio as a Derivatives Trader and prior to that, at the TransAlta
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2	Q4.	What are your responsibilities as Director of Portfolio Planning and
3		Origination?
4	A4.	As Director of Portfolio Planning and Origination, I manage counterparty
5		interactions and support negotiations to fulfill NIPSCO's long-term
6		capacity and energy needs. I am also responsible for leading the
7		commercial execution of NIPSCO's generation strategy outlined within its
8		Integrated Resource Plans ("IRP").
9	Q5.	Have you previously testified before the Indiana Utility Regulatory
10		Commission ("IURC") or "Commission") or any other regulatory
11		commission?

Corporation in Calgary, Alberta, Canada as an Energy Trader.

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12 A5. Yes. I previously testified in Cause No. 46028 in support of NIPSCO and 13 Fairbanks Solar Generation LLC's request for a modification of the 14 Commission's June 29, 2021 Order in Cause No. 45511 and in Cause No. 15 46032 in support of NIPSCO and Gibson Solar Generation LLC's request 16 for a modification of the Commission's November 22, 2023 Order in Cause 17 No. 45926. I also filed testimony before the Commission in NIPSCO's Fuel 18 Adjustment Clause ("FAC") tracker filing in Cause No. 38706 FAC 142,

- 1 and in Resource Adequacy Adjustment tracker filings in Cause No. 44155
- 2 RA XX (RA-22 through RA-24).
- 3 Q6. What is the purpose of your direct testimony in this proceeding?

4 A6. The purpose of my direct testimony is to support NIPSCO's request for the 5 issuance of a certificate of public convenience and necessity ("CPCN") to 6 purchase and acquire a 200 megawatt ("MW") wind project located in 7 Benton County, Indiana (the "Templeton Project"). The Templeton Project 8 previously was approved as a power purchase agreement ("PPA"), under which NIPSCO would purchase 100% of the electrical output of the project 10 and any environmental attributes associated with the Templeton Project 11 for a period of 20-years. However, NIPSCO now plans to purchase the 12 Templeton Project pursuant to the terms of a Build Transfer Agreement 13 (the "Templeton BTA"), which are favorable. My testimony (1) describes 14 how the Templeton Project remains a competitive, lower risk component 15 of NIPSCO's overall generation portfolio; (2) explains how NIPSCO has 16 incorporated the requirements of IURC General Administrative Order 17 ("GAO") 2023-04 into its direct testimony; and (3) explains how NIPSCO

The Templeton BTA is attached as <u>Confidential Attachment 1-B</u>.

2		pursuant to IURC GAO 2022-01.
3	Q7.	Please summarize the other witnesses' testimony supporting NIPSCO's
4		request.
5	A7.	Patrick N. Augustine, Vice President in Charles River Associates' Energy
6		Practice (1) provides an overview of NIPSCO's resource planning activities
7		over the last several years, including the findings from the 2018 IRP and
8		the 2021 IRP,2 and how the Templeton Project continues to fit into
9		NIPSCO's preferred plan; and (2) assesses how the costs of NIPSCO's
10		ownership of the Templeton Project compare with the cost of the original

has addressed the guidelines for additional evidence to be provided

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Jennifer A. Harding, Vice President of Tax for NCSC, describes NIPSCO's
 proposal to own the Templeton Project and how ownership provides value

source of energy for customers than the previously approved PPA.

project structure. Based on his levelized cost of energy ("LCOE") analysis,

Mr. Augustine concludes that the Templeton Project, under direct NIPSCO

ownership with self-monetization of federal tax credits, is a lower cost

Integrated Resource Plan submitted to the Commission on October 31, 2018 (the "2018 IRP"). Integrated Resource Plan submitted to the Commission on November 15, 2021 (the "2021 IRP"). https://www.nipsco.com/our-company/about-us/regulatory-information/irp

to NIPSCO's customers through the pass back of federal tax credit

proceeds, which NIPSCO proposes to conduct through its FAC.

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Kevin J. Blissmer, Manager of Regulatory for NCSC, describes the accounting and ratemaking treatment for the Templeton Project that are necessary to allow NIPSCO to timely recover through rates the costs incurred for the acquisition and operation of the Templeton Project through NIPSCO's Rider 595 - Generation Costs Tracker ("GCT") approved by the Commission's October 16, 2024 Order in Cause No. 45947. The costs NIPSCO proposes to recover through the GCT include costs associated with (1) capital investment recorded as utility plant to complete the purchase of the Templeton Project; (2) deferred post-in service carrying charges; (3) depreciation expense, including cost of removal, associated with the Templeton Project; and (4) operations and maintenance ("O&M") and property tax expenses. Mr. Blissmer demonstrates that the proposed timely recovery of the Templeton Project costs through the GCT results in a lower annual revenue requirement than would otherwise be produced by deferring and accruing the revenue requirement elements for later inclusion in a base rate case. He also describes NIPSCO's proposed

mechanism for sharing federal tax credit proceeds and supports NIPSCO's

- 1 request that the Commission approve initial depreciation rates for the
- 2 Templeton Project.
- 3 Q8. Are you sponsoring any attachments to your testimony?
- 4 A8. 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	Build Transfer Agreement by and
	between Northern Indiana Public
	Service Company LLC, as Purchaser
	and Templeton Wind Holdings, LLC, as
	Seller
Attachment 1-C	Generation Portfolio Update
Attachment 1-D	GAO 2022-01 Requirements
Attachment 1-E	MISO Qualitative Assessment

