

TESTIMONY OF DOUGLAS F ESAMANN
PRESIDENT, DUKE ENERGY INDIANA, INC.
CAUSE NO. 44418 BEFORE THE
INDIANA UTILITY REGULATORY COMMISSION

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Douglas F Esamann, and my business address is 1000 East Main Street,
4 Plainfield, Indiana.

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 A. I am President of Duke Energy Indiana, Inc. ("Duke Energy Indiana" or "Company"),
7 an indirect subsidiary of Duke Energy Corp. ("Duke Energy").

8 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL AND**
9 **PROFESSIONAL BACKGROUND.**

10 A. I am a graduate of Indiana University with a Bachelor of Science Degree in
11 Accounting. I joined Public Service Company of Indiana, Inc. ("PSI") in 1979 and
12 have held various positions with PSI or its affiliated companies in the Accounting,
13 Tax, and Corporate Development areas. From March 1999 until October 2001, I was
14 Vice President and Chief Financial Officer of Cinergy Corp.'s ("Cinergy")
15 Commercial Business Unit. I was named President of PSI Energy in October 2001.
16 In 2004, I was named Senior Vice President of Energy Portfolio Strategy and
17 Management for Cinergy. Immediately following the merger between Duke Energy
18 and Cinergy in April 2006, I served as Group Vice President of Strategy and Planning
19 for Duke Energy's U.S. Franchised Electric and Gas organization. In July 2009, I

1 was named Senior Vice President of Corporate Strategy for Duke Energy until
2 assuming my current position of President of Duke Energy Indiana in November
3 2010.

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

5 A. The purpose of my testimony is to: (1) review our proposed Phase 3 Environmental
6 Compliance Plan ("Phase 3 Plan") projects; (2) provide an overview of our witnesses
7 and their testimonies in this proceeding; and (3) provide an overview of the relief
8 requested by Duke Energy Indiana in this proceeding.

9 **II. PROPOSED PHASE 3 PLAN PROJECTS**

10 **Q. PLEASE SUMMARIZE THE PRIMARY COMPONENTS OF DUKE**
11 **ENERGY INDIANA'S PROPOSED PHASE 3 PLAN.**

12 A. Where our Phase 2 Compliance Plan¹ dealt primarily with the longest lead time
13 Mercury and Air Toxics Standards ("MATS") rule compliance projects, the Cayuga
14 Station Units 1 and 2 SCRs, Duke Energy Indiana's Phase 3 Plan will address the
15 remaining elements of our MATS rule compliance strategy. The Phase 3 Plan
16 includes: precipitator refurbishment projects at Gibson Units 3, 4, and 5; finalization
17 of our mercury trim technology selection at Gibson and Cayuga Stations; and our
18 MATS emission monitoring strategy. The chart below shows the primary
19 components of the Company's Phase 3 Plan:

¹ The Company's Phase 1 Environmental Compliance Plan, filed under consolidated Cause Nos. 42622 and 42718, was approved by the Commission's May 24, 2006 Order. The Company's Phase 2 Environmental Compliance Plan was approved by the Commission's April 3, 2013 Order in Cause No. 44217.

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Duke Energy Indiana’s Proposed Phase 3 Plan

| Station | Compliance Plan |
|----------------------------|---|
| Gibson Station | Unit 1 – PM CEMS, calcium bromide injection system Unit 2 – PM CEMS, calcium bromide injection system Unit 3 – Precipitator refurbishment, PM CEMS, calcium bromide injection system Unit 4 – Precipitator refurbishment, PM CEMS and associated stack improvements, calcium bromide injection system Unit 5 – Precipitator refurbishment, PM CEMS and associated stack improvements, calcium bromide injection system, FGD relief duct dampers |
| Cayuga Station | Unit 1 – PM CEMS, calcium bromide injection system Unit 2 – PM CEMS, calcium bromide injection system |
| Edwardsport Station | IGCC – Mercury sorbent trap |

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The Company’s MATS compliance plan no longer includes activated carbon injection (“ACT”) as a primary technology option, which is a significant change from our Phase 2 Plan proceeding. Also, with respect to Wabash River Station Unit 6, our evaluation is ongoing and we have not yet made a decision with respect to a potential natural gas conversion of that unit.

