VERIFIED SUPPLEMENTAL DIRECT TESTIMONY OF GREG BAACKE

1 <b>Q1.</b>	Please state your name, business address and title.
2 A1.	My name is Greg Baacke. My business office address is Eastport Tower,
3	3001 Leonard Drive, Valparaiso, Indiana 46383. I am the Senior Director of
4	Major Projects for Northern Indiana Public Service Company LLC
5	("NIPSCO").
6 02	Are you the same Cree Parelie who mustiled direct testiments in this
6 <b>Q2.</b>	Are you the same Greg Baacke who prefiled direct testimony in this
7	Cause?
8 A2.	Yes.
9 <b>Q3.</b>	What is the purpose of your supplemental direct testimony in this
10	proceeding?
11 A3.	The purpose of my supplemental direct testimony is to provide additional
12	information relating to NIPSCO's shift in the in-service date of its proposed
13	natural gas combustion turbine ("CT") peaker plant (the "CT Project") on
14	available property at NIPSCO's R.M. Schahfer Generating Station
15	("Schahfer") site from end of year 2026 to end of year 2027. Specifically, I
16	discuss supply chain challenges that are affecting the project schedule and

1		how NIPSCO's election to self-build utilizing a multi-prime contracting
2		strategy has allowed NIPSCO to pivot in the face of these challenges
3		without a presently anticipated impact to the best estimate. I also sponsor
4		an updated CT Project schedule and best estimate of costs of construction.
5	Q4.	Are you sponsoring any attachments to your supplemental direct
6		testimony in this Cause.
7	A4.	Yes. I am sponsoring Confidential Attachment 5-S-B and Attachment 5-S-
8		C, both of which were prepared by me or under my direction and
9		supervision.
10	<u>Sup</u> r	oly Chain Challenges
11	Q5.	Did the project schedule in your direct testimony presented as
12		Attachment 5-C and discussed in Question / Answer 21 include any
13		flexibility given supply chain challenges are now commonplace?
14	A5.	Yes. NIPSCO's originally estimated in-service date was end of year 2026.
15		This was always with the understanding that the CT Project must be in
16		service no-later-than end of year 2027 due to planned retirements in 2028
17		discussed in the direct testimonies of NIPSCO Witnesses Stanley and

significant construction projects, especially given supply chain challenges are more commonplace since COVID-19. Based on the expectation that the combustion turbines and generation step-up transformers would be the longest lead time equipment, NIPSCO went out for bid on these components before filing its request for a certificate of public convenience and necessity ("CPCN"). I discussed this procurement work in Question / Answer 14 of my direct testimony and noted NIPSCO was still evaluating the information received from the bid events. This has included ongoing conversations with suppliers.

#### Q6. Does NIPSCO now have new information?

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- 11 A6. Yes. Based on the ongoing conversations with suppliers and NIPSCO's

  12 review of bid responses, there are material updates with respect to

  13 necessary components that are impacting the project timeline.
- Q7. What necessary components are known to be impacting or potentially
   impacting the project timeline?
- A7. 345 kV breakers are one of the components impacted and are likely the best example of the dynamics of the supply chain market. Supplier information from NIPSCO's 345 kV breaker supplier in late summer/early fall indicated

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a lead time of about two years. Recent information from multiple 345 kV breaker suppliers indicate lead times of 36 to over 48 months. Only a single supplier has indicated that a delivery of the five needed breakers can potentially be achieved by late Quarter 3, 2026. This information alone makes achieving an end of year 2026 in-service date particularly challenging barring significant improvements on delivery times for these crucial components. Another potentially impacting component is generator step-up transformers. Results of NIPSCO's generator step-up bid event indicate that only a single supplier can deliver generator step-up transformers to support an end of year 2026 in-service date, but no other generator step-up suppliers provided proposals that would meet this timeframe.

