

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF DUKE ENERGY INDIANA,)
INC. FOR (i) APPROVAL OF FOUR (4) SOLAR)
PURCHASED POWER AGREEMENTS; (ii) TIMELY)
RECOVERY OF THE RETAIL JURISDICTIONAL)
PORTION OF PURCHASED POWER COSTS)
THROUGH RETAIL RATES PURSUANT TO INDIANA)
CODE 8-1-8.8; (iii) APPROVAL OF AN ALTERNATIVE)
REGULATORY PLAN PURSUANT TO INDIANA CODE)
§ 8-1-2.5-1ETSEQ. FOR A MODIFICATION TO ITS)
GOGREEN STANDARD CONTRACT RIDER NO. 56;)
AND (iv) CONFIDENTIAL TREATMENT OF PRICING)
AND OTHER PROPRIETARY TERMS OF THE)
PURCHASED POWER AGREEMENTS)

CAUSE NO. 44578

OUCC PREFILED TESTIMONY

OF

SUSANN M. BROWN - PUBLIC EXHIBIT #1

ON BEHALF OF THE

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

APRIL 16, 2015

Respectfully Submitted,

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR



Karol H. Krohn, Atty. No. 5566-82
Deputy Consumer Counselor

CERTIFICATE OF SERVICE

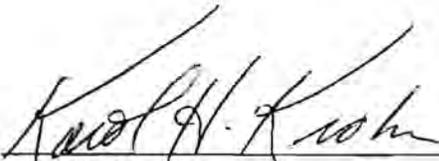
This is to certify that a copy of the foregoing *Office of Utility Consumer Counselor Testimony of Susann M. Brown* has been served upon the following counsel of record in the captioned proceeding by electronic service and/or by depositing a copy of same in the United States mail, first class postage prepaid, on April 16, 2015.

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TESTIMONY OF OUCC WITNESS SUSANN M. BROWN
CAUSE NO. 44578
DUKE ENERGY INDIANA, INC.

I. INTRODUCTION

1 **Q: Please state your name and business address.**

2 A: My name is Susann M. Brown and my business address is 115 W. Washington St., Suite
3 1500 South, Indianapolis, IN 46204.

4 **Q: By whom are you employed and in what capacity?**

5 A: I am employed by the Indiana Office of Utility Consumer Counselor ("OUCC") as a
6 Utility Analyst in the Resource Planning and Communications Division.

7 **Q: Please describe your educational background and experience.**

8 A: I have a Master of Science degree in Renewable Resources from McGill University
9 (Canada) and I have a Bachelor of Science degree in Forest Resources Management
10 (Hons.) from the University of British Columbia (Canada). I have worked in strategic
11 resource planning for the public (Province of British Columbia) and private sector
12 (Weyerhaeuser) in Canada and the United States. This work included the analysis and
13 evaluation of resource allocation strategies through modeling, including carbon modeling
14 scenarios. I have also worked as an air permit writer and as a rule writer with the Indiana
15 Department of Environmental Management ("IDEM"). I have been employed by the
16 OUCC since November 2013. I have attended the National Association of Regulatory
17 Utility Commissioners ("NARUC") Basic Utility Training in New Mexico.

1 **Q: What did you do to prepare for your testimony?**

2 A: I reviewed Duke Energy Indiana's ("DEI's") Petition, Direct Testimony, Exhibits, and
3 Data Responses submitted in this Cause. I also reviewed DEI's 2013 Integrated Resource
4 Plan ("IRP") and met with DEI at the OUCC on January 28, 2015.

5 **Q: What is the purpose of your testimony?**

6 A: My testimony will:

- 7 1. Evaluate DEI's proposal for four solar energy Purchased Power Agreements
8 ("PPAs");
- 9 2. Assess DEI's proposed transfer of Renewable Energy Certificates ("RECs")
10 to the DEI GoGreen program and affiliate DEI companies;
- 11 3. Discuss recommended reporting and disclosure requirements; and
- 12 4. Present the OUCC's recommendations.

13 **Q: Will anyone else be testifying on behalf of the OUCC?**

14 A: Yes, OUCC Utility Analyst, Leon A. Golden, will discuss the selection process DEI used in
15 seeking bids under a Request for Proposal ("RFP") and DEI's economic ranking of those
16 bids. Mr. Golden will also discuss the engineering design for planned interconnection
17 arrangements.

II. EVALUATION OF DEI'S SOLAR PROJECT PROPOSAL

18 **Q: What is DEI requesting in this Cause?**

19 A: DEI is requesting approval for four solar energy PPAs at five (5) MW each for a total of
20 twenty (20) MW of solar energy to be in commercial operation no later than March 31,
21 2016. Full and certain recovery is requested of the retail jurisdictional portion of the
22 purchased power costs under the PPAs from retail customers in conjunction with DEI's
23 Fuel Cost Adjustment Standard Contract Rider No. 60 ("Rider 60").

1 DEI also seeks approval to transfer the RECs associated with the proposed solar
2 energy PPAs at market price to its GoGreen program, or to an affiliate company, while
3 flowing the value received from those transfers through to its retail customers in DEI's
4 fuel adjustment charge ("FAC") proceedings under Rider 60.¹

5 **Q: What are RECs?**

6 A: RECs represent the property rights to the environmental, social, and other non-power
7 qualities of renewable electricity generation.² Renewable-based electricity generators
8 produce physical electricity and RECs. These products can be sold together or separately.
9 One REC is created for every 1,000 kWh (i.e., 1 MWH) of electricity placed on the grid.
10 REC tracking programs are used to track RECs from their point of creation to their point
11 of final use. In addition, to ensure the RECs are not double-counted, certification through
12 Green-e gives independent consumer protection for the transfer of renewable energy and
13 greenhouse gas reductions in retail markets.³ This certification provides and verifies
14 compliance with REC trading rules.

15 **Q: Will the RECs from all four solar projects be Green-e certified?**

16 A: Yes, according to DEI, they will all be Green-e certified.⁴

17 **Q: Please explain the proposed transactions regarding DEI's solar RECs.**

18 A: Intra-company trading would occur when solar RECs were transferred from the solar
19 PPA to DEI's GoGreen program. Inter-company trading would occur when solar RECs
20 were transferred from DEI to an affiliate company. Third-party market transactions could

¹ Direct Testimony of Suzanne E. Sieferman, page 2, lines 12-21, and page 3, lines 1-2.

² For additional background, see <http://www.epa.gov/greenpower/gpmarket/rec.htm>.

³ See Green-e website: <http://www.green-e.org/>.

⁴ See Att. SMB-1, DEI Response to OUCC DR 4.18.

1 also occur.

2 **Q: Are these transactions the same for DEI's wind RECs?**

3 A: No, all DEI wind RECs are bought and sold through the market.

4 **Q: Why is DEI proposing to purchase the proposed solar energy PPAs at this time?**

5 A: The PPAs for Indiana based renewable generation is required under an August 28, 2013
6 settlement between DEI and the Sierra Club, Valley Watch, Inc., Save the Valley, Inc.,
7 and Citizens Coalition of Indiana, Inc., to resolve DEI's air permit issues for the
8 Edwardsport Station Air Permit Settlement ("Settlement").⁵ The Settlement requires DEI
9 to "Construct/install, and/or execute a long-term contract with one or more independent
10 producers for energy and capacity from wind and/or solar generation with a combined
11 nameplate capacity of no less than 15 MW (of which a minimum shall be 5 MW solar)."⁶
12 DEI plans to issue contracts totaling twenty (20) MWs to ensure compliance with the
13 Settlement terms in the event one of the solar projects is not completed and the associated
14 PPA has to be terminated.