1 **Q. WHAT ARE THE ESTIMATED CAPITAL COSTS OF DUKE ENERGY**
2 **INDIANA'S PHASE 3 PLAN?**

3 A. The Company's Phase 3 Plan is estimated to require a capital investment of
4 approximately \$113 million, plus actual accrued AFUDC, which is estimated to be
5 about \$3 million.

6 **Q. MR. ESAMANN, COULD YOU PLEASE PREVIEW THE TESTIMONIES OF**
7 **THE COMPANY'S WITNESSES IN THIS PROCEEDING?**

8 A. Yes. The testimony of Michael W. Stroben (Petitioner's Exhibit B) explains the
9 federal environmental requirements that are the impetus for the Company's current
10 planned construction program, as well as future pending regulations that impact Duke
11 Energy Indiana's planning process. The testimony of Joseph A. Miller, Jr.
12 (Petitioner's Exhibit C) addresses in detail the Company's proposed environmental
13 compliance projects, including an explanation of Duke Energy Indiana's process for
14 determining the most appropriate and robust compliance plan under the various
15 environmental requirements. Mr. Miller also supports the Company's current cost
16 estimates and project schedule. The testimony of Jose Merino (Petitioner's Exhibit
17 D) describes Duke Energy Indiana's load forecast and its economic assumptions, and
18 also discusses the impacts of Energy Efficiency programs on the load forecast. Mr.
19 Merino also supports the Duke Energy 2013 Fundamental Forecast, which serves as
20 an input in the Integrated Resource Plan ("IRP") analyses performed for this
21 proceeding. The testimony of Scott Park (Petitioner's Exhibit E) explains the
22 Company's IRP analyses performed as part of the development of the proposed

1 environmental compliance plan and why the proposed plan is the most economic for
2 customers under a range of scenarios. Finally, the testimony of Christa Graft
3 (Petitioner's Exhibit F) explains in detail the proposed cost recovery mechanisms for
4 the environmental compliance plan costs, how the requested ratemaking and
5 accounting treatment will be coordinated with future rate cases, and how the rate
6 relief requested in this proceeding will impact our retail customers.

7 **Q. PLEASE SUMMARIZE THE RELIEF THAT DUKE ENERGY INDIANA IS**
8 **REQUESTING IN THIS PROCEEDING.**

9 A. Duke Energy Indiana is requesting that the Commission approve the Company's
10 proposed Phase 3 Plan for complying with pending environmental requirements, and
11 provide ongoing review and approval of our plan semi-annually as part of the
12 Company's semi-annual Environmental Cost Recovery ("ECR") filings. We are also
13 requesting that the Commission approve the Company's use of accelerated
14 depreciation for certain pollution control equipment. In addition, we are requesting
15 timely recovery of our compliance costs, specifically: assurance of capital cost
16 recovery (up to approved cost estimates); authority to recover financing, depreciation,
17 and operation and maintenance ("O&M") costs on a timely basis via Duke Energy
18 Indiana's existing ECR tracking mechanisms; and authority to recover compliance
19 plan development, engineering and pre-construction costs that may be incurred for the
20 Company's next environmental compliance case (be it for air, water, or waste
21 regulations) via Duke Energy Indiana's ECR tracking mechanisms.

1 Q. MR. ESAMANN, IN YOUR VIEW, WHY SHOULD THE COMMISSION
2 AUTHORIZE TIMELY RECOVERY OF ENVIRONMENTAL
3 COMPLIANCE COSTS?

4 A. Duke Energy Indiana has experienced, and will likely continue to experience,
5 significant environmental compliance costs. Timely recovery of these costs is
6 important from a credit quality perspective and is reasonable from a ratemaking
7 policy perspective. Timely cost recovery is important from a credit quality
8 perspective because it is crucial to the Company and its customers that Duke Energy
9 Indiana be able to finance these needed capital investments on the best terms possible.
10 An order from this Commission authorizing timely recovery of Duke Energy
11 Indiana's environmental compliance costs will support the Company's access to
12 capital markets on a timely and economic basis, by signaling to the financial
13 community that this Commission continues to believe it is appropriate for a utility to
14 have the opportunity to recover its prudently-incurred costs of providing reliable
15 utility service in a regulated environment.

