STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF NORTHERN INDIANA PUBLIC SERVICE COMPANY FOR (1) APPROVAL OF AND A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR A FEDERALLY MANDATED ENVIRONMENTAL COMPLIANCE PROJECT; (2) **AUTHORITY TO RECOVER FEDERALLY MANDATED COSTS** INCURRED IN CONNECTION WITH THE ENVIRONMENTAL COMPLIANCE PROJECT; (3) APPROVAL OF THE ESTIMATED FEDERALLY MANDATED COSTS ASSOCIATED WITH THE **ENVIRONMENTAL COMPLIANCE PROJECT; (4) AUTHORITY FOR** THE TIMELY RECOVERY OF 80% OF THE FEDERALLY MANDATED COSTS THROUGH RIDER 787 – ADJUSTMENT OF FEDERALLY MANDATED COSTS AND APPENDIX I – FEDERALLY MANDATED COST ADJUSTMENT FACTOR; (5) AUTHORITY TO DEFER 20% OF THE FEDERALLY MANDATED COSTS FOR RECOVERY IN NIPSCO'S NEXT GENERAL RATE CASE; (6) APPROVAL OF SPECIFIC RATEMAKING AND ACCOUNTING TREATMENT: (7) APPROVAL TO DEPRECIATE THE ENVIRONMENTAL COMPLIANCE PROJECT ACCORDING TO PREVIOUSLY APPROVED DEPRECIATION RATES; AND (8) APPROVAL OF ONGOING REVIEW OF THE ENVIRONMENTAL COMPLIANCE PROJECT; ALL PURSUANT TO IND. CODE § 8-1-8.4-1 ET SEQ., § 8-1-2-19, § 8-1-2-23, AND § 8-1-2-42.

CAUSE NO. 44872

Verified Direct Testimony and Attachments of

Nicholas Phillips, Jr.

On behalf of

The NIPSCO Industrial Group

PUBLIC

April 3, 2017



Project 10373

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF NORTHERN INDIANA PUBLIC SERVICE COMPANY FOR (1) APPROVAL OF AND A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR A FEDERALLY MANDATED **ENVIRONMENTAL COMPLIANCE PROJECT: (2) AUTHORITY TO** RECOVER FEDERALLY MANDATED COSTS INCURRED IN CONNECTION WITH THE ENVIRONMENTAL COMPLIANCE PROJECT: (3) APPROVAL OF THE ESTIMATED FEDERALLY MANDATED COSTS ASSOCIATED WITH THE ENVIRONMENTAL COMPLIANCE PROJECT; (4) AUTHORITY FOR THE TIMELY **RECOVERY OF 80% OF THE FEDERALLY MANDATED COSTS** THROUGH RIDER 787 – ADJUSTMENT OF FEDERALLY MANDATED **COSTS AND APPENDIX I – FEDERALLY MANDATED COST** ADJUSTMENT FACTOR; (5) AUTHORITY TO DEFER 20% OF THE FEDERALLY MANDATED COSTS FOR RECOVERY IN NIPSCO'S **NEXT GENERAL RATE CASE; (6) APPROVAL OF SPECIFIC** RATEMAKING AND ACCOUNTING TREATMENT: (7) APPROVAL TO DEPRECIATE THE ENVIRONMENTAL COMPLIANCE PROJECT **ACCORDING TO PREVIOUSLY APPROVED DEPRECIATION RATES;** AND (8) APPROVAL OF ONGOING REVIEW OF THE **ENVIRONMENTAL COMPLIANCE PROJECT; ALL PURSUANT TO** IND. CODE § 8-1-8.4-1 ET SEQ., § 8-1-2-19, § 8-1-2-23, AND § 8-1-2-42.

CAUSE NO. 44872

Verified Direct Testimony of Nicholas Phillips, Jr.

- 1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 2 A Nicholas Phillips, Jr. My business address is 16690 Swingley Ridge Road, Suite 140,
- 3 Chesterfield, MO 63017.

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4 Q WHAT IS YOUR OCCUPATION?

I am a consultant in the field of public utility regulation and a Managing Principal of Brubaker & Associates, Inc., energy, economic and regulatory consultants. Our firm and its predecessor firms have been in this field since 1937 and have participated in more than 1,000 proceedings in forty states and in various provinces in Canada. We

have experience with more than 350 utilities including many electric utilities, gas

pipelines and local distribution companies ("LDCs"). I have testified in many electric and gas rate proceedings on virtually all aspects of ratemaking. More details are provided in Appendix A attached to this testimony.

4 Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

The NIPSCO Industrial Group ("Industrial Group"). Industrial Group members

purchase substantial quantities of electric energy from Northern Indiana Public

Service Company ("NIPSCO" or "Company").

8 Q HAVE YOU BEEN INVOLVED WITH PRIOR PROCEEDINGS BEFORE THE 9 INDIANA UTILITY REGULATORY COMMISSION ("IURC" OR "COMMISSION")?

Yes. I have been involved in prior proceedings before this Commission and have presented testimony in many of those proceedings. I have either presented testimony or been involved in numerous NIPSCO gas and electric cases before this Commission over the last 30 years, including the Company's recent electric base rate case, Cause No. 44688, TDSIC cases and other trackers.

Q PLEASE DESCRIBE NIPSCO'S REQUEST IN THIS PROCEEDING.