15 **Q: Where will the proposed solar projects be located?**

16 A: The four winning bids responding to DEI's Solar RFP are located in Sullivan County
17 (Sullivan Solar, LLC, developed by Juwi Solar), Vigo County (McDonald Solar, LLC,
18 developed by Solexus Development), Clay County (Pastime Farm, LLC, developed by
19 Solexus Development), and Howard County (Geres Energy, LLC, developed by
20 Inovateus Solar).⁷

⁵ Direct Testimony of James S. Northrup, page 4, lines 20-22, and page 5, line 1.

⁶ See Att. SMB-2, DEI Response to OUCC DR 2.5, Edwardsport Station Air Permitting Settlement Agreement, pages 6-7.

⁷ Direct Testimony of James S. Northrup, page 3, lines 17-20.

1 **Q: What is the stated length of the proposed PPAs?**

2 A: The PPAs are all twenty (20) year contracts.⁸

3 **Q: Is that contract duration reasonable for these solar PPAs?**

4 A: Yes, a twenty (20) year contract is slightly less than the expected life span for these types
5 of solar installations, which typically operate for a minimum of twenty-five (25) years.⁹

III. ISSUES RELATED TO SOLAR RECs

6 **Q: Please explain the proposed solar REC intra-company transfer process to DEI's**
7 **GoGreen program.**

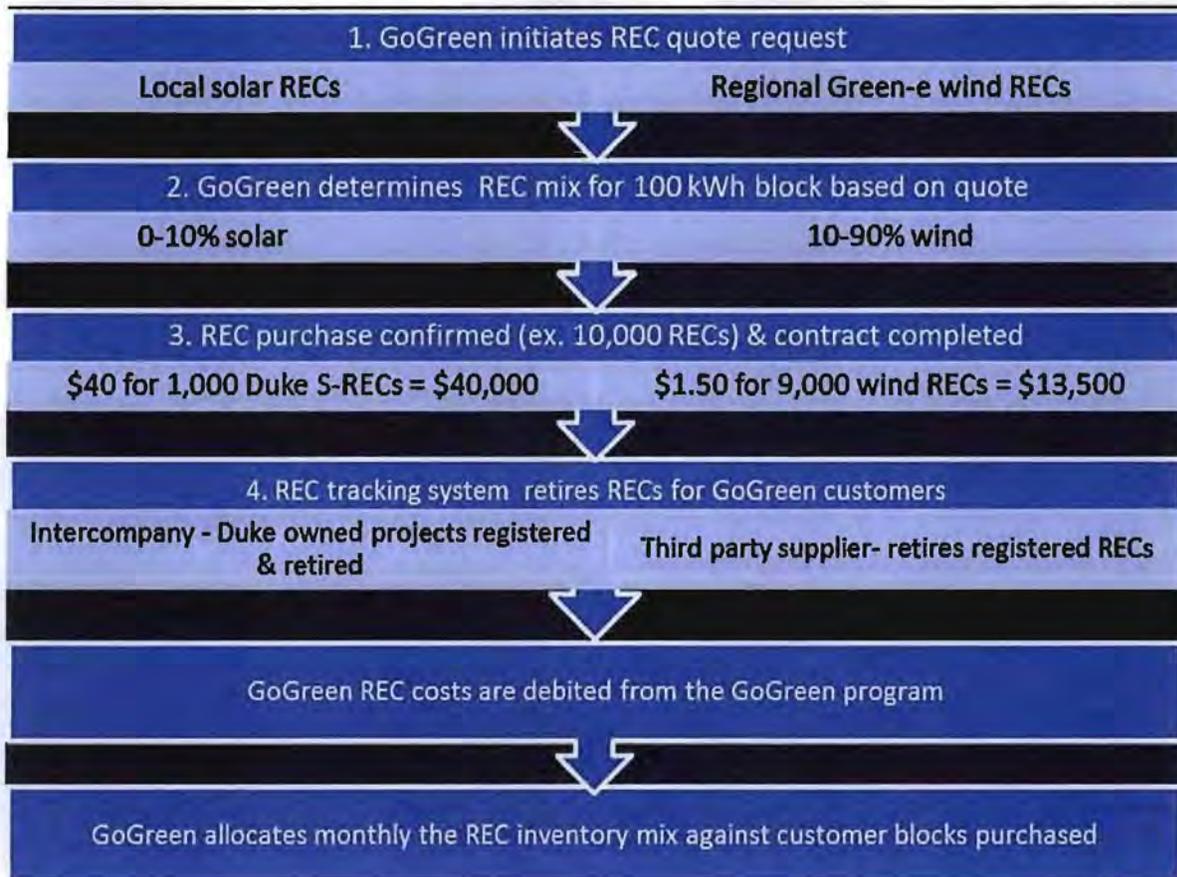
8 A: As submitted by DEI and as shown below in Figure 1, DEI's GoGreen program will
9 initiate the request to transfer local solar RECs and/or purchase regional Green-e wind
10 RECs. Next, DEI's GoGreen program will determine the REC mix for the 100 kWh
11 block based on the quote. It is anticipated that no more than 10% of any 100 kWh block
12 would be local solar RECs and between 90–100% would be purchased regional Green-e
13 wind RECs. The REC transfer would then be confirmed and the contract would be
14 completed. A REC tracking system, most likely the Midwest Renewable Energy
15 Tracking System ("M-RETS"), would then retire RECs for DEI's GoGreen program and
16 the REC costs would be paid through DEI's GoGreen program.¹⁰

⁸ Direct Testimony of James S. Northrup, page 3, lines 21-22.

⁹ See Att. SMB-3, DEI Response to OUCC DR 4.22.

¹⁰ See Att. SMB-4, DEI Response to OUCC DR 2.4.

Figure 1: DEI Diagram Illustrating Proposed Solar REC Transfer Process:



1 **Q: Will DEI own the solar RECs associated with the four PPAs?**

2 **A:** Yes. According to the RFP for the solar projects, "Proposals must include energy,
3 capacity, and renewable energy certificates, 'RECs' (inclusive of all environmental
4 attributes and reporting rights)."¹¹

5 **Q: In the future, does DEI plan to purchase solar RECs from only these proposed local**
6 **solar generation projects and not from other sources?**

7 **A:** No, the DEI GoGreen program would continue to purchase wind RECs and add local
8 DEI solar RECs depending on market price and availability, with a preference to

¹¹ See Att. SMB-5, DEI Response to OUCC DR 2.1, Attachment OUCC 2.1-A.

1 maximize the local DEI solar RECs in the DEI GoGreen program portfolio. At current
2 solar REC prices of \$40 per solar REC, less than ten percent (10%) would be purchased
3 by DEI's GoGreen program.¹²

4 **Q: Will the customers receive through the FAC the net benefits (proceeds) from REC**
5 **transfers?**

6 A: Yes, any net proceeds realized from the transfers of RECs associated with these solar
7 PPAs will flow through to DEI's retail customers in the FAC proceedings.¹³

8 **Q: Does DEI plan to sell or transfer the RECs?**

9 A: DEI plans to monetize the RECs, through sales on the open market, through transfers to
10 the DEI GoGreen program or through transfers to an affiliate company.¹⁴ The transfer of
11 RECs under these four PPAs to DEI's GoGreen program or an affiliate company would
12 allow DEI to avoid administrative and brokerage fees associated with selling and then
13 purchasing solar RECs through an established competitive market.¹⁵ However, the
14 market brokerage and administrative fees appear to be minimal, since DEI's GoGreen
15 program REC purchases during 2013 and 2014 did not have any additional brokerage
16 fees.¹⁶

17 **Q: Does the OUCC have any concerns with DEI's proposed transfer of solar RECs to**
18 **either DEI's GoGreen program or to affiliate companies at established market**
19 **prices?**

20 A: Yes. It is not clear which specific REC market DEI plans to use to set proxies for market
21 driven prices. The OUCC is concerned about the fairness and accuracy of the proxy

¹² See Att. SMB-4, DEI Response to OUCC DR 2.4.