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GENERATION TRANSITION AND CUSTOMER BENEFITS

- 7 Q9. Is NIPSCO continuing its generation transition as set forth in its 2018
- 8 IRP and 2021 IRP?
- 9 A9. Yes. NIPSCO continues to diversify its resources as it retires its coal-fired generation to include wind, solar, storage, flexible thermal generation
- 11 resources/emerging technologies, and market purchases/capacity. Units
- 12 14 and 15 at NIPSCO's R.M. Schahfer Generating Station ("Schahfer") were
- retired in October 2021. Schahfer Units 17 and 18 will retire on December Confidential Excluded from public access per Court Records Rule 5

1	31, 2025. Unit 12 at Michigan City Generating Station is planned to retire
2	at the end of 2028.
3	In 2022, NIPSCO issued two separate requests for proposals ("RFP"): (1)
4	an RFP for renewable facilities and energy storage options (the "2022 All-
5	Source RFP"), and (2) an RFP targeted to procure a resource(s) intended to
6	provide peaking, black start capabilities, and other reliability attributes
7	(the "Schahfer Development RFP") (together, the "2022 RFPs"). The 2022
8	RFPs included the latest information associated with the Midcontinent
9	Independent System Operator, Inc.'s ("MISO") seasonal resource
10	adequacy construct, Inflation Reduction Act ("IRA") tax credits, and
11	resource costs. The 2022 RFPs also provided information related to the
12	latest costs of storage resources and the viability of alternative natural gas
13	peaker options.
14	As explained in greater detail by NIPSCO Witness Augustine, NIPSCO
15	performed a portfolio analysis in 2023 ("the 2023 portfolio analysis"),3
16	incorporating certain changes to NIPSCO's resources and other market

See Confidential Attachment 2-B to the Verified Direct Testimony of Patrick N. Augustine for a summary of the key inputs and outputs associated with the 2023 portfolio analysis.

conditions relative to the 2021 IRP, including (1) near-term adjustments to NIPSCO's generation resource portfolio to reflect updated project 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 IRA.

Q10. Is NIPSCO confident that it will be able to reliably and affordably serve its customers during and upon completion of its generation transition?
A10. 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 and resiliency consistent with the Five Pillars codified in Ind. Code § 8-1-2-0.6.
As outlined by NIPSCO Witness Augustine, and as noted above, the 2023 portfolio analysis incorporates market shifts and changes that have occurred since the 2021 IRP. These changes point to the increased need for Confidential – Excluded from public access per Court Records Rule 5

1	capacity advantaged resources in the portfolio. As demonstrated in the
2	2022 RFPs, wind has improved economics given the IRA and MISO market
3	rules, as tax credits were extended for wind, and additional capacity is
4	needed in the winter season.
5	NIPSCO is effectuating the generation transition by reviewing at-risk
6	projects that may no longer be viable or suitable given MISO rule changes,
7	pursuing solar and wind PPAs, seeking cost and structure updates that
8	take advantage of IRA incentives, and building a gas peaker. NIPSCO is
9	confident that, through its own resource planning efforts and its
10	participation in the MISO market, it will be able to serve all its customers
11	reliably and affordably during and upon completion of its generation
12	transition.

CONVERSION OF THE TEMPLETON PPA TO TEMPLETON BTA

13	QII.	rease describe the rempleton PPA previously approved by the
14		Commission.
15	A11.	In its September 13, 2023 Order in Cause No. 45887 (the "45887 Order")
16		the Commission approved, among other things, NIPSCO's request for
17		approval of a Wind Energy Purchase Agreement between NIPSCO and
18		Templeton Wind Energy Center, LLC dated February 13, 2023

("Templeton Wind PPA") for the Templeton Project. The Templeton Wind PPA provided NIPSCO with 100% of the electrical output of the project and any environmental attributes associated with the project at a fixed price of \$ / MWh (with no adjustments) over a term of 20 years beginning at the Commercial Operation Date. The price included the renewable energy, accredited capacity, generation benefits, and all renewable energy credits associated with the energy generated by the Templeton Project and metered at the point of delivery. Under the Templeton Wind PPA, Templeton Wind Energy Center, LLC would have received and retained existing and future tax credits or tax benefits as the owner and operator of the wind energy project. In its 45887 Order, the Commission concluded that NIPSCO's 2021 IRP "did not rely on a single set of assumptions that could later be invalidated by evolving market conditions" and that its process was "robust and well developed." 45887 Order at 19. The Commission further observed that NIPSCO's 2023 portfolio analysis "accounted for NIPSCO's ongoing resource planning and other market conditions and developments that have occurred since the 2021 IRP was completed, including, among other things, updated pricing from NIPSCO's 2022 All-Source RFP, changes to

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the MISO resource adequacy construct, commodity pricing updates, and
changes to federal law." Id. The Commission found that the Templeton
Wind PPA "will fit well into and diversify NIPSCO's overall generation
portfolio" and "ensure the generation portfolio has adequate energy and
capacity." Id. The Commission found that the energy to be obtained from
the Templeton Wind Project is "reasonably priced compared to other
alternatives and provides material benefits" and that the pricing for the
Templeton Wind PPA "is similar to the renewable resource tranches
evaluated in NIPSCO's 2021 IRP and is thus consistent with the Short-
Term Action Plan." Id. at 18-19. Accordingly, in the 45887 Order, the
Commission approved the Templeton Wind PPA, found the Templeton
Wind Project to be a clean energy project, and authorized NIPSCO to
recover all the purchased power costs over the full term of the Templeton
Wind PPA through the FAC. <i>Id.</i> at 20.