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In this proceeding, NIPSCO is seeking approval of a Certificate of Public Convenience and Necessity ("CPCN") for its proposed Environmental Compliance Project(s) to comply with the Coal Combustion Residuals ("CCR") Rule that became effective October 19, 2015 and the Effluent Limitations Guidelines ("ELG") that became effective on January 4, 2016. NIPSCO indicates that these projects are associated with its three active coal-fired generating units: Bailly, Michigan City and R.M. Schahfer. Since NIPSCO has indicated that the Bailly Generating Station will be

shutdown in 2018, the majority of the expenditures are associated with the units at the Michigan City and R.M. Schahfer generating stations which NIPSCO presently assumes will remain in service beyond the December, 2023 ELG compliance deadline.¹ Mr. Sangster's testimony also identifies additional future projects related to CCR compliance that NIPSCO is not, at present, seeking cost recovery for through this proceeding.

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NIPSCO is also requesting certain ratemaking and accounting treatment associated with the projects. In particular, NIPSCO is seeking approval under Indiana Code Chapter 8-1-8.4 for authority to recover 80% of the "approved federally mandated" costs associated with the projected through its periodic Federally Mandated Cost Adjustment Factor, Rider 787, and authority to defer 20% of the "approved federally mandated costs" for later recovery in NIPSCO's next base rate case.

WHAT IS THE SUBJECT MATTER OF YOUR DIRECT TESTIMONY?

My testimony is directed towards NIPSCO's requests for cost approval and cost recovery. I also make certain recommendations for reasonable ratepayer protections which the Commission should implement with respect to the proposed Environmental Compliance Projects.

¹Specifically, while other units at Schahfer are schedule to remain in service, Units 17 & 18 are scheduled to be closed in 2023.

1 Q DOES THE FACT THAT YOU DID NOT ADDRESS EVERY ISSUE RAISED IN 2 NIPSCO'S TESTIMONY MEAN THAT YOU AGREE WITH NIPSCO'S TESTIMONY ON THOSE ISSUES? 3 4 No. It merely reflects that I did not choose to address all those issues. It should not Α 5 be read as an endorsement of, or agreement with, NIPSCO's position on such issues. WHAT IS NIPSCO'S PROPOSED COST FOR THE ENVIRONMENTAL 6 Q 7 **COMPLIANCE PROJECTS?** NIPSCO is requesting approval of total direct and indirect capital cost of 8 Α 9 \$385.8 million and \$13.1 million of AFUDC for a total estimated cost of \$398.9 million. 10 NIPSCO also seeks approval to recover an estimated \$9.2 million increase in annual 11 operating and maintenance expense related to the Environmental Compliance 12 Projects.² In addition, NIPSCO is seeking approval to recover depreciation, taxes, and carrying costs.3 13 14 The \$398.9 million in estimated capital costs and AFUDC is based on estimates of \$228.5 million for the CCR projects and \$170.4 million for the ELG 15 projects.4 16 WHAT IS THE CURRENT STATE OF THE PROJECTS? 17 Q Petitioner's Exhibit 4, Attachment 4-A includes a column titled "Construction Start 18 19 Date." According to NIPSCO's Response to OUCC DR 6-3, this column "defines the 20 dates in Petitioner's Attachment 4-A for award of the EPC contracts," at least with

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respect to the CCR and ELG compliance projects.⁵ The response further indicates

²See Petitioner's Exhibit 4 at Attachment 4-A.

³See Petitioner's Exhibit 1 at page 14.

⁴Petitioner's Exhibit 4 at Attachment 4-A.

⁵See Attachment NP-A, NIPSCO Response to OUCC DR 6-3.

that EPC contracts for several of the costlier projects, the Remote Ash Conveyance Systems at Michigan City and Schahfer, are expected to be issued by the end of April, 2017.⁶ It appears, based on the dates on Attachment 4-A and the response that contracts for other projects, such as the ZLD system at Schahfer, will not be awarded until 2020.

Regardless of the "Construction Start Date," however, most of the CCR projects are scheduled to be in service by the fall of 2018 and the ZLD system is expected to be in service by the end of 2023.

Q HAVE YOU REVIEWED HOW NIPSCO ARRIVED AT THE COST ESTIMATES SET FORTH IN ATTACHMENT 4-A?

Yes, and I believe it is very important to note that Petitioner's Attachment 4-A is simply a summary that reflects the "final" estimate. It does not present the full basis of the estimate for purposes of assessing the costs associated with the Environmental Compliance Projects.

Q PLEASE EXPLAIN WHAT NEEDS TO BE REVIEWED IN ORDER TO HAVE A BETTER PICTURE OF WHAT IS CONTAINED IN THE COST ESTIMATE.

In addition to Attachment 4-A, NIPSCO provided cost analyses for the CCR projects (Petitioner's Confidential Attachment 4-B) and the ELG projects (Petitioner's Confidential Attachment 4-C). These reports, produced by Burns McDonnell and CH2M Hill, respectively, together with NIPSCO's Confidential Response to OUCC DR 5-1⁷ provide a much more comprehensive picture of what is included in NIPSCO's cost estimate than Petitioner's Attachment 4-A.

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⁷Confidential Attachment NP-B.

⁶*Id*.