¹³ See Att. SMB-6, DEI Response to OUCC DR 4.20.

¹⁴ See Att. SMB-7, DEI Response to OUCC DR 4.21.

¹⁵ Direct Testimony of Suzanne E. Sieferman, Page 8, lines 6-9.

¹⁶ See Att. SMB-8, DEI Response to OUCC DR 4.7.

1 market price used to document intra-company transfers (for DEI's GoGreen program)
2 and inter-company (affiliate) transfers of RECs. The OUCC would prefer that REC
3 pricing be established in widely-recognized competitive markets. As the program grows,
4 the OUCC would like to see Indiana solar RECs traded through an established solar REC
5 market. This will ensure that the RECs are sold at the most accurate price, so DEI's FAC
6 customers receive the best possible off-set to their monthly utility bills.

7 **Q: Why does the OUCC prefer that DEI sell its solar RECs through an established**
8 **competitive market rather than transferring solar RECs through intra-company,**
9 **inter-company or other off-market transactions?**

10 A: The development of the REC market could be negatively impacted over time if utilities
11 transfer their RECs off-market. Multiple buyers and sellers are required to establish and
12 maintain robust and competitive REC markets. Removing buyers, sellers, and large
13 numbers of RECs from current REC markets could negatively impact further market
14 development.

15 **Q: What is the OUCC's recommended solution regarding DEI's proposed transfer of**
16 **solar RECs?**

17 A: Since Indiana's solar REC market is still developing, intra-company transfers to DEI's
18 GoGreen program and inter-company transfers to affiliate companies should be allowed
19 at this time. As the Indiana solar REC market develops further, the OUCC recommends
20 that the Commission set a sunset date on any authority DEI receives in this case
21 permitting intra-company transfer of RECs, inter-company transfers of RECs, or other
22 off-market sales of RECs. The sunset date should be two to three years after these solar
23 facilities have been in operation. At that time, we recommend a sub-docket of DEI's
24 GoGreen program (e.g., Cause No. 44283-S1) to allow the Commission, the OUCC and

1 other interested parties to examine the fairness and the impact of off-market transfer of
2 RECs under the 20-year solar PPAs approved in this case.

3 **Q: What type of information should DEI provide under Rider 60 in future FAC**
4 **proceedings?**

5 A: At a minimum the information offered to support the market price of solar RECs should
6 include the following for each transfer: the names of all parties to the transaction, the
7 transfer date, the number of RECs transferred, the actual price per REC that was used, the
8 total payment or value received, the market price of solar RECs on the transaction date,
9 the name of the source(s) used to establish the proxy market price and copies of all
10 supporting documentation. Requiring DEI to file additional information to support
11 related Rider 60 adjustments in future FAC proceedings will permit the Commission, the
12 OUCC and other interested parties to verify that DEI's GoGreen program costs include
13 reasonable solar REC prices on the date of each transfer.

14 **IV. RECOMMENDED REPORTING REQUIREMENTS**

15 **Q: If the Commission approves the relief requested by DEI, does the OUCC**
16 **recommend reporting requirements related to the PPAs or the renewable**
17 **generation facilities?**

18 A: Yes. The OUCC recommends that DEI file an initial Solar Project Report with the
19 following information for each of the four solar generation facilities:

- 20 1. Project name(s);
- 21 2. Names, titles, addresses and phone numbers of primary contact person(s);
- 22 3. Specific locations, including street addresses;
- 23 4. Number and configuration of arrays and total number of panels, by facility ;
- 24 5. Anticipated output per panel, per array, and total output for each solar
25 facility;

- 1 6. Manufacturer, model number, and operational characteristics of each type of
- 2 panel used;
- 3 7. Copies of all Interconnection System Impact Studies for each facility;
- 4 8. Expected in-service (commercial operation) dates;
- 5 9. An estimate of the engineering/construction timeline and critical milestones
- 6 for each solar facility.

7 The OUCC also recommends Petitioner file subsequent annual updates on the status of

8 the four solar projects. Petitioner's Annual Solar Project Update Reports should include:

- 9 1. Any changes to the information in the Initial Solar Project Report and any
- 10 Annual Solar Project Update Reports; and
- 11 2. A monthly summary of actual generation output for each facility.

12 Petitioner should also commit to providing more detailed generation performance data,

13 by facility, if requested by the Commission or the OUCC.

14 **Q: Why does the OUCC request additional detailed generation performance data for**

15 **these solar facilities?**

16 A: As energy generation continues to change, the OUCC would like to understand and

17 investigate the effectiveness and efficiency of various renewable energy ("RE")

18 generation resources; from wind and solar to other less commonly known RE generation

19 assets, such as landfill gas, bio-digestion, micro hydro, etc.

20 **Q: Is the OUCC also recommending additional reporting requirements for DEI's Go**

21 **Green program?**

22 A: Other than the Rider 60 FAC solar REC pricing, volume and source data requirements I

23 previously discussed, I recommend requiring DEI to expand its future GoGreen Annual

24 Reports to address the impact of using RECs from these four solar projects on GoGreen

25 program costs per REC (detailing commodity, administrative and marketing costs),

26 customer participation levels, the total number of RECs used in DEI's GoGreen program,

1 and an estimate of the brokerage fees avoided by not using an established REC market to
2 buy and sell RECs. That information would supplement DEI's existing GoGreen
3 reporting requirements, as agreed upon and approved in Cause No. 44283 (2013).

4 **Q: Should DEI's GoGreen marketing materials and/or annual Go Green program**
5 **report inform GoGreen customers that some of the RECs used for the GoGreen**
6 **program may be from local DEI solar generation?**

7 A: Yes.

8 **Q: Is the OUCC recommending any other changes to the current terms of the GoGreen**
9 **program?**

10 A: No. The GoGreen program remains subject to the requirements agreed upon and
11 approved in Cause No. 44283. The additional reporting and disclosure requirements
12 recommended above simply supplement the GoGreen program requirements approved in
13 Cause No. 44283.