16 Timely cost recovery is reasonable from a ratemaking policy perspective
17 because these costs have been and will be incurred in order to be able to continue to
18 meet our obligation to provide adequate and reliable electric utility service to retail
19 customers in the State of Indiana. If we do not make the necessary investments to
20 comply with emission reduction requirements, our generating units would be shut
21 down. Perhaps stating the obvious, having generating units available to meet
22 customer loads is a critical component of meeting this obligation to customers. One

1 of the basic tenets of regulation is that a utility should be provided with the
2 opportunity to recover from customers its prudently-incurred costs of providing utility
3 service. This basic ratemaking principle is consistent with the idea that the costs of
4 providing utility service should be reflected in the prices charged for that service.
5 Timely recovery of our environmental compliance costs is consistent with these
6 ratemaking concepts.

7 **Q. PLEASE DESCRIBE THE PRIMARY BENEFITS OF THE COMPANY'S**
8 **PROPOSED PHASE 3 PLAN.**

9 A. In my view, our environmental compliance plan will allow Duke Energy Indiana to
10 achieve compliance with stringent new emission reduction requirements most
11 economically and will allow the Company to continue to provide adequate and
12 reliable electric utility service to our customers. At the same time, these investments
13 will result in additional reductions of mercury, acid gas, and particulate matter
14 emissions.

15 **Q. IN YOUR JUDGMENT, IS DUKE ENERGY INDIANA'S PROPOSED PHASE**
16 **3 PLAN DESIGNED TO COST-EFFECTIVELY ENSURE COMPLIANCE**
17 **WITH ENVIRONMENTAL REGULATIONS?**

18 A. Yes, it is. Duke Energy Indiana subjected our proposed Phase 3 Plan to a number of
19 different scenario and sensitivity analyses that could have impacted the project
20 selections. Duke Energy Indiana's Phase 3 Plan performed well in all of the analyses,
21 leading us to conclude that our proposed Phase 3 Plan is a robust and cost-effective
22 way to ensure compliance with environmental regulations.

1 I would also like to highlight the enhancements in our overall compliance
2 strategy relative to our original Phase 2 Plan proposal. The Company had initially
3 proposed to install ACI systems at Cayuga, Gibson, and Gallagher Stations as our
4 preferred mercury trim control technology, and we received Commission approval of
5 ACI at Cayuga and on Gibson Unit 5. As Mr. Miller discusses in detail, and as
6 recommended by the OUCC, following our Phase 2 Plan proceeding we continued
7 evaluating mercury trim control technologies and conducted additional mercury
8 testing at Gibson and Gallagher Stations. Through this testing we have gained
9 confidence in a better technology, calcium bromide injection, for meeting our
10 mercury emission trimming needs. This technology is operationally,
11 environmentally, and economically superior to ACI, and is approximately one-tenth
12 the cost of ACI (both capital and operations and maintenance costs). We have further
13 verified that ACI is not required at Gallagher Station for MATS rule mercury
14 compliance as a result of our MATS organics work practice standards testing.

15 **Q. WHAT IS THE CUSTOMER RATE IMPACT OF THE COMPANY'S**
16 **PROPOSED PHASE 3 PLAN?**

17 A. We estimate the peak year rate impact for our proposed Phase 3 Plan projects to be
18 0.8% in 2017.

19 **Q. MR. ESAMANN, WHAT CUSTOMER VALUE HAS BEEN ACHIEVED AS A**
20 **RESULT OF THE COMPANY'S CHANGE IN STRATEGY FROM ACI TO**
21 **CALCIUM BROMIDE?**

1 A. Had we not conducted the additional mercury remedy testing and made the strategic
2 decision to implement the calcium bromide technology, the Company would have
3 been reaffirming the need for ACI in this proceeding; it is therefore appropriate to
4 consider the savings our customers will experience as a result of this strategy.
5 Customer rates would have been as much as an additional 2.0% to 2.5% higher in
6 2017 (above the 0.8% for the Phase 3 Plan projects) had we proceeded with ACI at
7 Gibson, Gallagher, and Cayuga Stations, as was originally proposed in Phase 2.
8 Overall, our new combined Phase 2 and Phase 3 Plans have a lower total rate impact
9 than our Phase 2 Plan as originally proposed. Our proposed Phase 3 Plan strategy
10 results in significant savings for our customers, while still ensuring the Company's
11 ability to meet environmental compliance requirements. Ms. Graft provides
12 additional details on our customer impact analysis.