1 Q PLEASE EXPLAIN YOUR UNDERSTANDING OF HOW THE ESTIMATES IN 2 ATTACHMENT 4-A WERE DEVELOPED.



20 Q DO YOU HAVE CONCERNS WITH THE FINAL ESTIMATES PROVIDED BY 21 NIPSCO?

Yes. To begin with, I would again note that EPC contracts are expected to be awarded for the major CCR projects by the end of April.⁸ At that time, NIPSCO will

⁸Attachment NP-A.

have a much firmer price of the expected costs for several of the costlier compliance projects. The starting point for considering the approved costs should be those contracts, not estimates subject to significant adjustments.⁹



Q PLEASE PROVIDE A SPECIFIC EXAMPLE OF HOW THE COST ESTIMATES WERE DEVELOPED.

A NIPSCO's Attachment 4-A shows \$137.9 million for Direct Capital for ELG



⁹This does not mean, however, that the EPC contract price should, inherently, be accepted. Insofar as no one has seen those contracts it is far too early to judge whether they present a reasonable cost for the proposed projects. I merely mean to point out that the contract prices are more likely than not a better starting point to gauge whether the costs are reasonable and should be approved.

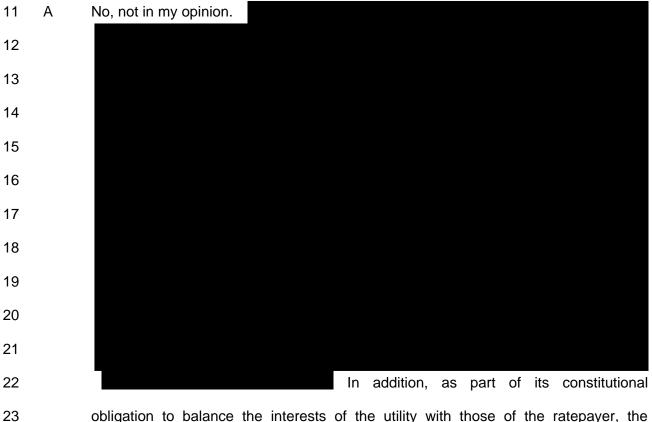


15 Q ARE THE OTHER PROJECT COST ESTIMATES DEVELOPED IN A SIMILAR 16 MANNER?





9 Q SHOULD THE COMMISSION APPROVE NIPSCO'S COST ESTIMATES GIVEN 10 YOUR DESCRIPTION OF HOW THEY WERE DEVELOPED?



obligation to balance the interests of the utility with those of the ratepayer, the Commission should adopt reasonable ratepayer protections.

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1 Q WHAT IS THE STATUTORY FRAMEWORK WITH REGARD TO APPROVAL OF

COSTS?

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NIPSCO seeks approval under Indiana Code Chapter 8-1-8.4. The statute requires the Commission to "approve the projected federally mandated costs associated with the proposed compliance project." IC 8-1-8.4-7(b) If the projected costs are approved, the utility is authorized to track 80% of the approved federally mandated costs and defer 20% of the federally mandated costs. IC 8-1-8.4-7(c).

WHAT IS SIGNIFICANT ABOUT THE FRAMEWORK OF INDIANA CODE 8-1-8.4?

Indiana Code 8-1-8.4 is one of a series of statutes Indiana has enacted to accelerate a utility's recovery of capital investments outside of traditional ratemaking. Whether a utility is operating under a traditional ratemaking or a tracker framework, the more it adds to its rate base, the more it can earn as a return on investment.

The difference is that under traditional ratemaking, a utility has incentive to control the costs of its capital projects because it is at risk of not recovering the cost of those investments until the project is in service and the utility has its next base rate case. A tracker framework, however, blunts the incentive to control costs which exists under traditional ratemaking precisely because it accelerates recovery of those costs outside of a general rate case. Pre-approval of cost recovery further blunts the incentive to contain costs as it serves as a form of regulatory assurance that the costs will ultimately be recovered.

In this context, by limiting the approved estimate to the lowest reasonable level, or requiring firm estimates or contract prices, the requirement in Indiana Code 8-1-8.4 that the Commission approve the projected federally mandated costs serves

as a means to provide the necessary cost-control incentive which is otherwise lost with cost recovery through a tracker.

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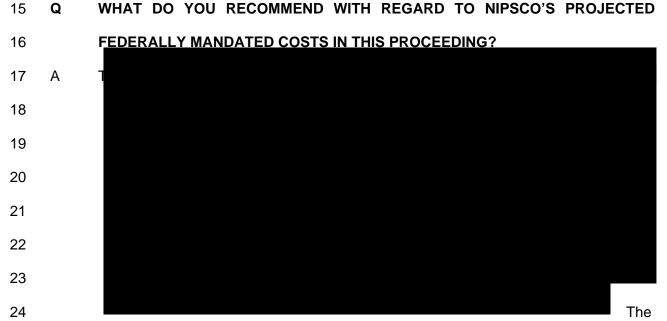
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A core principle of the regulatory compact is that a utility must conduct its operations efficiently in exchange for its monopoly service territory. The Commission, as the surrogate for competition, has an important role in ensuring that the same accountability principles which drive productivity in the unregulated business world are present with regard to major utility capital investments. In this case, the Commission can serve that role by concluding that excessive cost estimates should not be approved, and that firmer, more transparent estimates should be presented to the parties and the Commission for examination before approving cost recovery.

Competitive rates for the industrial sector in the NIPSCO territory are extremely important. The requested cost must be minimized because customers will be forced to pay for the costs at issue in this case and, in addition, replacement power costs after unit retirements. Ratepayer protection is essential in this matter.