V. OUCC RECOMMENDATIONS

14 **Q: What does the OUCC recommend regarding DEI's request?**

15 A: The OUCC recommends the Commission:

- 16 1. Approve the four proposed solar PPAs with a total combined capacity of 20 MW;
- 17 2. Approve DEI's request to recover from its retail customers the retail jurisdictional
18 portion of purchased power costs under the four proposed PPAs in conjunction
19 with DEI's Rider 60 adjustments in future FAC proceedings;
- 20 3. Require DEI to file in this Cause an initial Solar Project Report for each of the
21 four solar PPAs and to file subsequent annual updates;
- 22 4. Require DEI to keep adequate records and file sufficient information in future
23 Rider 60 adjustment filings to verify that FAC customers have received the full
24 benefit of RECs associated with these four solar PPAs, as previously outlined in
25 this testimony;
- 26 5. Require DEI to expand future GoGreen Annual Reports to address the impact of
27 using local solar RECs on GoGreen program costs per REC (detailing
28 commodity, administrative and marketing costs), customer participation levels,

1 the total number of RECs used in DEI's GoGreen program, and an estimate of the
2 brokerage fees avoided by not using an established REC market to buy and sell
3 RECs;

4 6. Require DEI to disclose the fact that its GoGreen program may use RECs from
5 one or more of the four solar facilities covered by DEI PPAs approved in this
6 case; and

7 7. Request that the Commission set a sunset date on any authority DEI receives in
8 this case permitting intra-company transfer of RECs, inter-company transfers of
9 RECs, or other off-market sales of RECs. The sunset date should be two to three
10 years after these solar facilities have been in operation. At that time, we
11 recommend a sub-docket of DEI's GoGreen program (e.g., Cause No. 44283-S1)
12 to allow the Commission, the OUCC and other interested parties to examine the
13 fairness and the impact of off-market transfer of RECs under the 20-year solar
14 PPAs approved in this case.

15 **Q: Does this conclude your testimony at this time?**

16 **A: Yes.**

AFFIRMATION

I affirm, under the penalties for perjury, that the foregoing representations are true.



By: Susann Brown
Indiana Office of
Utility Consumer Counselor

04-16-15

Date:

OUCG
IURC Cause No. 44578
Data Request Set No. 4
Received: March 27, 2015

OUCG 4.18

Request:

Will the RECs from these solar projects be green e-certified?

Response:

Yes. The RECs from these four (4) solar PPAs will be green e-certified.

Witness: James S. Northrup

ATTACHMENT OUCG 2.5-A

EDWARDSPORT STATION
AIR PERMITTING SETTLEMENT AGREEMENT

This is an AGREEMENT TO SETTLE AND RELEASE CLAIMS ("Agreement") made and entered this ~~28~~ ²⁹ day of ~~August~~ ^{August} 2013 by and among the Sierra Club, Valley Watch, Inc., Save the Valley, Inc., and Citizens Action Coalition of Indiana, Inc. (collectively "Petitioners"), and Duke Energy Indiana, Inc. and its affiliated companies ("Duke Energy"). Petitioners and Duke Energy agree to the following terms as a basis for resolving all issues and disputes (collectively the "Air Permitting Matters") between them as specifically identified below related to certain air emission permits associated with the construction and operation of the Edwardsport Integrated Gasification Combined Cycle Station ("Edwardsport IGCC" or "IGCC") at Duke Energy's Edwardsport Generating Station, Edwardsport, Knox County, Indiana.

By this Agreement, the undersigned settling Petitioners and Duke Energy (collectively the "Parties") mutually agree to compromise, settle, release, and dismiss with prejudice the Air Permitting Matters, subject to the following terms and conditions.

WITNESSETH:

WHEREAS, on January 25, 2008, the Indiana Department of Environmental Management, Office of Air Quality ("IDEM OAQ") issued Significant Source Modification No. T083-23529-00003 ("SSM 23529") to Duke Energy for construction of the Edwardsport IGCC, and construction commenced thereafter;

WHEREAS, Petitioners filed a Verified Petition for Review and Stay of Effectiveness ("SSM 23529 Appeal") challenging the issuance of SSM 23529 with the Indiana Office of Environmental Adjudication ("OEA") (Cause No. 08-A-J-4066);

WHEREAS, on March 11, 2008, the IDEM OAQ issued Significant Permit Modification No. T083-23531-00003 ("SPM 23531") to Duke Energy to modify the Title V operating permit for Edwardsport Generating Station to authorize operation of the facilities to be constructed under SSM 23529. No petition for administrative review or any other legal challenge to the issuance of SPM 23531 was filed or made by any of the Petitioners;

WHEREAS, on March 1, 2010, the IDEM OAQ issued Significant Source Modification No. T083-28683-00003 ("SSM 28683") to Duke Energy for construction of certain modifications to materials handling facilities for coal and other materials at the Edwardsport IGCC ("Materials Handling Modifications"). Construction of the Materials Handling Modifications to the Edwardsport IGCC commenced in 2010. No petition for administrative review or any other legal challenge to the issuance of SSM 28683 was filed or made by any of the Petitioners;

WHEREAS, on April 20, 2010, the IDEM OAQ issued Significant Permit Modification No. T083-28801-00003 ("SPM 28801") to Duke Energy to modify the Title V operating permit to authorize operation of the materials handling facilities at the Edwardsport IGCC to be constructed under SSM 28683. No petition for administrative review or any other legal challenge to the issuance of SPM 28801 was filed or made by any of the Petitioners;

WHEREAS, on or about July 31, 2009, the IDEM OAQ published notice of a 30-day public comment period ("2009 Title V Renewal Notice") with respect to a draft renewal of the Title V operating permit for the Edwardsport Generating Station ("Draft Title V Renewal

Permit"). Petitioners timely submitted certain comments to the IDEM OAQ concerning the Draft Title V Renewal Permit during the public comment period ("Petitioners' 2009 Title V Renewal Comments");

WHEREAS, on or about September 16, 2010, Petitioners submitted to the Administrator of the U.S. Environmental Protection Agency ("EPA") their Petition Requesting that the Administrator Object to the Issuance of the Draft Title V Operating Permit for the Edwardsport Generating Station ("2010 Petition for Objection to the Title V Permit"). The 2010 Petition for Objection to the Title V Operating Permit was denied by the EPA Administrator as moot in approximately December 2011, because the permit had been withdrawn by IDEM;

WHEREAS, on or about December 6, 2011, the IDEM OAQ published a notice of a second 30-day public comment period ("2011 Title V Renewal Notice") with respect to a revised draft renewal of the Title V operating permit for the Edwardsport Generating Station and a revised Technical Support Document ("2011 Revised Draft Title V Renewal Permit"). Petitioner Sierra Club timely submitted certain comments on or about January 5, 2012 to the IDEM OAQ concerning the 2011 Revised Draft Title V Renewal Permit ("Petitioners' 2012 Title V Renewal Comments") during the public comment period;

WHEREAS, on April 3, 2013, IDEM issued the renewal of the Title V Permit for operation of Edwardsport Generating Station, Permit No. T-083-27138-00003 ("Renewed Title V Permit");

WHEREAS, on April 17, 2013 certain Petitioners filed a Petition for Review challenging the issuance of the Renewed Title V Permit (OEA Case No. 13-A-J-4651); and

WHEREAS, Petitioners and Duke Energy now desire to compromise and settle all the disputes and issues arising from:

- SSM 23529;
- SSM 23529 Appeal;
- SPM 23531;
- SSM 28683;
- SPM 28801;
- 2009 Title V Renewal Notice;
- Draft Title V Renewal Permit;
- Petitioners' 2009 Title V Renewal Comments;
- 2010 Petition for Objection to the Title V Permit;
- 2011 Title V Renewal Notice;
- 2011 Revised Draft Title V Renewal Permit;
- Petitioners' 2012 Title V Renewal Comments; and
- The Renewed Title V Permit (and all related appeals)

(collectively the "Air Permitting Matter(s)"), without admitting any factual or legal contentions or positions taken by any Party therein.