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- Q8. Given this new information, what is NIPSCO's updated approach to construction of the CT Project?
- 15 A8. These external supply chain challenges and other factors as discussed by 16 NIPSCO Witnesses Walter and Stanley caused NIPSCO to reevaluate an 17 end of the year 2026 in-service date. At this time, a target in-service date of 18 no-later-than end of year 2027 appears to be more achievable. If there are

- opportunities to achieve a summer or fall of 2027 in-service date for a portion or all of the CT Project, NIPSCO will evaluate such opportunities.
- 3 Q9. What key project risks is NIPSCO mitigating with this approach?
- 4 A9. This approach mitigates risks associated with unplanned changes to the 5 construction schedule. Construction labor is planned around anticipated 6 delivery dates of equipment and material as well as weather and contractor 7 availability. Late delivery of equipment or material could require 8 resequencing of the construction schedule in order to manage the 9 availability of labor and to maintain the overall project schedule. This may 10 include increased labor hours. This would likely come at added cost due to 11 the premium time of the construction contractor(s). Resequencing the 12 schedule due to late delivery of equipment or material may also require 13 construction activities to be performed during non-optimal construction 14 seasons. This would likely come at added cost due to lost productivity and 15 efficiencies in performing construction in potentially adverse weather 16 conditions. Overall, an end of year 2027 target in-service date is not "risk 17 free," but it has lower overall risk than an end of year 2026 in-service date.
  - Q10. How was NIPSCO's election to self-build with a multi-prime contracting

#### strategy beneficial in the face of these supply chain challenges?

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A10. The process NIPSCO took, which ultimately led to the election to self-build with a multi-prime contracting strategy, is discussed in Question / Answers 15-17 of my direct testimony. The variety of reasons NIPSCO chose selfbuild with a multi-prime contracting strategy is discussed in my direct testimony, but an added benefit of the election is it has allowed NIPSCO to pivot in the face of these challenges without a presently anticipated impact to the best estimate. Other contracting structures, such as with an engineering, procurement, and construction ("EPC") contractor, would likely have required the execution of a change order to shift the in-service date to end of year 2027 and increased costs as a result. In addition, NIPSCO was able to secure a favorable procurement timeframe for generator step-up transformers due to its strong vendor relationship. While these supply chain challenges would have hit regardless of the chosen contract structure, NIPSCO is able to pivot without a presently anticipated impact to the cost of the project. NIPSCO Witnesses Walter and Blissmer specifically discuss customer impact.

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Q11.	Given the end of year 2027 expected in-service date, are there any updates
	to NIPSCO's construction and bid process for the CT Project previously
	described in Question / Answer 19 of your direct testimony?
A11.	Yes. The anticipated dates of the activities stated in my answer provided
	in my original direct testimony have each been extended out one year.
	Where I said 2024, the expected date is now 2025. That answer remains
	otherwise unchanged. Under this planned construction and bid process,
	NIPSCO will have allowed third parties to submit firm and binding bids
	for the construction of the CT Project on NIPSCO's behalf that meet all of
	the technical, commercial, and other specifications so as to enable
	ownership of the CT Project to vest with NIPSCO not later than the date the
	facility becomes commercially available.
Q12.	Is NIPSCO still well positioned to oversee construction of the CT Project?
A12.	Yes, and as I discussed above, as a result of choosing to self-build the CT
	Project with a multi-prime contracting strategy, NIPSCO was able to pivot
	A11.

# Q13. Please describe the updates to the CT Project schedule.

with greater flexibility and minimized impact to the customer.

1 A13. As I stated in Question / Answer 21 of my direct testimony, the ultimate in-2 service date will be driven by the date the CPCN is granted. However, 3 given the updated information discussed here and in other NIPSCO 4 witness supplemental testimony, the units are now expected to be 5 commercially available by the end of 2027.<sup>1</sup> Attachment 5-S-C shows the 6 updated project schedule and reflects the following key drivers: the award 7 of the CT OEM contract and the associated long lead times for the CT 8 equipment, environmental permitting, and the MISO Generator 9 Replacement Process.

- 10 Q14. Please provide an update to the key schedule activities to complete the
  11 CT Project.
- 12 A14. A summary by year of the key schedule activities to complete the CT Project
  13 is as follows:
- 2023 NIPSCO released the turbine equipment RFP in June 2023
   with bids received in August 2023. Due to the long lead times,

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Based on the agreed procedural schedule modification filed with the Commission on December 18, 2023, an order in this Cause is requested to be issued on or before September 18, 2024.