WHAT DO YOU RECOMMEND WITH REGARD TO NIPSCO'S PROJECTED



Commission should also make necessary adjustments to the requested AFUDC, depreciation, taxes, and carrying costs to reflect a lower overall approved level of cost recovery.

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In addition, the Commission should require NIPSCO to present the final EPC contracts and responsive bids for the CCR projects that will be issued by the end of April, and allow the OUCC and intervening parties a full opportunity to review the costs reflected in the bids and contracts. The Commission should take the contract and bid prices into account before approving any cost recovery by NIPSCO.

By taking an approach to approve a more tailored estimate of federally mandated costs, ratepayers are protected from costs escalating more than reasonably should be the case.

TO THE EXTENT THAT NIPSCO WILL EVENTUALLY COLLECT ONLY ACTUAL COSTS THROUGH THE RIDER AS A RESULT OF RECONCILIATIONS, DOES THAT PROVIDE SUFFICIENT RATEPAYER PROTECTION FROM APPROVAL OF EXCESSIVE COST ESTIMATES?

No. Use of the reconciliation process in a rider is not an adequate ratepayer protection because it does not actually act as a means to incentivize cost control. The reconciliation process ultimately provides a utility with cost recovery for all amounts spent. The revenue requirement, however, is based on the initial cost estimate, subject only to offsets due to differences between forecasted and actual expenditures and recovery in prior periods. Accordingly, a reasonable, approved, estimate is a better ratepayer protection than the reconciliation process.

Q HAS THE COMMISSION PREVIOUSLY SPOKEN TO THE NEED FOR REASONABLE COST ESTIMATES?

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Yes, and abandoning such an approach would be inconsistent with a number of prior Commission decisions which have found that a reasonably detailed estimate is a necessary statutory requirement.

For example, with regard to NIPSCO's MATs projects in Cause No. 44012, the Commission stated:

We acknowledge that it would be ideal for a utility to perform more detailed engineering up front and provide a budgetary cost estimate with a range of accuracy of +/- 25% at the time the petition for a CPCN is filed. As we have previously stated, 'the initial granting of a CPCN depends in large part upon the economic efficacy of a proposed project, and as such, the initial cost estimates are a significant factor in the Commission's decision making process.' Indianapolis Power & Light, Cause No. 42170 ECR 16 SI, at 7 (IURC 7/7/2011). However, we recognize that NIPSCO and all other regulated utilities must operate within a variety of regulatory and statutory parameters that sometimes create tension between one another. We recognize this presents a challenge for a utility that wishes to satisfy environmental requirements while also attempting to provide timely and thorough information to state regulators and its stakeholders when it requests authority to construct the project. We believe that a one-sizefits all approach to a standardized cost estimate accuracy and/or a standardized level of engineering to be done before filing to support a request for a CPCN is not a reasonable or appropriate expectation because the circumstances surrounding the utility's need for the project may dictate differently.

The language in this Order clearly gives some leeway to the utility in developing its cost estimate based on the circumstances; but, significantly, it also underscores the importance of reasonable estimates in the Commission's decision making process.

Here, the proposed costs NIPSCO has presented in this case do not even come close to meeting the +/-25% accuracy range; and NIPSCO has not explained in its case in chief why it could not present a more tailored proposal in this case. This is especially troubling as it relates to the CCR projects, as final EPC contracts will be

issued by the end of April, 2017. As Mr. Baacke's testimony makes clear, NIPSCO was pursuing EPC contracts at the time the filing. See Petitioner's Exhibit 3 at pages 7-8. Yet, even with a hearing scheduled in July, 2017, rather than waiting for more reasonable estimates to be produced, NIPSCO has presented inflated estimates of CCR compliance costs for approval.

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This approach does a disservice to the other parties and the Commission by aggressively pursuing cost approval to satisfy regulatory requirements without reasonable consideration of the balance necessary to provide "timely and thorough" information to the Commission and stakeholders that would allow a reasonable review of what the Commission has identified as a "significant factor" in its decision making process in a case such as this.

WOULD IT BE BENEFICIAL TO REVIEW ACTUAL BIDS AND CONTRACTS?

Yes. But, as I noted above in relation to the EPC contracts, the presentation of the bids and final contracts is not, by itself, evidence of the reasonableness of the estimates or costs they contain. That still must be reviewed on an independent basis.

DO YOU HAVE ANY CONCERNS WITH NIPSCO'S PROPOSAL TO ALLOCATE RECOVERY OF APPROVED COSTS?

No. NIPSCO correctly indicates demand related or fixed costs will be allocated to classes as set forth in Joint Exhibit B to the Stipulation and Settlement Agreement ("Settlement") approved by the Commission in Cause No. 44688. In my opinion, this is appropriate because it is consistent with the terms of the Settlement and with basic cost of service principles. Fixed cost will basically be allocated to classes in

- 1 accordance with the revenue requirement established for each class in Cause No.
 2 U-44688.
- Q DO YOU HAVE ANY CONCERNS WITH RESPECT TO THE TERMS OF THE

 SETTLEMENT AND NIPSCO'S REQUEST FOR COST RECOVERY IN THIS

 CASE?
- 6 A Yes. The Settlement contained the following provision:

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7 "(c) Capital Project Financing. 8 The Settling Parties agree that during the time these rates 9 remain in effect, NIPSCO should finance, in aggregate, any project, or set of projects in an approved plan, estimated to cost 10 11 more than \$100 million for which it receives a Certificate of 12 Public Convenience and Necessity pursuant to Ind. Code Chapters 8-1-8.4, 8-1-8.5, 8-1-8.7, 8-1-8-8, or 8-1-39 with at 13 14 least 60% debt capital." (Stipulation and Settlement 15 Agreement, page 9, Cause No. U-44688)

Here, NIPSCO is seeking a CPCN under Indiana Code Chapter 8-1-8.4 for capital projects in excess of \$100 million. Accordingly, this term applies.