NOW, THEREFORE, in consideration of the promises and covenants of the respective Parties contained herein and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Petitioners and Duke Energy agree to compromise, settle, release, and dismiss with prejudice all claims and causes of action arising in and/or related to the Air Permitting Matters, subject to the terms and conditions set forth below:

Duke Energy's Obligations

1. As specified below, Duke Energy hereby agrees that the following EGUs (representing a total of approximately 1,108 MW) have been retired,¹ will be retired,² and/or shall cease combustion of coal,³ as specified below:

- a. Retirement of Edwardsport Units 6, 7, and 8 (approximately 160 MW);
- b. Retirement of Gallagher Units 1 and 3 (approximately 280 MW);
- c. Retirement of Wabash River Units 2, 3, 4, and 5 (approximately 350 MW) by the compliance deadline for the MATS Rule⁴ standards/requirements or by June 1, 2018, whichever occurs first; and
- d. The cessation of the combustion of coal at Wabash River Unit 6 by June 1, 2018 (approximately 318 MW).

2. In addition, Duke Energy also agrees to undertake one of the following actions to be selected at its sole discretion, which actions will be conditioned upon obtaining all necessary regulatory approvals, if any; but provided that if all necessary regulatory approvals have not been or cannot be timely obtained for the option selected by Duke energy, then Duke Energy shall timely and diligently pursue another option referenced below. The actions referenced in

¹ The retirements referenced in items (a) and (b) above are included because they occurred after January 25, 2008, the date that IDEM OAO issued SSM 23529 to Duke Energy for construction of the Edwardsport IGCC.

² "Retired" and "Retirement" for purposes of this Agreement shall mean that Duke Energy shall have permanently ceased combustion of fuel in the boilers and ceased power production from the turbine-generator of the unit and initiate all necessary steps to remove the retired units from Indiana's air emissions inventory and amend all applicable permits to reflect the permanent shutdown status of the retired units.

³ "Coal" for purposes of this Agreement shall include all solid fossil fuels, such as biomass, coal, peatcoke, tires, etc., and synthetic gases made from any of the foregoing. It shall not include natural gas.

⁴ The compliance deadline includes any extensions requested and approved pursuant to the MATS Rule. See National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units, 77 Fed. Reg. 9304 (Feb. 16, 2012) ("Mercury and Air Toxics Standards Rule" or "MATS Rule") (to be codified at 40 C.F.R. Parts 60 and 63).

paragraphs 2(a) and/or 2(b)(i) shall not be conditioned on obtaining regulatory approval of rate recovery; however, neither is Duke Energy precluded from seeking approval of rate recovery. Additionally, the failure to receive rate recovery approval, if sought, shall constitute a Force Majeure event for a period up to but no longer than thirty-six (36) months, as set forth herein:

- a. Implement a feed-in tariff for solar photovoltaic energy modeled on the program currently implemented by Northern Indiana Public Service Company:
 - i. The feed-in tariff shall include the following program elements:
 - A. Be implemented in Duke Energy's Indiana service territory;
 - B. Provide for a total program cap of no fewer than 30 MW;
 - C. Provide that no fewer than 5 MW be reserved for small systems (no larger than 10 kW in size); and
 - D. Be requested in a filing not later than June 1, 2014;
 - ii. Duke Energy shall make all reasonable and diligent efforts to receive Indiana Utility Regulatory Commission approval of the feed-in tariff and to solicit full subscription by customers.
 - iii. To the extent that the feed in tariff is not fully subscribed by June 1, 2018, Duke Energy shall, by June 1, 2019, execute one or more long term contracts (for no fewer than 20 years) for solar photovoltaic energy of 30 MW, less any amount of the feed-in-tariff, above, that is subscribed.
 - iv. This shall not preclude the Petitioners and Duke Energy from collaborating on other or additional feed-in-tariff provisions that may be developed and implemented by Duke Energy.
 - v. Nothing in this Settlement shall preclude any of the Petitioners from intervening and participating, in support of the requested feed-in tariff, in any utility regulatory proceeding in which the Indiana Utility Regulatory Commission considers and implements the elements of a feed-in-tariff for Duke Energy's service territory.

OR

- b. Do the following:
 - i. Construct/install, and/or execute a long-term contract with one or more independent producers for energy and capacity from wind and/or solar generation with a combined nameplate capacity of no less than 15 MW (of

which a minimum shall be 5 MW solar). Such wind and/or solar generation shall be in addition to any Duke Energy currently owns or has a contract for. For purposes of this subparagraph, Duke Energy shall enter any long-term PPA contract(s) and file for IURC approval (including requests for related cost recovery) on or before December 31, 2014. The PPA contract(s) will be conditioned upon obtaining any necessary IURC approvals, including those necessary approvals for the PPA independent producers, but not including approval of rate recovery. Should Duke Energy choose to construct/install such wind and/or solar generation, Duke Energy shall apply to the IURC for approval on or before December 31, 2014. Duke Energy shall timely and diligently pursue all regulatory approvals and any rate recovery approval. Denial of any PPA rate recovery by the IURC shall constitute a Force Majeure event, but only as to the deadline for Duke Energy to comply with its obligation under this paragraph and only for a period up to, but not longer than, thirty-six (36) months, and only provided that Duke otherwise complies with the other obligations and procedures set forth in Attachment A for Force Majeure events. In no event shall a denial of rate recovery constitute a Force Majeure event for longer than 36 months, nor relieve Duke Energy of its obligations pursuant to Paragraph 2(a) and/or 2(b)(i) of this Agreement. Duke Energy shall utilize its best efforts to complete installation (if applicable) within 12 months after receipt of IURC approval. The wind and/or solar generation covered by this paragraph shall be connected to the grid as quickly as feasible and without undue delay; and

- ii. Duke Energy will retire the Miami Wabash Station and Connersville Station (approx. 166 MW – installed summer capacity) by June 1, 2018; and
- iii. If this option (b) is selected by Duke Energy, the requirement outlined in Paragraph 1(c) shall be modified such that Duke Energy shall retire Wabash River Units 2, 3, 4, and 5 (approximately 350 MW) by the compliance deadline for the MATS Rule⁵ standards/requirements or by June 1, 2017, whichever occurs first.

3. The Parties agree and stipulate that this Agreement does not address or affect Duke Energy's ability to seek regulatory approvals to: conduct any of the actions referenced in Paragraphs 1 and 2 above; retire or convert the existing boiler at Wabash River Unit 6 to natural gas firing pursuant to this Agreement; or offset emission increases associated with any such actions by netting or otherwise utilizing the retirements required under this Agreement. If any of

⁵ The compliance deadline includes any extensions requested and approved pursuant to the MATS Rule.

the above referenced actions/projects in Paragraphs 1 through 3 of this Agreement ("Projects") are undertaken, Petitioners agree that they will not file a legal challenge, lawsuit, or objection, or take a position before or submit testimony or comments to any governmental agency, including without limitation IDEM and the Indiana Utility Regulatory Commission ("IURC"), challenging or publicly criticizing Duke Energy's request(s) to obtain environmental permits and/or requests for rate recovery for the costs incurred from these Projects. Petitioners may challenge cost allocation among the rate classes for the Projects. This shall not preclude challenges to other actions or proposals not described in this Agreement to the extent that they may be included in the same proceeding as the Projects. Petitioners further agree not to provide legal assistance by any staff member, contract with any outside counsel to provide legal assistance, or fund any third parties in any legal challenge, including any lawsuit, objection, or administrative petition challenging, or in any public criticism of, Duke Energy's request(s) to obtain environmental permits and/or requests for rate recovery for the costs incurred from these Projects. This shall not preclude challenges to other actions or proposals not described in this Agreement to the extent that they may be included in the same proceeding as the Projects.