13 **Q. DOES THE COMPANY ANTICIPATE THAT IT WILL NEED TO RETURN**
14 **TO THE COMMISSION TO SEEK APPROVAL FOR ADDITIONAL**
15 **FUTURE COMPLIANCE PLANS?**

16 A. Yes, we believe it is likely at some point in the future once the various proposed rules
17 become finalized. Mr. Stroben discusses multiple future potential environmental
18 regulations that could impose additional requirements and costs on the Company's
19 generating units. The Company will plan and seek approval for investments required
20 by these regulations, at the time such information is known. Also, we anticipate
21 making a final decision on Wabash River Unit 6 natural gas conversion prior to the
22 MATS compliance deadline.

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III. CONCLUSION

2 **Q. PLEASE IDENTIFY PETITIONER'S EXHIBIT A-1.**

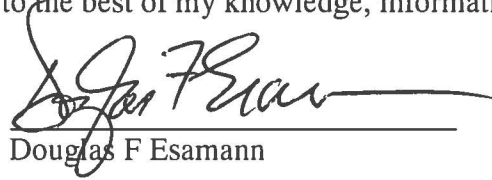
3 A. Petitioner's Exhibit A-1 is a copy of the verified petition initiating this proceeding.

4 **Q. DOES THIS CONCLUDE YOUR PREFILED TESTIMONY?**

5 A. Yes, it does.

VERIFICATION

I hereby verify under the penalties of perjury that the foregoing representations are true to the best of my knowledge, information and belief.

Signed: 
Douglas F Esamann

Dated: 11-12-13

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INDIANA UTILITY REGULATORY COMMISSION

STATE OF INDIANA
INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF DUKE ENERGY INDIANA, INC.,)
FOR APPROVAL OF (1) A PHASE 3 PLAN TO ENSURE)
COMPLIANCE WITH REGULATED AIR EMISSION)
LIMITS; (2) PETITIONER'S PHASE 3 PLAN PROJECTS AS)
QUALIFIED POLLUTION CONTROL PROPERTY AND)
CLEAN ENERGY PROJECTS; (3) CERTAIN FINANCIAL)
INCENTIVES IN CONNECTION WITH PETITIONER'S)
PHASE 3 COMPLIANCE PLAN, INCLUDING THE TIMELY)
RECOVERY OF COSTS INCURRED DURING)
CONSTRUCTION AND OPERATION OF THE CLEAN)
ENERGY PROJECTS VIA DUKE ENERGY INDIANA'S)
RIDER NOS. 62 AND 71, AND THE USE OF)
ACCELERATED DEPRECIATION; (4) THE AUTHORITY)
TO DEFER POST-IN-SERVICE CARRYING COSTS AS A)
REGULATORY ASSET UNTIL THE APPLICABLE COSTS)
ARE REFLECTED IN PETITIONER'S RATES; (5) THE)
AUTHORITY TO DEFER DEPRECIATION AND)
INCREMENTAL OPERATION AND MAINTENANCE)
EXPENSES ON AN INTERIM BASIS UNTIL THE)
APPLICABLE COSTS ARE REFLECTED IN)
PETITIONER'S RATES; AND (6) THE TIMELY)
RECOVERY OF FUTURE COMPLIANCE PLAN)
DEVELOPMENT, ENGINEERING, TESTING AND PRE-)
CONSTRUCTION COSTS)

44418
CAUSE NO. _____

VERIFIED PETITION

Duke Energy Indiana, Inc. (hereinafter referred to as "Petitioner," "Company" or "Duke Energy Indiana") respectfully petitions the Indiana Utility Regulatory Commission ("Commission") for approval of a Phase 3 Plan for environmental compliance and all other necessary relief. In support of this Petition, Duke Energy Indiana states as follows:

1. Petitioner's Corporate and Regulated Status. Duke Energy Indiana is an Indiana corporation with its principal office in the Town of Plainfield, Hendricks County, Indiana. Its address is 1000 East Main Street, Plainfield, Indiana 46168. It has the corporate

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CONSUMER COUNSELOR

power and authority to engage in the business of supplying electric utility service to the public in the State of Indiana. Accordingly, Petitioner is a “public utility” within the meaning of that term as used in the Indiana Public Service Commission Act, as amended, Ind. Code § 8-1-2-1, and is subject to the jurisdiction of the Commission in the manner and to the extent provided by the laws of the State of Indiana, including Ind. Code § 8-1-2-1 *et seq.*

2. **Petitioner’s Electric Utility Service.** Duke Energy Indiana owns, operates, manages and controls plants, properties and equipment used and useful for the production, transmission, distribution and furnishing of electric utility service to the public in the State of Indiana. It directly supplies electric energy throughout its 22,000 square mile service area to approximately 794,000 customers located in 69 counties in the State of Indiana. Petitioner also sells electric energy for resale to municipal utilities, Wabash Valley Power Association, Inc., Indiana Municipal Power Agency, Hoosier Energy, and to other public utilities that in turn supply electric utility service to numerous customers in areas not served by Petitioner.

3. **Petitioner’s Electric Generating Properties.** Petitioner’s electric generating properties currently consist of: (1) two syngas/natural gas-fired combustion turbines (“CT”) and one steam turbine; (2) steam capacity located at four stations comprised of 14 coal-fired generation units; (3) combined cycle capacity located at one station comprised of three natural gas-fired CTs and two steam turbine-generators; (4) a run-of-river hydroelectric generation facility comprised of three units; and (5) peaking capacity consisting of seven oil-fired diesels located at two stations, seven oil-fired CT units located at two stations, and 24 natural gas-fired CTs, one of which has oil back-up.

4. **Federal and State Jurisdiction.** Duke Energy Indiana’s operations are subject to federal and state rules promulgated by, among others, the United States Environmental

Protection Agency (“EPA”), the Indiana Department of Environmental Management, and the Air Pollution Control Board of the State of Indiana. Such rules establish environmental compliance standards that govern emissions from Duke Energy Indiana’s generating stations.

5. **Emissions Reduction Rules.** The EPA’s Utility Mercury and Air Toxics Standard (“MATS”) is the main rule driving Petitioner’s compliance plan in Phase 3.¹ Other rules considered and analyzed as part of Petitioner’s Phase 3 compliance plans include the final, but stayed, Cross State Air Pollution Rule, the proposed 316(b) cooling water intake structures rule, the proposed Coal Combustion Residuals rule, potential revisions to the Steam Electric Effluent Guidelines, and the National Ambient Air Quality Standards, among others.

6. **Petitioner’s Phase 3 Plan for Compliance with Regulated Air Emissions Limits.** Duke Energy Indiana’s proposed Phase 3 Plan consists of the following projects:

- Refurbishment of the precipitators at Gibson Station Units 3, 4, and 5 in order to ensure future compliance with the MATS filterable particulate matter limits;
- Installation of calcium bromide systems at Gibson Station Units 1-5 and Cayuga Station Units 1-2 for purposes of mercury trim control;
- Installation of particulate matter continuous emission monitoring systems at Gibson Station Units 1-5 and Cayuga Station Units 1-2 to demonstrate compliance with MATS limits;
- Installation of mercury sorbent traps at Edwardsport Station and ongoing maintenance of other Company-owned and operated sorbent traps in order to demonstrate compliance with MATS limits;

¹ The Commission’s April 3, 2013 Order in Cause No. 44217 approved Duke Energy Indiana’s Phase 2 Environmental Compliance Plan. Duke Energy Indiana refers to the compliance projects in this proceeding as its “Phase 3 Plan.”

- Improvements to the stacks at Gibson Station Units 4 and 5 to ensure safe and reliable access for certain stack testing and monitoring in order to demonstrate compliance with MATS;
- Installation of relief duct dampers on the Gibson Station Unit 5 flue gas desulfurization equipment to help ensure compliance with acid gas limits under MATS;
- Operating and maintenance expenses associated with quarterly stack testing and Organics Work Practice Standards testing required by MATS.