NIPSCO, however, has not presented any evidence regarding its plan to finance the requested Environmental Compliance Projects with at least 60% debt capital. In fact, in response to Industrial Group Data Requests 2-13 and 2-14, NIPSCO provides calculations of its estimated AFUDC and post-in-service carrying charges, respectively. Those responses, however, use a consistent WACC and debt/equity percentages, suggesting that NIPSCO has not attempted to modify its WACC or capital structure to reflect use of such financing.

The purpose of this provision in the Settlement was to address concerns with the capital structure NIPSCO employs by introducing balance to NIPSCO's capital structure by increasing the ratio of long term debt to equity. The result, all else being

¹⁰Attachments NP-D and NP-E.

equal, will be a more balanced capital structure and a lower overall WACC on a going forward basis. With a more balanced capital structure, and all else being equal, the result will be lower overall rate of return, resulting in lower burdens on ratepayers.¹¹

Consistent with the term of the Settlement, then, the Commission should require that NIPSCO use at least 60% debt financing for any approved cost over \$100 million, and to apply an adjusted WACC reflecting that long term debt in calculating AFUDC or carrying charges applied to deferred costs. In approving any cost estimate, further, the Commission should consider the impact of a 60% debt financing on those elements of the requested recovery and adjust them accordingly.

Q ARE THERE OTHER REASONABLE RATEPAYER PROTECTIONS THAT SHOULD BE CONSIDERED BY THE COMMISSION?

Yes. A reasonable cost cap for costs that are subject to the tracker should be implemented. The cap will protect ratepayers from excessive cost add-ons and over-runs since it appears that NIPSCO is compounding the carrying costs on a monthly basis. Financing costs should include at least 60% debt including AFUDC and carrying costs on deferrals. Carrying costs on deferrals should be limited to a certain reasonable time period, such as three years after completion of the project. The rationale for this proposal is the presumption that if a utility does not require a base rate increase, then its rates are adequate to recover carrying costs through the existing rates.

Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

22 A Yes, it does.

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¹¹Another impact of the use of the debt financing for large capital projects is to reduce the immediate cost to ratepayers of extensive capital investment versus relying on direct cost recovery of the capital cost through a tracking mechanism.

Qualifications of Nicholas Phillips, Jr.

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Ί	l Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

- 2 A Nicholas Phillips, Jr. My business address is 16690 Swingley Ridge Road, Suite 140,
- 3 Chesterfield, MO 63017.

4 Q PLEASE STATE YOUR OCCUPATION.

- 5 A I am a consultant in the field of public utility regulation and a Managing Principal with
- 6 the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory
- 7 consultants.

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8 Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL

9 **EMPLOYMENT EXPERIENCE.**

- A I graduated from Lawrence Institute of Technology in 1968 with a Bachelor of Science

 Degree in Electrical Engineering. I received a Master's of Business Administration

 Degree from Wayne State University in 1972. Since that time I have taken many

 Masters and Ph.D. level courses in the field of Economics at Wayne State University
- and the University of Missouri.

I was employed by The Detroit Edison Company in June of 1968 in its Professional Development Program. My initial assignments were in the engineering and operations divisions where my responsibilities included the overhead and underground design, construction, operation and specifications for transmission and distribution equipment; budgeting and cost control for operations and capital expenditures; equipment performance under field and laboratory conditions; and

emergency service restoration. I also worked in various districts, planning system expansion and construction based on increased and changing loads.

Since 1973, I have been engaged in the preparation of studies involving revenue requirements based on the cost to serve electric, steam, water and other portions of utility operations.

Other responsibilities have included power plant studies; profitability of various segments of utility operations; administration and recovery of fuel and purchased power costs; sale of utility plant; rate investigations; depreciation accrual rates; economic investigations; the determination of rate base, operating income, rate of return; contract analysis; rate design and revenue requirements in general.

I held various positions at Detroit Edison, including Supervisor of Cost of Service, Supervisor of Economic studies and Depreciation, Assistant Director of Load Research, and was designated as Manager of various rate cases before the Michigan Public Service Commission and the Federal Energy Regulatory Commission. I was acting as Director of Revenue Requirements when I left Detroit Edison to accept a position at Drazen-Brubaker & Associates, Inc., in May of 1979.

The firm of Drazen-Brubaker & Associates, Inc. was incorporated in 1972 and has assumed the utility rate and economic consulting activities of Drazen Associates, Inc., active since 1937. In April 1995, the firm of Brubaker & Associates, Inc. was formed. It includes most of the former DBA principals and staff.

Our firm has prepared many studies involving original cost and annual depreciation accrual rates relating to electric, steam, gas and water properties, as well as cost of service studies in connection with rate cases and negotiation of contracts for substantial quantities of gas and electricity for industrial use. In these cases, it was necessary to analyze property records, depreciation accrual rates and

reserves, rate base determinations, operating revenues, operating expenses, cost of capital and all other elements relating to cost of service.