Petitioners' Obligations

4. Within ten (10) days of the execution of this Agreement by all Parties, the Petitioners will:
 - a. Dismiss, with prejudice, their Petition for Review, including any amendments, and all claims in the SSM 23529 Appeal challenging the SSM 23529 construction permit relating to the Edwardsport IGCC plant;

- b. Dismiss, with prejudice their Petition for Review, including any amendments, and all claims in OEA Case No. 13-A-J-4651 regarding the Renewed Title V Permit;
- c. Notify IDEM that they are withdrawing Petitioners' 2009 Title V Renewal Comments submitted to IDEM OAQ in response to the 2009 Title V Renewal Notice, and Petitioners shall request that IDEM deem such comments as if they had not been submitted⁶; and
- d. Notify IDEM that they are withdrawing Petitioners' 2012 Title V Renewal Comments submitted to IDEM OAQ in response to the 2011 Title V Renewal Notice, and Petitioners shall request that IDEM deem such comments as if they had not been submitted.

5. While recognizing that any individual member of their respective organizations may take such action, as an individual, as that member deems fit, Petitioners, collectively and as individual organizations:

- a. Now and forever waive and release any and all claims related to the Air Permitting Matters (as to the Edwardsport plant), including without limitation those claims that: (i) were raised or could have been raised in the SSM 23529 Appeal; (ii) could have been raised in administrative appeals of SPM 23531, SSM 28683, or SPM 28801 had such administrative appeals been filed; (iii) were raised or could have been raised in the 2010 Petition for Objection to

⁶ It is understood that by withdrawing their comments and treating them as having not been submitted, Petitioners are not indicating nor agreeing that any of the legal or factual representations made in any public comments were inaccurate. Rather, withdrawal operates, as a matter of law, as if the comments had not been submitted.

the Title V Permit; and/or (iv) were raised or could have been raised in the appeal of the Renewed Title V Permit, OEA Case No. 13-A-J-4651; and/or (v) could have been raised in a petition for objection to the Renewed Title V Permit (collectively, the "Claims");

- b. Covenant and agree to refrain from raising or asserting in any other existing or future administrative or judicial proceeding pertaining to the Edwardsport IGCC plant, including but not limited to any permit proceeding for a future renewal and/or reissuance of the Title V operating permit for the Edwardsport IGCC plant: (i) any and all of the Claims; and (ii) any other environmental claim or cause of action that is based upon any alleged erroneous or omitted application of any applicable requirement under the Clean Air Act or the air quality/air permitting rules, 326 IAC, of the state of Indiana with respect to the construction or the operation of the Edwardsport Generating Station, including but not limited to the Edwardsport IGCC plant, at any time prior to July 31, 2013, including but not limited to any applicable requirement pertaining to any alleged and/or actual physical change or change in the method of operation (as those terms are used in the New Source Review and/or NSPS program) that occurred at Edwardsport Generating Station, including but not limited to the Edwardsport IGCC plant, prior to July 31, 2013; provided, however, that this subparagraph (b) shall not apply to application of future environmental regulations not in effect as of July 31, 2013;

- c. Shall not provide funding to any third parties (including but not limited to individual members of Petitioners' respective organizations) to file any litigation in a court or in an administrative tribunal or to submit formal comments to any government agency regarding and/or in pursuit of any of the Air Permitting Matters, provided that such agreement does not in any way limit or constrain actions by Petitioners to perform their normal educational and informational activities, including but not limited to information posted on their internet sites or included in Petitioners' newsletters or similar publications; and
- d. Shall not oppose (through testimony, formal written comments, administrative challenges, lawsuits or other proceedings) Duke Energy's request for authority for cost recovery, or prudence of, implementing the retirements of generating units required by Paragraph 1 and/or any other action required by this Agreement (including but not limited to the Indiana Utility Regulatory Commission, Federal Energy Regulatory Commission and the Midcontinent Independent System Operator ("MISO"). Petitioners may challenge cost allocation among the rate classes for the Projects. This shall not preclude challenges to other actions or proposals to the extent that they may be included in the same proceeding as the Projects.

Additional Provisions

6. **Force Majeure.** The Parties agree that Duke Energy's obligations outlined herein shall be subject to the Force Majeure provisions attached hereto as Exhibit A.

7. Binding Nature of Agreement. The Parties represent and agree that the persons executing this Agreement have full and sufficient authority to sign and agree to be bound by the Agreement, and that this Agreement shall be binding upon the Petitioners and Duke Energy, and their successors and assigns, upon its execution by all Parties.

8. Attorneys' Fees, Costs, and Expenses. The Parties agree to bear their own attorneys' fees, costs, and other expenses that have been incurred in connection with any stage of the Claims and/or Environmental Matters.

9. Governing Law and Interpretation. This Agreement shall be governed and construed in accordance with the laws of the State of Indiana without regard to the conflict of law provisions of Indiana or any other state, and any provision herein that violates a statute or rule shall be void and unenforceable.

10. Contemporaneous Information. In order to facilitate Petitioners' ability to follow and communicate with Duke Energy about its compliance with this Agreement, Duke Energy will provide to the Petitioners, on a contemporaneous basis, notice of the retirement of any generating unit under this Agreement. Duke Energy shall make its best effort to provide the information as set forth in this paragraph, though its failure to do so will not be considered a breach of this Agreement. Duke Energy's obligations as set forth in this paragraph will cease upon satisfaction of this Agreement.

11. Enforceability and Remedies for Breach. The Parties stipulate and agree that this Agreement may be enforced in any court of competent jurisdiction in Indiana or in United States District Court, and that if filed in a state court, that venue is appropriate in Marion County, Knox County or Hendricks County, Indiana. The Parties' sole and exclusive remedy for breach of this Agreement shall be an action for specific performance or injunction. In no event shall any Party

be entitled to monetary damages for breach of this Agreement. In addition, no legal action for specific performance or injunction shall be brought or maintained until: (a) the non-breaching Party provides written notice to the breaching Party which explains with particularity the nature of the claimed breach; and (b) within thirty (30) days after receipt of said notice, the breaching Party fails to cure the claimed breach or, in the case of a claimed breach which cannot be reasonably remedied within a thirty (30) day period, the breaching Party fails to commence to cure the claimed breach within such thirty (30) day period, and thereafter diligently complete the activities reasonably necessary to remedy the claimed breach.

12. Severability. The invalidity or unenforceability of any provision of this Agreement shall in no way affect the validity or enforceability of any other provision; the invalid or unenforceable provision shall be stricken, without assessing damages or imposing penalties to either Party arising out of said provisions by any court of competent jurisdiction.

13. Headings. The headings used in this Agreement are for convenience of reference only and shall in no way define, limit, expand, or otherwise affect the meaning of any provision of this Agreement.

14. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

15. Amendment. This Agreement may not be modified, altered, or changed except in a written document that is signed by all Parties and that makes specific reference to this Agreement.

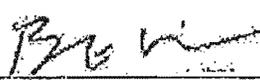
16. Entire Agreement. This Agreement sets forth the entire agreement between the Parties, and fully supersedes any prior agreements or understandings between the Parties. In

addition, this Agreement does not alter or modify the terms of any Permit related to the Edwardsport IGCC, including without limitation: SSM 23529; SPM 23531; SSM 28683; and SPM 28801.

17. Review and Signing: Each Party and counsel for each Party has reviewed this Agreement. Accordingly, this Agreement shall be construed without regard to any presumption or other rule of construction requiring resolution of ambiguities against the drafting Party.

IN WITNESS WHEREOF, Petitioners and Duke Energy have executed this Agreement, which shall be effective as of the date identified above.