- Q12. Why is NIPSCO seeking a BTA structure for the Templeton Project as opposed to continuing to develop the project under the already approved Templeton Wind PPA?
- 18 A12. NextEra Energy Resources, LLC ("NextEra"), the developer of the
 19 Templeton Wind Project, advised NIPSCO that it was willing to sell the

Templeton Project to NIPSCO upon its completion at terms that NIPSCO considered favorable, even in comparison to the terms of the Templeton Wind PPA. As NIPSCO Witness Augustine discusses in his testimony, NIPSCO determined that the LCOE for the Templeton Project under the BTA structure would be favorable as compared to the LCOE under the PPA structure. As the parties were negotiating the BTA, they agreed to terminate the PPA because changed circumstances meant the terms of the PPA were no longer viable even as a backstop. Nothing has changed since the issuance of the Commission's 45887 Order that would alter the findings that the Templeton Project "will fit well into and diversify NIPSCO's overall generation portfolio" and "ensure the generation portfolio has adequate energy and capacity." 45887 Order at 19.

Q13. Please describe the Templeton Project under the Templeton BTA.

14 A13. The Templeton Project itself is not changing. Under the Templeton BTA,
15 Templeton Wind Holdings, LLC ("Seller"), through a special purpose
16 entity known as Templeton Wind Energy Center, LLC (the Templeton
17 ProjectCo), will develop a wind project that includes construction of 71
18 wind turbines in Benton County, Indiana (utilizing MISO interconnect
19 request J2509), having an aggregate nameplate capacity of approximately
19 Confidential – Excluded from public access per Court Records Rule 5

200 MW.4 The Templeton Project is expected to achieve commercial 2 operation by mid-2027 and have an estimated purchase price of \$

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Q14. Why does ownership of the Templeton Project benefit customers? 4

As supported by NIPSCO Witness Augustine, the price offered by NextEra for purchase of the Templeton Project results in an LCOE that is favorable to the LCOE under the former PPA structure. The 2021 IRP supports adding wind to NIPSCO's generation portfolio as part of its least-cost resource portfolio, and NIPSCO's initial decision to contract for the wind energy produced by the Templeton Project through a PPA was informed by the 2022 All-Source RFP. In addition, 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 federal tax credits to wind resources through the

The point of interconnection is Duke Energy Indiana's Westwood 345kV Substation. To facilitate the project's interconnection, less than \$10 million in upgrades are required, the cost of which are included in the purchase price.

passage of the IRA. The seasonal resource adequacy construct makes wind resources an important component of winter reserve margin planning, particularly as compared to solar resources. The expansion of IRA federal tax credits has improved the economics of wind resources making wind projects more competitive, which is reflected in the LCOE analysis sponsored by NIPSCO Witness Augustine. These two factors, and the fact that wind resources provide energy without fuel costs, make it prudent to negotiate competitive terms under which NIPSCO would purchase the Templeton Project.

In addition, wind resources are scarce within Indiana and a demand-supply imbalance could emerge as other nearby utilities move toward implementing wind resources, thereby possibly intensifying the pricing for wind projects. If NIPSCO were to pass on the Templeton Project, it could be exposed to higher pricing for wind projects due to a competitive market – especially starting the 3.5+ year process all over again while navigating the MISO Generator Interconnection Queue process that continues to be delayed.

1	Q15.	Is the cost to customers under the Templeton BTA structure comparable
2		to the cost to customers under the former Templeton Wind PPA?
3	A15.	Yes. As I discuss below, the cost to customers under the two structures is
4		comparable and as NIPSCO Witness Augustine notes, the LCOE under the
5		Templeton BTA structure is lower than the LCOE under the former PPA
6		structure.
7	Q16.	Does the Templeton BTA include any risk mitigation provisions to
8		protect the viability of the Templeton Project?
9	A16.	Yes. The Templeton BTA includes several risk mitigation provisions to
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Q17. Are there other benefits of a direct ownership structure as opposed to a

PPA structure?

A17. Yes. A direct ownership structure ensures the asset will be available to meet the needs of NIPSCO's customers over a longer term as compared to PPAs, which generally have terms of ten to twenty years. As a part of the implementation of NIPSCO's generation transition plan, NIPSCO has long valued the benefits of a diverse portfolio and the risk reduction a diverse portfolio affords. Diversification in the portfolio is more than technological diversification. Accordingly, NIPSCO has incorporated other types of diversification into its portfolio, including the use of different transaction structures via its mix of PPAs, joint ventures, and direct ownership to facilitate the generation transition. NIPSCO believes it is prudent to diversify its investments in renewable generation resources to manage risks, ensure that customers benefit from the portfolio as a whole, and to ensure NIPSCO has optionality to quickly address changing circumstances. A map showing NIPSCO's current generation portfolio and the diverse structures for those generation assets is attached hereto as Confidential – Excluded from public access per Court Records Rule 5

Attachment 1-C.

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As further discussed by NIPSCO Witness Harding, a direct ownership structure can drive value and financial benefits for NIPSCO customers through the realization of the Production Tax Credit ("PTC") and optionality with regards to self-utilization or transfer of these tax credits. Self-utilization and/or direct transfer of tax credits afforded under the IRA can provide an additional layer of diversification NIPSCO can apply to its portfolio. NIPSCO has in-service projects that utilize the Investment Tax Credit ("TTC") through both a joint venture / tax equity partner structure and through direct ownership.⁵

In addition to those benefits, a direct ownership structure provides operational management benefits to NIPSCO. For example, under a PPA

structure, the operation and management of the facility is completely

controlled by a third party. Similarly, under a tax equity partnership,

⁵ NIPSCO brought Indiana Crossroads Solar (200 MW) and

⁵ NIPSCO brought Indiana Crossroads Solar (200 MW) and Dunns Bridge I (265 MW) solar projects and Rosewater Wind (100 MW) and Crossroads Wind (300 MW) wind projects online. Because NIPSCO used the joint venture and tax equity structure to pursue those projects, customers benefit from the associated ITCs. In 2024, NIPSCO brought the Cavalry Solar Plus Battery (200 MW + 45 MW) project online. Because NIPSCO used the direct ownership structure to pursue this project, customers benefit from the associated ITCs and PTCs.