NIPSCO issued contracts for five (5) 345 kV breakers and four (4) generator step-up transformers in December 2023.

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2024 – Due to the long lead time for turbine equipment, NIPSCO plans to enter into a Limited Notice to Proceed ("LNTP") with the selected turbine OEM in Quarter 2 2024. During the LNTP period, the turbine OEM will be limited to engineering and planning activities to better position them for the potential full release of the contract if the CPCN for the CT Project is issued. NIPSCO will work with the turbine OEM to obtain information that supports the start of detailed design, geotechnical investigation, environmental permitting, and the MISO Generator Replacement Process. NIPSCO plans to submit the environmental air permit and the MISO Generator Replacement Process application in Quarter 2 2024. Through 2024, NIPSCO will work with the turbine OEM to continue engineering and planning activities during the LNTP period and progress detailed design. A progressed detailed design will allow for the development of construction packages to be bid in 2025. If the CPCN for the CT Project is issued, NIPSCO plans to fully release

1		the turbine OEM for ordering materials, equipment, and start of
2		fabrication.
3	•	2025 – NIPSCO plans to bid and award the three major construction
4		contracts for the project in 2025 and to begin construction activities
5		later in 2025 with site preparation and the installation of
6		foundations.
7	•	2026 - Construction and long lead time equipment fabrication
8		activities will continue in 2026. Long lead time equipment will begin
9		to be delivered and installed on site. NIPSCO plans to begin gas,
10		electric, and water interconnect construction with portions of the
11		work expected to be complete in 2026.
12	•	2027 - Final material and equipment deliveries are expected to be
13		complete in early 2027, and all construction installation activities will
14		be substantially complete by mid-year to support start up and
15		commissioning and placing the CT Project in-service in Quarter 4
16		2027.
17	•	2028 – Completion of any remaining project close out activities.

#### **Best Estimate of Cost of Construction**

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2	Q15.	Is the best estimate of total cost of construction as presented in Question
3		/ Answer 23 of your direct testimony the same even with the update in
4		Project Schedule?
5	A15.	Yes. The best estimate of the total cost of construction for the CT Project
6		remains at \$641,223,000, (shown in <u>Attachment 5-A</u> of my direct testimony)
7		which includes indirect costs but excludes allowance for funds used during
8		construction ("AFUDC"). NIPSCO will accrue AFUDC associated with the
9		CT Project costs based upon the amounts at the time such costs or charges
10		are incurred. Based upon estimates of AFUDC at the time of this
11		supplemental filing, the total estimated cost, including AFUDC of
12		\$1,531,039, is \$642,754,039. <sup>2</sup>
13		The updated best estimate of cost of construction remains an AACE Class 3
14		estimate with an accuracy range of -20% / +30%. This cost estimate will be
15		refined as the project definition progresses and large contracts, such as the

As explained by NIPSCO Witness Blissmer, if NIPSCO's proposed construction work in progress ratemaking is approved, the AFUDC is projected to be fairly minimal, including only the actual AFUDC accrued to date and through February, 2025. AFUDC will be greater to the extent NIPSCO's proposal described by Mr. Blissmer is not approved.

1		CT OEM and construction contracts, are awarded for the CT Project.
2	Q16.	What has changed regarding the best estimate of total cost of
3		construction?
4	A16.	As shown in Confidential Attachment 5-S-B, the updated in-service date
5		shifts the yearly distribution of spend to align with the updated schedule
6		described in Question / Answer 14 of this supplemental direct testimony
7		and the updated project schedule in <u>Attachment 5-S-C</u> .
8	O17.	Does this conclude your prefiled supplemental direct testimony?

A17. Yes.

**VERIFICATION** 

I, Greg Baacke, Senior Director of Major Projects 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.

ls/ Greg Baacke

Greg Baacke

Date: January 16, 2024

#### Confidential Attachment 5-S-B (Redacted)