SIERRA CLUB

By: 
Its: Senior Director
Date: 8-12-13

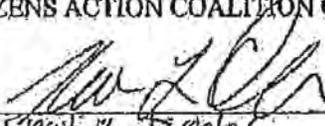
VALLEY WATCH, INC.

By: _____
Its: Director
Date: 8/4/13

SAVE THE VALLEY, INC.

By: J. P. [Signature]
Its: Chairman
Date: 7/30/13

CITIZENS ACTION COALITION OF INDIANA,
INC.

By: 
Its: Executive Director
Date: 7/30/13

DUKE ENERGY INDIANA, INC.

By: *[Signature]*
Its: President
Date: 8/28/2013

EXHIBIT A: FORCE MAJEURE EVENTS

1. For purposes of this Agreement, a "Force Majeure Event" shall mean an event that has been or will be caused by circumstances beyond the control Duke Energy of one or more of its contractors, or any entity controlled by Duke Energy, that delays or prevents the performance of any obligation under this Agreement or otherwise causes a violation of any provision of this Agreement despite Duke Energy's best efforts to fulfill the obligation. "Best efforts to fulfill the obligation" include using best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event: (a) as it is occurring; and (b) after it has occurred, such that the delay and/or violation are minimized to the greatest extent possible and the emissions during such event are minimized to the greatest extent possible.

2. Notice of Force Majeure Events. If any event occurs or has occurred that may delay or prevent compliance with or otherwise cause a violation of any Duke Energy obligation under this Agreement, as to which Duke Energy intends to assert a claim of Force Majeure, Duke Energy shall notify Petitioners in writing as soon as practicable, but in no event later than fourteen (14) business days following the date Duke Energy first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or violation. In this notice, Duke Energy shall reference this section/exhibit of the Agreement and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the Force Majeure Event, all measures taken or to be taken by Duke Energy to prevent or minimize the delay or violation, the schedule by which Duke Energy proposes to implement those measures, and Duke Energy's rationale for attributing the failure, delay or violation to a Force Majeure Event. A copy of this Notice shall be sent electronically, as soon as practicable, to Petitioners. Duke Energy shall adopt all reasonable measures to avoid or minimize such failures, delays, or

violations, Duke Energy shall be deemed to know of any circumstance which it, its contractors, or any entity controlled by Duke Energy, knew or should have known.

3. Failure to Give Notice. If Duke Energy fails to comply with the notice requirements of this Section, the Petitioners may seek to void such claim for Force Majeure as to the specific event for which Duke Energy failed to comply with such notice requirement.

4. Petitioners' Response. The Petitioners shall notify Duke Energy in writing of their response regarding any claim of Force Majeure as soon as reasonably practicable. If Petitioners agree that a delay in performance has been or will be caused by a Force Majeure Event, the Petitioners and Duke Energy shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event, in which case the delay at issue shall be deemed not to be a violation of the affected requirement(s) of this Agreement. In such circumstances, an appropriate modification shall be made pursuant to Paragraph 15 (Amendment) of this Agreement.

5. Disagreement. If the Petitioners do not agree with Duke Energy's claim of Force Majeure, or if the Petitioners and Duke Energy cannot agree on the length of the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Paragraph 11 of the Agreement.

6. Burden of Proof. In any dispute regarding Force Majeure, Duke Energy shall bear the burden of proving by a preponderance of the evidence that any delay in performance, or any other violation of any requirement of this Agreement, was caused by or will be caused by a Force Majeure Event. Duke Energy shall also bear the burden of proving by a preponderance of the evidence that it gave the notice required by this Section and the anticipated duration and extent of any failure, delay, or violation(s) attributable to a Force Majeure Event. An extension

of one compliance date may, but will not necessarily, result in an extension of a subsequent compliance date.

7. Events Excluded. Unanticipated or increased costs or expenses associated with the performance of Duke Energy's obligations under this Agreement shall not constitute a Force Majeure Event.

8. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and Duke Energy's response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; acts of God; acts of war or terrorism; and orders by a government official, government agency, other regulatory authority, or a regional transmission organization (e.g., the MISO), acting under and authorized by applicable law or tariff as accepted by the Federal Energy Regulatory Commission, that directs Duke Energy to supply electricity so long as such order is a response to a state-wide or regional emergency or is necessary to preserve the reliability of the bulk power system. Depending upon the circumstances and Duke Energy's response to such circumstances, failure of a permitting authority or the Indiana Utility Regulatory Commission to issue any necessary permit or order with sufficient time for Duke Energy to achieve compliance with this Agreement may constitute a Force Majeure Event where the failure of the authority to act is beyond the control of Duke Energy and Duke Energy has taken all reasonable steps available to it to obtain the necessary permit or order, including, but not limited to: submitting a complete permit application or request; responding to requests for additional information by the authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the authority.

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OUCG
IURC Cause No. 44578
Data Request Set No. 4
Received: March 27, 2015

OUCG 4.22

Request:

What is the typical life span for these types of solar installations?

Objection:

Duke Energy Indiana objects to this Request on the basis that it is vague, ambiguous, and not reasonably calculated to lead to the discovery of admissible evidence as the term "typical life span" has not been defined. Duke Energy Indiana further objects to this Request as the "typical life span" of the solar installations is irrelevant to this proceeding as Duke Energy Indiana has entered into four (4) solar PPAs and is not the developer or owner of these solar projects.

Response:

The typical life span for these types of solar installations is a minimum of twenty-five (25) years, which is consistent with typical twenty-five (25) year power output warranties offered by leading solar panel manufacturers.

Witness: James S. Northrup

OUCG
IURC Cause No. 44578
Data Request Set No. 2
Received: March 12, 2015

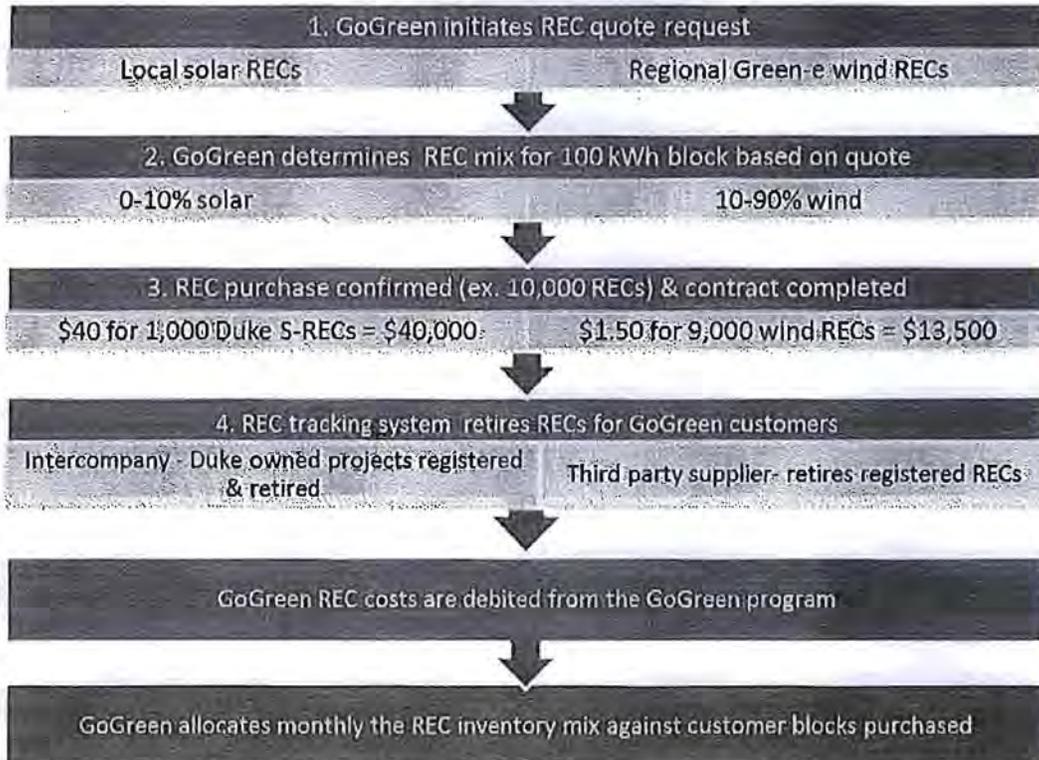
OUCG 2.4

Request:

Please provide a flow chart and/or a detailed diagram illustrating the proposed solar REC purchase process.