NIPSCO is required to have general operational decisions approved by the partner. Under a direct ownership structure, the operational decisions and asset management are governed by NIPSCO's operational and risk management practices. By simplifying the ownership structure, NIPSCO can allocate more time and resources to initiatives that ultimately benefit its customers.

7 Q18. How does the Templeton BTA leverage the benefits of PTCs afforded

8 **by the IRA?**

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9 A18. By extending PTCs for wind production facilities and allowing for the 10 transferability of credits, the IRA has done two important things: (1) 11 acknowledged the continued benefits of wind production and incentivized 12 further development of viable projects, and (2) created a tax credit market 13 that can be accessed by many investors with different investment 14 appetites, which is beneficial to all parties involved. The Templeton 15 Project is well positioned to provide customers the benefit of realization of 16 PTCs over a ten-year period. The expected capacity factor for the 17 Templeton Project is approximately 36.4%. This expected capacity factor 18 is a reasonable assumption when considering 10 years' worth of 19 production. As NIPSCO Witness Harding explains, the value of PTCs is Confidential – Excluded from public access per Court Records Rule 5

1	expected to grow each year due to the annual inflation adjustment factor,
2	and NIPSCO proposes to flow the PTC benefits to customers over a 10-
3	year period.

Q19. Is NIPSCO's approach of evaluating its generation projects on a
 portfolio basis and making modifications as appropriate to reduce risks
 to customers consistent with prior Commission directives?
 A19. Yes. The Commission has consistently stressed the importance of a
 balanced and diverse mix of generating resources. For instance, in *S. Ind.*

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balanced and diverse mix of generating resources. For instance, in *S. Ind. Gas & Elec. Co.*, Cause No. 45501, the Commission noted: "a balanced and diversified portfolio offers risk mitigation by helping to protect customers from marketplace risks, such as increases in fuel costs, or if the future differs from the IRP reference case scenario." 45501 Order at 4. In discussing the factors CenterPoint Energy Indiana South utilized in developing its preferred generation portfolio in its 2019/2020 IRP, including the use of a diverse mix of generating resources and ownership structures, the Commission stated "[t]hese factors are designed to diversify CenterPoint's portfolio and to provide off ramps that enable Petitioner to react to changing circumstances and make appropriate changes in its resources." *Id.* at 29. The Commission supported the

evaluation of projects on a portfolio basis and highlighted diversity in generation projects, stating "[f]uel diversity and the addition of local renewable resources are important in helping insulate electric utilities and their customers from contingencies such as fuel price fluctuations and changes in regulatory practices, including environmental regulations, that can impact the cost of a particular fuel." *Id.* at 31, 33. The Commission additionally noted the separate and diverse benefits of BTA ownership structures and PPA ownership structures and stated that risk can be mitigated through "diversification and [the] use of an economic mix of resources that provides flexibility." Id. at 32, 34. Taking advantage of the PTC for some projects and the ITC for others is consistent with the foregoing findings and will reduce customers' exposure to market uncertainties and risks. Moreover, in S. Ind. Gas & Elec. Co., Cause No. 45052, the Commission found: "[a] key consideration in long term resource planning is the need to retain maximum flexibility in utility resource decisions to minimize risks." 45052 Order at 24. The Commission noted "[t]he credibility of the analysis is critical to the efforts of Indiana utilities to maintain as many options as possible, which includes off ramps, to react quickly to changing

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circumstances and make appropriate changes in the resources." Id.
Consistent with the foregoing findings, NIPSCO developed a diverse
generation portfolio made up of resources that has preserved optionality
and allowed NIPSCO to react quickly to changing circumstances. That
portfolio structure allowed NIPSCO to identify an opportunity to modify
the structure of the Templeton Project while retaining a joint venture or
PPA structure for other projects. Full ownership of the Templeton Project
allows NIPSCO to realize all of the environmental attributes associated
with the Project, which it would not have access to under a PPA. Direct
ownership also provides greater flexibility and autonomy than under a
joint venture ownership structure, which would require contractual
commitments to a tax equity partner.
Is the Tompleton Duciest and on a direct example of the

Q20. Is the Templeton Project, under a direct ownership structure and the terms of the Templeton BTA, reasonable and necessary?

A20. Yes. The Commission's findings in the 45887 Order with respect to the necessity of the Templeton Project and its consistency with the 2018 IRP and Short-Term Action Plan remain true, notwithstanding the modifications to the ownership structure. As the Commission found in its 45887 Order, the Templeton Project is consistent with the 2021 IRP. 45887

Order at 19. The ownership structure does not change that finding, or the
findings that Templeton's energy and capacity are reasonable and
necessary additions to NIPSCO's portfolio of generating resources to meet
the need for electricity within NIPSCO's service area while also mitigating
the risk through the diversification and use of an economic mix of
resources that provides flexibility. See id. at 20. Additionally, the
Commission found that NIPSCO's LCOE analysis showed acquiring the
wind energy from the Templeton Project was "superior to other options
available to NIPSCO." Id. at 19. The change in ownership structure serves
to reduce the LCOE, such that the Templeton BTA is a reasonable, highly
economic choice to serve the energy and capacity needs of NIPSCO's
customers. Moreover, NIPSCO believes wholly owning the Templeton
Project and passing the benefit of wind PTCs to customers through the
FAC will mitigate the impact of the price increases on customer rates.
Commission approval of the relief requested herein is in the public
interest, will enhance or maintain the reliability and efficiency of service
provided by NIPSCO, and is otherwise consistent with Ind. Code § 8-1-8.8-
11.