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In general, we are engaged in valuation and depreciation studies, rate work, feasibility, economic and cost of service studies and the design of rates for utility services. In addition to our main office in St. Louis, the firm also has branch offices in Phoenix, Arizona and Corpus Christi, Texas.

7 Q WHAT ADDITIONAL EDUCATIONAL, PROFESSIONAL EXPERIENCE AND 8 AFFILIATIONS HAVE YOU HAD?

I have completed various courses and attended many seminars concerned with rate design, load research, capital recovery, depreciation, and financial evaluation. I have served as an instructor of mathematics of finance at the Detroit College of Business located in Dearborn, Michigan. I have also lectured on rate and revenue requirement topics.

HAVE YOU PREVIOUSLY APPEARED BEFORE A REGULATORY COMMISSION?

Yes. I have appeared before the public utility regulatory commissions of Arkansas, Delaware, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Missouri, Montana, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, South Dakota, Virginia, West Virginia, and Wisconsin, the Lansing Board of Water and Light, the District of Columbia, and the Council of the City of New Orleans in numerous proceedings concerning cost of service, rate base, unit costs, pro forma operating income, appropriate class rates of return, adjustments to the income statement, revenue requirements, rate design, integrated resource planning, power plant operations, fuel cost recovery, regulatory issues, rate-making issues,

- 1 environmental compliance, avoided costs, cogeneration, cost recovery, economic
- 2 dispatch, rate of return, demand-side management, regulatory accounting and
- 3 various other items.

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STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF NORTHERN INDIANA PUBLIC SERVICE COMPANY FOR (1) APPROVAL OF AND A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR A FEDERALLY MANDATED ENVIRONMENTAL COMPLIANCE PROJECT; (2) AUTHORITY TO RECOVER FEDERALLY MANDATED COSTS INCURRED IN CONNECTION WITH THE ENVIRONMENTAL COMPLIANCE PROJECT; (3) APPROVAL OF THE ESTIMATED FEDERALLY MANDATED COSTS ASSOCIATED WITH THE ENVIRONMENTAL COMPLIANCE PROJECT; (4) AUTHORITY FOR THE TIMELY RECOVERY OF 80% OF THE FEDERALLY MANDATED COSTS THROUGH RIDER 787 – ADJUSTMENT OF FEDERALLY MANDATED COSTS AND APPENDIX I - FEDERALLY MANDATED COST ADJUSTMENT FACTOR; (5) AUTHORITY TO DEFER 20% OF THE FEDERALLY MANDATED COSTS FOR RECOVERY IN NIPSCO'S NEXT GENERAL RATE CASE; (6) APPROVAL OF SPECIFIC RATEMAKING AND ACCOUNTING TREATMENT; (7) APPROVAL TO DEPRECIATE THE ENVIRONMENTAL COMPLIANCE PROJECT ACCORDING TO PREVIOUSLY APPROVED DEPRECIATION RATES; AND (8) APPROVAL OF ONGOING REVIEW OF THE ENVIRONMENTAL COMPLIANCE PROJECT; ALL PURSUANT TO IND. CODE § 8-1-8.4-1 ET SEQ., § 8-1-2-19, § 8-1-2-23, AND § 8-1-2-42.

CAUSE NO. 44872

Verification

I, Nicholas Phillips, Jr., a Consultant and Managing Principal of Brubaker & Associates, Inc., affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information and belief.

Nicholas Phillips, Jr.

Cause No. 44872 Northern Indiana Public Service Company's Objections and Responses to OUCC's Data Request Set No. 6

OUCC Request 6-003:

Please provide any updates for "Construction Start Date" and "In-Service Date" for each CCR and ELG Compliance Plan project shown in Petitioner's Attachment 4-A. Provide detailed explanations for describing the reason for the change in each date.

Objections:

Response:

The term "Construction Start Date" as used in Petitioner's Exhibit No. 4 defines the dates in Petitioner's Attachment 4-A for award of the EPC contracts. There have been changes to Construction Start Dates for five (5) of the fourteen (14) projects listed in Petitioner's Attachment 4-A, and these changes are listed below. All of the in-service dates, with exception to Piping of Bottom Ash to FGD, remain unchanged.

- R. M. Schahfer Generating Station (RMSGS) & Michigan City Generating Station (MCGS) Remote Ash Conveying Systems The construction start dates for these projects have been changed from 4/1/17 to 4/28/17. These dates have been changed due to the anticipated award of the EPC contract on 4/28/17.
- MCGS Material Handling Area The construction start date for this project has been changed from 4/1/17 to 4/28/17. This date has changed since this work is planned to be integrated with the EPC contract for the Remote Ash Conveying System project at MCGS.
- RMSGS Material Handling Area The construction start date for this project has been tentatively changed from 4/1/17 to 4/1/18. It is anticipated that construction of this project can occur in a single year. However, the schedule for this project is still under review to determine any impacts from constructing the new RMSGS Material Handling Area in 2018.
- Piping Bottom Ash to FGD The construction start date for this project has been changed from 1/1/20 to 4/28/17. The in-service date for this project has been changed from 12/1/23 to 10/19/18. This date has changed since this work is planned to be integrated with the EPC contract for the Remote Ash Conveying System project at RMSGS.