7. **Request for Prehearing Conference.** Petitioner requests that, pursuant to 170 IAC 1-1.1-15, the Commission convene a prehearing conference in this Cause within 45 days following the filing of this petition for the purpose of establishing a procedural schedule in accordance with Indiana Code § 8-1-8.8-11(d).

8. **Applicable Law.** Duke Energy Indiana considers Indiana Code §§ 8-1-2-6.8, 8-1-2-19, 8-1-2-23 and 8-1-2-42(a), and Indiana Code 8-1-8.8 *et seq.*, among others, as applicable to the subject matter of this proceeding.

9. **Petitioner's Counsel.** Kelley A. Karn, Elizabeth A. Herriman, and Casey M. Holsapple of 1000 E. Main Street, Plainfield, Indiana 46168 are counsel for Petitioner in this matter and are duly authorized to accept service of papers in this Cause on behalf of Petitioner.

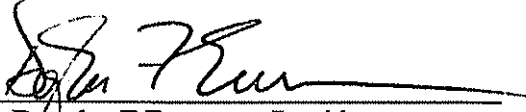
10. **Relief Requested.** Petitioner respectfully requests that the Commission make such investigation and hold such hearings as it may deem necessary and advisable, and thereafter make and enter an order: (1) approving Duke Energy Indiana's proposed Phase 3 Plan for ensuring compliance with regulated air emissions limits; (2) approving Petitioner's proposed Phase 3 Plan projects as qualified pollution control property and clean energy projects; (3) providing for the timely recovery of the financing, construction and operating costs and expenses associated with Petitioner's Phase 3 Plan via Petitioner's existing Standard Contract Riders No. 62 and 71; (4) authorizing the use of accelerated depreciation in connection with Petitioner's Phase 3 environmental compliance projects; (5) granting Petitioner authority to defer post-in-service carrying costs as a regulatory asset until the applicable costs are reflected in Petitioner's

rates; (6) granting Petitioner authority to defer depreciation and incremental operation and maintenance costs on an interim basis until the applicable costs are reflected in Petitioner's rates; (7) authorizing the timely recovery of future plan development, preliminary engineering, testing and pre-construction costs via Rider 62 and/or 71; (8) approving Petitioner's proposal for ongoing review of its Phase 3 projects through the existing semi-annual Environmental Compliance Recovery filings; and (9) granting Petitioner such further relief in the premises as may be appropriate and proper.

[Signature Page to Follow]

Dated as of the 7 day of November, 2013.

DUKE ENERGY INDIANA, INC.

By: 
Douglas F Esamann, President
Duke Energy Indiana, Inc.

By: 
Elizabeth A Herriman
Counsel for Duke Energy Indiana, Inc.

Kelley A. Karn, Atty. No. 22417-29
Elizabeth A. Herriman, Atty. No. 24942-49
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AFFIDAVIT

STATE OF INDIANA)
) SS:
COUNTY OF HENDRICKS)

Douglas F Esamann and Elizabeth A. Herriman, being first duly sworn, depose and say that they are the President of Duke Energy Indiana, Inc., and Counsel for Duke Energy Business Services LLC, the service company affiliate of Duke Energy Indiana, Inc., respectively, the Applicant in the foregoing Application; that as such they have executed the foregoing Application and have authority to do so; that they have read said Application and know the contents thereof; and that the statements therein contained are true to the best of their knowledge, information and belief.

Douglas F Esamann
Douglas F Esamann, President,

Elizabeth A. Herriman
Elizabeth A. Herriman, Attorney

Subscribed and sworn to before me,
This 7 day of November, 2013.

Oranie M. Clack
Notary Public

My Commission Expires: April 17, 2014

My County of Residence: Morgan

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing was hand delivered or mailed, postage prepaid, in the United States mail, this 7th day of November, 2013, to the following:

Indiana Office of Utility Consumer Counselor
PNC Center
115 W. Washington Street
Suite 1500 South
Indianapolis, Indiana 46204

By: 
Counsel for Duke Energy Indiana, Inc.