REQUIREMENTS UNDER IND. CODE § 8-1-2-0.6

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2	A21.	Ind. Code § 8-1-2-0.6 is the codification of the Five Pillars (reliability,
3		affordability, resiliency, stability, and environmental stability)
4		recommended by the 21st Century Energy Policy Development Task Force
5		("Task Force") in its November 2020 Final Report. The Task Force
6		recommended these Pillars serve as the lens through which policy
7		decisions about Indiana's generation resource mix should be made. IURC
8		GAO 2023-04 specified the proceedings in which case-in-chief testimony
9		on the Five Pillars within Ind. Code § 8-1-2-0.6 is encouraged. An index
10		identifying the NIPSCO witness and testimony page number that
11		addresses each of the Five Pillars is attached to the Verified Petition as
12		Attachment B.

13 Q22. Is NIPSCO's request in this Cause consistent with the Five Pillars

14 codified in Ind. Code § 8-1-2-0.6?

15 A22. Yes. Ind. Code § 8-1-2-0.6(1) defines reliability in two ways: (a) the
16 adequacy of electric utility service, including the ability of the electric
17 system to supply the aggregate electrical demand and energy
18 requirements of end use customers at all times, taking scheduled and

reasonably expected unscheduled outages into account, 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. I, along with NIPSCO Witness Augustine, address the reliability attributes of the Templeton Project and the Preferred Portfolio as a whole. Overall, as part of NIPSCO's preferred generation portfolio, the Templeton Project will address both reliability concepts by providing capacity to meet the planning reserve requirements of MISO's seasonal resource adequacy construct and will further enhance the ability of the system to withstand sudden disturbances. NIPSCO Witness Augustine also addresses NIPSCO's 2021 IRP and Preferred Portfolio, which reflect a diverse resource mix to meet current and future load and reserve margin requirements. The Preferred Portfolio enhances the resiliency and stability of NIPSCO's system by minimizing the risk of sustained disruptions. NIPSCO's solar assets are well-suited to provide stable energy in the summer when usage is at its highest, NIPSCO's thermal resources will provide dispatchability to meet winter load, and NIPSCO's wind resources provide capacity benefits throughout Confidential – Excluded from public access per Court Records Rule 5

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1	the four seasons, including a higher accreditation in the winter than solar.
2	This balanced approach will ensure NIPSCO continues to meet its
3	planning reserve margin requirements in all four seasons.
4	The Preferred Portfolio was among the most affordable for customers,
5	particularly in light of the supply chain and solar tariff-related challenges
6	the industry has faced in recent years. The Preferred Portfolio is also
7	environmentally sustainable because it reduces lifecycle greenhouse gas
8	emissions, as compared to continued operation of NIPSCO's coal-fired
9	fleet and provides the flexibility to adapt to future environmental
10	regulations or upward shifts in fuel prices relative to other reference case
11	assumptions.
12	Although the Templeton Project itself is not directly aimed at resiliency,
13	the Short-Term Action Plan coming out of NIPSCO's 2021 IRP, of which
14	the Templeton Project is a part, is aimed at ensuring the overall resiliency
15	of NIPSCO's electric operations. As part of this portfolio, the Templeton
16	Project assists NIPSCO in ensuring both reliability and resiliency as it
17	serves its electric customers.

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

1	Q23.	Is the purchase and ownership of the Templeton Project consistent with
2		NIPSCO's 2018 and 2021 IRPs and Short-Term Action Plan?
3	A23.	Yes. As mentioned above, the relief sought in this case does not change
4		the Commission's findings in its 45887 Order. As explained by NIPSCO
5		Witness Augustine, the Templeton Project remains consistent with the
6		2018 and 2021 IRPs and Short-Term Action Plan.
7	Q24.	Ind. Code § 8-1-8.5-5(b)(2) requires that the proposed construction,
8		purchase, or lease be consistent with either the Commission's analysis
9		for expansion of electric generating capacity or with a utility specific
10		proposal. Is the purchase and ownership of the Templeton Project
11		consistent with Ind. Code § 8-1-8.5-5(b)(2)?
12	A24.	Yes. NIPSCO's purchase and ownership of the Templeton Project in this
13		proceeding is consistent with its 2018 and 2021 IRPs. Within its IRP
14		process, as further discussed by NIPSCO Witness Augustine, NIPSCO
15		considered many different generation resources for modeling, including
16		natural gas, coal, wind, solar, battery storage, and demand response.
17		NIPSCO engaged and considered stakeholder input throughout its IRP
18		process. NIPSCO utilized an array of best practices, including basing
		Confidential – Excluded from public access per Court Records Rule 5

model inputs on the results of an RFP; transparent inclusion of input forecasts, outputs, and assumptions; a thorough description of most aspects of screening and portfolio selection; and fair consideration of a wide range of supply-side alternatives without arbitrary limitations on the amount of those resources that can be selected or unsupported cost additions.

Q25. Is NIPSCO requesting ongoing review of the construction of the

Templeton Project pursuant to Ind. Code § 8-1-8.5-6?