NIPSCO also notes that it anticipates beginning excavation for the MCGS and RMSGS Remote Ash Conveying Systems, the MCGS Material Handling Area, and the Piping Bottom Ash to FGD on or about July 1, 2017.

Confidential Attachment NP-B (Redacted Public Version)

Cause No. 44872 Northern Indiana Public Service Company's Objections and Responses to OUCC's Data Request Set No. 5

OUCC Request 5-001:

Refer to Direct Testimony Kurt Sangster. Mr. Sangster discusses capital costs and annual O&M costs associated with the options for CCR and ELG compliance. Cost estimates included in Sangster's testimony, and Confidential Attachments 4-B and 4-C do not appear to agree on a dollar-to-dollar comparison. Please describe in detail the differences between these estimates. Provide supporting documentation.

Objections:

NIPSCO objects to this Request on the grounds and to the extent that this Request seeks information that is confidential, proprietary and/or trade secret information.

Response:

Subject to and without waiver of the foregoing general and specific objections, NIPSCO is providing the following response:

See the attached spreadsheet, OUCC Request 5-001 Confidential Attachment A, for an explanation of the buildup of the estimates. The total includes the Direct Capital from Petitioner's Confidential Attachments 4-B and 4-C, Direct Capital-Owner's Cost, Direct Capital-Upper End of Accuracy Range, and Direct Capital- Escalation. These are all summed to get to the Total Direct Capital amounts that are shown on Petitioner's Attachment 4-A.

											-							_			 ent in		_
	In-Service Date		10/19/2017 on-going	9	10/19/2017	10/19/2018	10/19/2018 on-going			10/19/2017	10/19/2018	10/19/2018 TBD	10/19/2028	on-going					12/1/2023 12/1/2023				
	Construction Start Date		6/6/2016		6/13/2016	4/1/2017	4/1/2017 10/21/2015			5/23/2016	4/1/2017	/107/1/4	10/21/2018	10/21/2013					1/1/2020				
	Annual O&M (\$)		117,000	463,000	117.000	2,252,000	346,000	2,715,000		280,000	2,382,000		000	3.463.000		6,641,000			0 2,600,000	2,600,000	Annual O&M (\$)		9,241,000
	Annı																				Annı		\$
	Total Capital (\$)															228,535,000				170,275,000	Total Capital (\$)		398,810,000
	AFUDC (\$)															6,700,000				6,400,000	AFUDC (\$)		13,100,000 \$
iance Project	Total Capital (direct and controllable) (\$)		1,380,000	1,380,000	1.380.000	61,525,000	3,450,000 0	66,355,000		3,565,000	123,740,000	6.210.000	18,285,000	154.100.000	2001001100	221,835,000			5,290,000	163,875,000	Total Capital (direct and controllable)		385,710,000 \$
ntal Compl	Indirect Capital (\$)		180,000	180,000	180.000	8,025,000	450,000 0	8,655,000		465,000	16,140,000	810.000	2,385,000	20.100.000	2001001100	28,935,000			690,000	21,375,000	Indirect Capital (\$)		50,310,000 \$
NIPSCO Environmental Compliance Project	Total Direct Capital (\$)		1,200,000	1,200,000	1.200,000	53,500,000	3,000,000	57,700,000		3,100,000	107,600,000	5.400.000	15,900,000	134.000.000		192,900,000			4,600,000	142,500,000	Direct Capital (\$)		\$ 335,400,000 \$
NIPSC																					ŀ		\$
	H																						8
	ŀ						ľ														þ		\$
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	Project	CCR Compliance Plan	Bailly Generating Station Ground Water Monitoring Incremental Surface Impoundment (O&M)		Michigan City Generating Station Ground Water Monitoring	Remote Ash Conveying	Material Management Area Incremental Surface Impoundment (O&M)		R. M. Schahfer Generating Station	Ground Water Monitoring	Remote Ash Conveying (U14 & U15)	Material Mariagement Area Process and Storm Water Pond	Landfill-Pond Closure	Total		J.R.	ELG Compliance Plan	R. M. Schahfer Generating Station	Piping Bottom Ash to FGD ZLD	Đ.		Environmental Compliance Project	
		CCRC	Bailly G Ground W.	Total	Michiga Ground W	Remote A:	Material N Incrementa	Total	R. M. Sc	Ground W.	Remote A	Process at	Landfill-Pc	Total		Total CCR	ELG C	R. M. Sc	Piping Bott ZLD	Total ELG		Environ	

ATTACHMENT NP-C (CONFIDENTIAL)

Cause No. 44872 Northern Indiana Public Service Company's Objections and Responses to Industrial Group's Data Request Set No. 2

IG Request 2-013:

Please provide the AFUDC rate development and the compounding period used to provide the total AFUDC amount.

Objections:

Response:

Please see the file attached hereto as IG Set 2-013 Attachment A for a detailed summary of AFUDC activity and related AFUDC rates for the respective periods. NIPSCO notes that, because of rounding differences, the total AFUDC shown in Attachment A (\$13.2 million) differs from the amount included in Petitioner's Exhibit No. 4 (\$13.1 million).