A25. Yes. NextEra, as the developer for the Templeton Project, is already subject to quarterly construction reporting pursuant to Paragraph 7 in the Commission's January 17, 2024 Order in Cause No. 45952 (Templeton Wind Project) through commercial operation of the facility. These quarterly reports include many project and construction details, including, but not limited to, achievement of construction milestones, date of commercial operation, and, when commercial operation is achieved, the nameplate capacity of each facility. To satisfy ongoing review, NIPSCO will submit a report in this Cause within sixty days after the Templeton Project is placed in service, summarizing information related to the Templeton Project, including the actual total purchase price. NIPSCO will

1		file a separate cause pursuant to Ind. Code § 8-1-2-72 seeking to modify the
2		best estimates approved in this Cause to the extent approval of an increase
3		to the cost of the facilities above the best estimate is needed.
4	Q26.	Does the public convenience and necessity require or will require the
5		construction, purchase, and ownership of the Templeton Project?
6	A26.	Yes. The Templeton Project is the result of a thorough RFP process and a
7		quantitative and qualitative evaluation of the RFP responses. As the
8		Commission found in its 45887 Order, the energy provided through the
9		Templeton Project is a reasonable and necessary addition to NIPSCO's
10		portfolio of generating resources necessary to meet the need for electricity
11		within NIPSCO's service area, while also mitigating the risk through the
12		diversification and use of an economic mix of capacity resources that
13		provides flexibility.
	GUID	ELINES ESTABLISHED UNDER GAO 2022-01
14	Q27.	Are you familiar with GAO 2022-01?
15	A27.	Yes. GAO 2022-01 provides guidelines for additional evidence to be
16		provided in connection with certain petitions regarding electric generation
17		under Ind. Code chs. 8-1-8.5 and 8-1-8.8. The required information as it
18		pertains to NIPSCO's request for approval under Ind. Code ch. 8-1-8.8 in

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Petitioner's Confidential Exhibit No. 1 Northern Indiana Public Service Company LLC Page 29

1	this Cause is provided in <u>Attachment 1-D</u> . <u>Attachment 1-E</u> is the Affidavit
2	of Andy Witmeier, Director of Resource Utilization for MISO, providing a
3	qualitative assessment provided by MISO regarding the new generation,
4	including NIPSCO's request to MISO (Exhibit 1 to the Affidavit).

CONCLUSION

- 5 Q28. Does this conclude your prefiled direct testimony?
- 6 A28. Yes.

VERIFICATION

I, Patrick M. d'Entremont, Director of Portfolio Planning and Origination for NiSource Corporate Services Company, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information, and belief.

Patrick M.

d'Entremont Date:

February 24, 2025

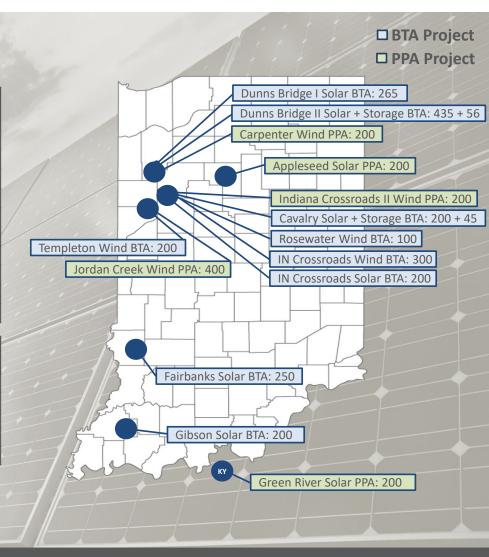
Attachment 1-A [Verified Petition - Not duplicated herein]



Current Portfolio Update

BTA Projects	Installed Capacity (MW)	Structure	Estimated In Service	Status
Rosewater Wind	100	JV	2020	Complete
Indiana Crossroads Wind	300	JV	2021	Complete
Dunn's Bridge I Solar	265	JV	2Q23	Complete
Crossroads Solar	200	JV	2Q23	Complete
Transmission Projects		Owned	2Q23	Complete
Cavalry Solar + Storage	200 + 45	Owned	2Q24	Complete
Dunn's Bridge II Solar + Storage	435 + 56	Owned	1Q25	Construction
Fairbanks Solar	250	Owned	2Q25	Construction
Gibson Solar	200	Owned	2Q-3Q25	Construction
Templeton Wind	200	Owner	2Q27	Construction

PPA Projects	Installed Capacity (MW)	Estimated In Service	Status
Jordan Creek Wind	400	2020	Complete
Crossroads II Wind	200	2023	Complete
Carpenter Wind	200	2025	Construction
Appleseed Solar	200	2025	Construction
Green River Solar	200	2025	Construction



GAO 2022-01 Information

GAO 2022-01 Guideline	Witness	Templeton BTA
The name of the RTO to which the generation will be connected.	D'Entremont	The Templeton Project will be connected to the Duke Energy Indiana Westwood 345kV Substation, which interconnects with the Midwest Independent System Operator, Inc. ("MISO") transmission system. To facilitate the project's interconnection, less than \$10 million in upgrades are required, the cost of which are included in the purchase price. See Q/A 13.
A description of the new generation's anticipated impact on the submitting utility's resource adequacy and reliability.	D'Entremont	The Templeton Project 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/A 11. The Templeton Project is expected to contribute to meeting resource adequacy requirements and contribute to the overall reliability of NIPSCO's system. See Q/A 14.
An explanation regarding whether the generation is required to be in the RTO's interconnection queue and, if so, its status in the queue.	D'Entremont	The Generation Interconnection Agreement ("GIA") request for the Templeton Project entered the MISO Queue in September 2022 and is currently in the Definitive Planning Phase 1. The GIA is expected to be executed by December 2025. See Q/A 13.
A description of the generation's expected capacity factors, dispatchability, and accreditation characteristics.	D'Entremont	The Templeton Project will provide 200 MW of nameplate capacity ("ICAP"), at an expected annual capacity factor of 36.4%. See Q/A 18. 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 the wind facility.
		The Templeton Project is expected to provide approximately 42 MW, 61 MW, 58 MW and 51 MW of UCAP accredited capacity in the Summer, Fall, Winter and Spring MISO planning seasons, respectively.

GAO 2022-01 Guideline	Witness	Templeton BTA
		The Templeton Project will be a variable resource.
		Please see Attachment 1-E for the Affidavit of Andy Witmeier, Director of Resource Utilization for MISO, providing a qualitative assessment provided by MISO regarding the new generation, including NIPSCO's request to MISO (Exhibit 1 to the Affidavit).
A description of how the generation is expected to perform at the relevant RTO's peak pursuant to its capacity construct.	D'Entremont	As noted above, the Templeton Project is expected to provide approximately 42 MW, 61 MW, 58 MW and 51 MW of UCAP accredited capacity in the Summer, Fall, Winter, and Spring MISO planning seasons, respectively.

AFFIDAVIT OF ANDREW WITMEIER

1		I. <u>INTRODUCTION AND QUALIFICATIONS</u>
2	Q.	PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND RELATIONSHIP TO
3		THE MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC. ("MISO").
4	A.	My name is Andrew Witmeier. I am the Director of Resource Utilization for the
5		Midcontinent Independent System Operator, Inc. ("MISO"). My business address is: 720
6		City Center Drive, Carmel, IN 46032-7574.
7	Q.	PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
8		PROFESSIONAL EXPERIENCE.
9	A.	I joined MISO in 2003 after graduating from Purdue University with a Bachelor's degree
10		in Electrical Engineering. I spent the first 17 years of my career in various positions in
11		MISO Operations. During that time I worked as a North American Reliability Corporation
12		("NERC") certified system operator in scheduling, engineering, and as a reliability
13		coordinator. I also led several groups within MISO Operations as a manager in engineering,
14		reliability coordination, and seams administration. In January 2020, I was appointed to my
15		current position.
16	Q.	PLEASE DESCRIBE YOUR JOB RESPONSIBILITIES WITH MISO AS THEY
17		RELATE TO THIS FILING.
18	A.	As the Director of Resource Utilization, I am responsible for the administration of MISO's
19		Generator Interconnection Procedures ("GIP"), which are set forth in Attachment X of
20		MISO's Open Access Transmission, Energy and Operating Reserve Markets Tariff
21		("Tariff" or "MISO Tariff"). I oversee MISO's generation interconnection queue,

1 including the conduct of studies, and the negotiation and execution of Generator 2 Interconnection Agreements.

II. PURPOSE OF THIS AFFIDAVIT

- 4 Q. ARE YOU SUBMITTING THIS AFFIDAVIT ON BEHALF OF MISO?
- 5 A. Yes.

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- 6 WHAT IS THE PURPOSE OF YOUR AFFIDAVIT? Q.
- 7 The purpose of my affidavit is to provide information requested by the Northern Indiana A.
- 8 Public Service Company LLC ("NIPSCO") to enable its compliance with Indiana Utility
- 9 Regulatory Commission General Administrative Order 2022-01 ("the GAO").
- 10 Q. PLEASE DESCRIBE NIPSCO'S REQUEST FOR INFORMATION.
- NIPSCO requested that MISO enable NIPSCO's compliance with the GAO by providing A. a qualitative assessment regarding new generation. The request referenced a potential project ("the Project") that has been submitted into the MISO Generator Interconnection Oueue ("the Oueue"). The Project was described in the Interconnection Request¹ as a 15 205.86 MW wind generating facility, consisting of 73 GE 2.82 MW wind turbines, each rated at 3.13 MVA/2.82 MW, one main power transformer, and a lead line to connect to 16 the point of interconnection at Westwood 345 kV Substation ("Westwood"). Interconnection Request for the Project was entered in the DPP 2022 Cycle, in the Central study group, with a Commercial Operation Date of 12/31/2025. NIPSCO states the Project 20 is now projected to have a Commercial Operation Date ("COD") in the second quarter of 2027.

III. NIPSCO REQUEST FOR INFORMATION

¹ Tariff Attachment X, Section 1 (Definitions).

1 Q. CAN MISO GIVE A GENERAL ASSESSMENT OF THE PROJECT?

- 2 A. At this time, MISO can only give a generalized assessment of the Project as the studies
- 3 associated with its Interconnection Request have not been completed.²
- 4 Q. DOES MISO NEED TO DO A FULL ASSESSMENT OF THE PROJECT AT THIS
- 5 POINT IN THE IURC PROCESS?
- 6 A. No. It is MISO's understanding that for the CPCN proceeding NIPSCO does not need to
- 7 present the same level of details that are required for the MISO Interconnection process.
- 8 The GAO requirement is fairly new to MISO. We have historically only reviewed the
- 9 Interconnection Request and studied how it impacts the grid.
- 10 Q. WHAT WOULD MISO NEED TO PROVIDE A FULL ASSESSMENT OF THE
- 11 **PROJECT?**
- 12 A. MISO's Tariff requires MISO to make determinations about the impacts of projects based
- on specific details in Interconnection Requests. Under the Tariff, an Interconnection
- Request contains relevant information such as the requested level of Interconnection
- Service, generating facility data, and short circuit and dynamic modeling information. A
- valid Interconnection Request for a new generating facility has entered the Definitive
- Planning Phase, a three phase study process.³ As of the date of this affidavit, MISO has
- received a valid⁴ Interconnection Request for the Project to enter the Definitive Planning

² As of October 9, 2024, the Central study group for the DPP 2022 Cycle is currently in DPP Phase I. The most recent MISO Definitive Planning Phase Schedule is available at https://www.misoenergy.org/planning/resource-utilization/GI_Queue/. The Preliminary System Impact Study, the first study in the Definitive Planning Phase, will not be available until completion of DPP Phase I.

³ Tariff Attachment X, Section 7.2.

⁴ Tariff Attachment X, Section 3.3.

Phase, but has not completed any of the applicable studies. Therefore, MISO cannot make specific statements regarding the impact of the project.