	1/31/2016 2,	/29/2016 3	/31/2016	4/30/2016	5/31/2016	6/30/2016	7/31/2016	8/31/2016	9/30/2016	10/31/2016	11/30/2016	12/31/2016	1/31/2017	2/28/2017	3/31/2017	4/30/2017	5/31/2017	6/30/2017	7/31/2017	8/31/2017	9/30/2017
AFUDC	-	-	-	-	-	-	-	-	-	341	1,811	4,349	13,369	33,211	57,320	77,641	94,535	114,648	149,455	126,467	173,020
Debt %	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%
Equity %	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%

10/31/2017	11/30/2017	12/31/2017	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	1/31/2019	2/28/2019	3/31/2019	4/30/2019	5/31/2019
219,926	271,397	334,976	392,860	233,571	295,213	341,119	427,330	628,000	615,789	407,627	500,988	589,273	647,640	1,351	1,396	4,186	6,999	10,527	14,775
2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%
5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%

6/3	0/2019	7/31/2019	8/31/2019	9/30/2019	10/31/2019	11/30/2019	12/31/2019	1/31/2020	2/29/2020	3/31/2020	4/30/2020	5/31/2020	6/30/2020	7/31/2020	8/31/2020	9/30/2020	10/31/2020	11/30/2020	12/31/2020	1/31/2021	2/28/2021	3/31/2021
	19,052	21,967	15,070	16,565	17,921	19,137	0	358	1,078	1,802	2,890	4,344	5,807	7,281	6,591	8,070	9,226	10,057	0	3,930	11,816	19,756
	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%
	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%

4/30/2021	5/31/2021	6/30/2021	7/31/2021	8/31/2021	9/30/2021	10/31/2021	11/30/2021	12/31/2021	1/31/2022	2/28/2022	3/31/2022	4/30/2022	5/31/2022	6/30/2022	7/31/2022	8/31/2022	9/30/2022	10/31/2022	11/30/2022
35,298	58,493	81,847	106,017	107,188	132,186	161,625	195,534	218,454	252,020	149,761	182,919	216,684	251,059	285,669	326,603	173,668	219,925	263,901	305,579
2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%	2.33%
5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%

12/31/2022	1/31/2023	2/28/2023	3/31/2023	4/30/2023	5/31/2023	6/30/2023	7/31/2023	8/31/2023	9/30/2023	10/31/2023	11/30/2023	12/31/2023
337,563	379,318	185,848	226,791	262,866	294,039	325,424	352,351	126,613	-	-	-	-
2.33%												
5.86%												

Cause No. 44872 Northern Indiana Public Service Company's Objections and Responses to Industrial Group's Data Request Set No. 2

IG Request 2-014:

Please provide the post in service carrying costs ("PISCC") rate development and the compounding period used by NIPSCO. Please provide an estimate of the deferred amount and of the carrying costs by year.

Objections:

Response:

Please see the file attached hereto as IG Set 2-014 Attachment A for a detailed summary of estimated PISCC balances (including the deferred amounts) and related PISCC rate for the respective periods.

	1/31/2016	2/29/2016	3/31/2016	4/30/2016	5/31/2016	6/30/2016	7/31/2016	8/31/2016	9/30/2016	10/31/2016	11/30/2016	12/31/2016
PISCC (80%)	-	-	-	-	-	-	-	-	-	-	-	-
PISCC (20%)	-	-	-	-	-	-	-	-	-	-	-	-
WACC	6.49%	6.49%	6.49%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%

	1/31/2017	2/28/2017	3/31/2017	4/30/2017	5/31/2017	6/30/2017	7/31/2017	8/31/2017	9/30/2017	10/31/2017	11/30/2017	12/31/2017	1/31/2018	2/28/2018	3/31/2018	4/30/2018
PISCC (80%)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PISCC (20%)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WACC	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%

	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	1/31/2019	2/28/2019	3/31/2019	4/30/2019	5/31/2019	6/30/2019	7/31/2019	8/31/2019
PISCC (80%)	-	-	-	-	-	-	-	-	730,593	251,456	247,544	247,198	247,260	247,317	247,359	-
PISCC (20%)	-	-	-	-	-	-	-	-	182,648	62,864	61,886	61,799	61,815	61,829	61,840	-
WACC	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%

	9/30/2019	10/31/2019	11/30/2019	12/31/2019	1/31/2020	2/29/2020	3/31/2020	4/30/2020	5/31/2020	6/30/2020	7/31/2020	8/31/2020	9/30/2020	10/31/2020	11/30/2020	12/31/2020
PISCC (80%)	-	-	-	3,064	26,968	7,745	7,585	7,570	7,570	7,570	7,570	-	-	-	-	-
PISCC (20%)	-	-	-	766	6,742	1,936	1,896	1,893	1,892	1,892	1,892	-	-	-	-	-
WACC	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%

	1/31/2021	2/28/2021	3/31/2021	4/30/2021	5/31/2021	6/30/2021	7/31/2021	8/31/2021	9/30/2021	10/31/2021	11/30/2021	12/31/2021	1/31/2022	2/28/2022	3/31/2022	4/30/2022
PISCC (80%)	14,142	4,423	4,343	4,337	4,337	4,337	4,337	-	-	-	-	-	11,636	3,975	3,911	3,911
PISCC (20%)	3,536	1,106	1,086	1,084	1,084	1,084	1,084	-	-	-	-	-	2,909	994	978	978
WACC	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%

	5/31/2022	6/30/2022	7/31/2022	8/31/2022	9/30/2022	10/31/2022	11/30/2022	12/31/2022	
PISCC (80%)	3,911	3,911	3,911	-	-	-	-	-	
PISCC (20%)	978	978	978	-	-	-	-	-	
WACC	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	6.66%	