3 Q. WHAT IS MISO'S GENERAL ASSESSMENT OF THE PROJECT?

- A. From a generator interconnection process perspective, my general assessment is that submitting an Interconnection Request to be studied by MISO to be provided Interconnection Service is the appropriate method of connecting new generation on the MISO transmission system. NIPSCO states the Project is projected to have a COD in the second quarter of 2027. The ability for the Project to meet the COD depends on the date that an Interconnection Request is submitted for the Project, the date of completion of the Definitive Planning Phase, and the proposed development schedule.
- 11 Q. HOW DOES MISO EVALUATE WIND GENERATION IN ITS EVALUATION OF
- 12 INTERCONNECTION REQUESTS?
- 13 MISO's Generator Interconnection Procedures are fuel and technology neutral, and MISO A. 14 does not evaluate a project more or less preferably than another based on fuel type. This 15 said, MISO acknowledges that the attributes of Generating Facilities that are proposed by Interconnection Customers can positively or negatively impact grid reliability and that both 16 17 Interconnection Customers and regulators may consider how specific Generating Facilities 18 may impact overall grid reliability. MISO simply notes that as the IURC considers the 19 requested relief herein and MISO's GIP, that it also take grid reliability and the need for 20 electric generation into account.
- Q. COULD YOU PROVIDE COST ESTIMATES AND POTENTIAL COST

 ALLOCATION FOR INTERCONNECTION FACILITIES OR NETWORK

1		UPGRADES, IF ANY, REQUIRED TO CONNECT THE PROJECT TO THE MISO
2		TRANSMISSION SYSTEM?
3	A.	I am not able to estimate costs for the Project at this time. Costs will be assessed and
4		estimates provided at the end of each phase of the MISO three phase study process. The
5		costs of potential interconnection facilities will depend on the configuration of the Project
6		as detailed in the Interconnection Request, and its impact on the grid. Numerous factors
7		can impact Interconnection Facility costs. MISO cannot provide an estimate before the
8		appropriate studies are complete.
9	Q.	ASSUMING NETWORK UPGRADES OR INTERCONNECTION FACILITIES
10		ARE NEEDED, COULD YOU DESCRIBE THE SCOPE OF WORK AND
11		CONSTRUCTION TIMELINES FOR SUCH FACILITIES?
12		If a Network Upgrade is necessary, the scope of work and construction timelines would
13		need to be established through the Definitive Planning Phase. MISO cannot describe the
14		specific scope and timeline of a project prior to the Definitive Planning Phase.
15	Q.	WHAT IS MISO'S EVALUATION OF ANY POTENTIAL CONGESTION FROM
16		THE PROPOSED PROJECT DUE TO LOCAL ENERGY DELIVERABILITY, IF
17		ANY?
18	A.	Information, such as historical data from Westwood, may be available to help determine
19		the possibility of any potential congestion from the Project, however MISO does not
20		conduct any evaluations of historical congestion data as part of the Generator
21		Interconnection Process.
22		IV. <u>CONCLUSION</u>

23

- 1 Q. DOES THIS CONCLUDE YOUR AFFIDAVIT?
- 2 A. Yes, it does.

Affidavit of Andrew Witmeier

COUNTY OF HAMILTON)
	,
STATE OF INDIANA	1
OTHER OF HIDHIM	

Andrew Witmeier, being duly sworn, deposes and states that he prepared the Affidavit of Andrew Witmeier, and the statements contained therein are true and correct to the best of his knowledge and belief.

Andrew Witmeier

SUBSCRIBED AND SWORN BEFORE ME, this 20th day of Noember, 2024.

Kandi Hali-

KANDI HAHN
Notary Public, State of Indiana
Marion County
Commission Number NP0740038
My Commission Expires
March 23, 2030

Exhibit 1

Warning! This email originated from outside the organization and caution should be used when clicking on links/attachments. If you suspect this email is malicious, use the 'Phish Alert' button.

JB: J2509
DPP Cycle: DPP 2022 Cycle
DPP Status: In DPP 1 with a target completion of 1/31/2025
Expected GR: 11/2025 per most recent MISO update
POI: Duke Westwood 345kV

Thank you.

Tiffany Murray (she'her'] | Benir Counsel - NPSCO Regulatory | NSource Corporate Services
150 West Market Street, Suize 600 | Indianapolis, N 46004 | 26: 117-449-4540 Cell 2011 | Infantymurray@inisour **NiSource**



Have a concern? Need to report confidentially and/or anonymously? Click below



From: Kalen Coleman St.Coleman@misoenersc.org>
Sent: Thursday, October 24, 2024 9:19 AM
To: Steven Krohne@icemiller.com
Cc: Murray\, Tiffany <tiffanymurray@nisource.com>
Subject: RE: [EXT]Assistance With IURC Filling

This Message Is From an External Sender

Is the wind project already in the MISO GI queue? If not, could you send me any details about the project?

Kalen Coleman, PE
Associate Corporate Counsel
MISO | Legal Department
1700 Centerview Drive | Little Rock, Arkansas 72211
[501] 378-4187
kcoleman@misoenetry.cgg

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Kristins Tridico told me that you would be the person that could help with the following issue. A client (NPSCO) is filling a petition for approval of a new wind project and under the Commission's rules is required to provide. "The name of the RTO is which the new generation will be connected and information regarding the RTO's planning reserve margin, peaks, capacity auctions, possible ancillary services the new generation may provide, and other markets in which the new generation may participate, is qualitative assessment by the RTO regarding the new generation shall be requested and the RTO's response (including, as applicable, the RTO's affiding or restimony) shall be part of the utility's case in distinct.

In another NIPSCO case, Andrew Witmeier provided a short affidavit, which I have attached. In this case, I don't think the Affidavit would need to be near this long. Is that something you could help facilitate?

Steve

IceMiller

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