- a. Will DEI's GoGreen program purchase solar RECs from only these proposed local solar generation projects and no other sources going forward?
- b. If not, what percentage of REC purchases does DEI plan to make from its proposed local solar generation projects
- c. Will Indiana GoGreen customers be permitted to choose between solar RECs and RECs from other types of renewable generation?
 - i. If not, please explain why?
- d. Has Duke considered selling its solar RECs on the market and buying them back at the lowest cost purchase price?
 - i. If not, please explain why?

Response:



- a. No. As is current practice, GoGreen would continue to purchase wind RECs and add local Duke Energy solar RECs depending on market price and availability with a preference to maximize the localized Duke Energy solar RECs in the GoGreen portfolio.
- b. At current solar REC prices of \$ \$40 a solar REC, less than ten percent (10%). However, this decision will be revisited periodically
- c. No. Regional solar RECs are too expensive as a one hundred (100) kWh block for the GoGreen program (currently \$40 a solar REC). At current prices, the GoGreen premium would have to increase to six dollars (\$6.00) a block to cover costs for the GoGreen program.
- d. Yes. Duke Energy wanted its GoGreen participants to be able participate in locally produced renewable power. If Duke sold the locally produced RECs, there would be no certainty that the RECs would be available later for repurchase along with uncertainty as to what the repurchase market price might be. Therefore, Duke wanted to be able to offer locally produced solar RECs by maintaining control of the portion of RECs intended for the GoGreen participants.

Witness: Christine E. Smith



REQUEST FOR PROPOSALS

For

Capacity, Energy and RECs

From Solar Renewable Proposals

Duke Energy Indiana, Inc.

Dated: February 3, 2014
Proposals Due: March 28, 2014

Complete Information on this RFP can be found at:
<http://DukeEnergyIndianaRFP.com>

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I. Objective of RFP

Duke Energy Indiana, Inc. (Duke Energy Indiana) is interested in purchasing energy, capacity, and renewable energy certificates from a new or existing solar generating facility or facilities totaling up to 5 MW (AC). The solar resources will be utilized to further develop Duke Energy Indiana's renewables portfolio and diversify the resource mix.

Duke Energy Indiana is soliciting proposals with the following characteristics:

1. Minimum size of 1 MW (AC) with a maximum size of 5 MW (AC) per proposal. Solar sites may be aggregated to meet the minimum proposal size by combining Individual projects with a minimum size of 250 kW (AC) or greater per site.
2. Projects must be capable of providing energy as quickly as feasible after Duke Energy Indiana receives regulatory approval with a preference for projects to be in-service no later than 12/31/15.
3. Contract term of all proposals must be 20 years
4. Proposals must include energy, capacity, and renewable energy certificates, "RECs" (inclusive of all environmental attributes and reporting rights).
5. Preference for projects located in Duke Energy Indiana's service territory.
6. Solar projects may originate from either new (to be developed) or existing facilities that are not currently under contract with Duke Energy Indiana.
7. The respondent must be financially stable and have good credit.

This RFP is not open to offers of tax equity partnerships, net metering, energy efficiency, demand side management, affiliate company proposals, acquisitions, REC-Only proposals, or use of Duke Energy Indiana property for the siting of facilities.

Duke Energy Indiana will utilize "PowerAdvocate" to administer the RFP. PowerAdvocate is a web-based platform that provides centralization of proposals and communications for RFP issuers while maintaining confidentiality among respondents. PowerAdvocate will provide information and instructions for respondents to this RFP. Respondents must submit their proposals to the PowerAdvocate platform on or before 5:00 pm EDT on March 28, 2014.

II. General Terms

Respondent must complete the response package as contained within PowerAdvocate and adhere to the following general terms.

A. Capacity, Energy and REC Requirements

Capacity

Each proposal should have a minimum capacity size of at least 1 MW (AC) and a maximum size of 5 MW (AC). Size of project offered must be stated in MW based on nameplate capability¹ of the facility. Projects may be aggregated to achieve the minimum requirements by combining individual projects with a minimum size of 250 kW (AC) or greater per site.

Energy

All proposals should contain an hourly estimate of net delivered generation for an average day of each month (24 hourly estimates for each of 12 months) for the project. Proposals that consist of aggregated projects should only submit one (1) expected net generation profile that aggregates all projects.

RECs

RECs and all other environmental attributes associated with the project must be included.

B. Delivery Date & Term

Projects shall be connected to the grid as quickly as feasible after Duke Energy Indiana receives regulatory approval. The term of all contracts is set at 20 years.

C. Site Location & Delivery Point

Site

There is a site location preference for projects with the following declining order of preference:

1. Projects located within Duke Energy Indiana service territory
2. Projects located in Indiana within Midcontinent Independent System Operator (MISO)
3. Projects located in Indiana

Identification of all aggregated projects and their locations must be disclosed.

Delivery Point

Proposals must specify the point of interconnection either to a transmission system or to a distribution system. If the project is internal to MISO, then the delivery point is the generator node. Respondent is responsible for meeting all transmission and MISO requirements. If the project is external to MISO, then the delivery point is the MISO border.

¹ The capability of the project will be the lesser of the sum of the MW (AC) output capability of the inverters or the solar panels.

If the project will be connected at the transmission level, describe the status and projected completion date of the interconnection request(s).

Projects external to MISO must have firm Transportation Service from the project to the MISO border. Firm Transmission Service must be obtained to deliver at least the Installed Capacity (ICAP) amount of the Capacity Resource from the external project to the MISO border. Respondents are responsible for all delivery and losses prior to the delivery points.

D. Generator Interconnection and Transmission/Distribution

Estimates of interconnection costs to the Duke Energy Indiana distribution system are not required to be included in the initial proposal. Estimates of interconnection costs may be included if available, but in all cases should be noted separately from all other costs of RECs or electricity. Duke Energy Indiana does not require or expect a utility interconnection study or process to have been initiated with Duke Energy Indiana prior to the submittal of the proposal, although estimates developed by the respondent may be included as a separate item. Following initial proposal evaluation, a subset of proposals will be further evaluated for detailed interconnection analysis and cost. Respondents must include firm interconnection costs in their proposals for projects that are located outside of the Duke Energy Indiana service territory regardless of whether they are connected at the transmission or distribution level.

Respondents should note that interconnection costs, up to the delivery point with the transmission or distribution system, are the responsibility of the respondent. This generally includes equipment such as the solar facility generator step-up (GSU) transformer (for conversion up to the interconnecting voltage level), facility side generator breaker, as needed, all station service equipment and any additional equipment, such as utility-owned interrupting device and metering needed to connect to the transmission or distribution facilities. Multiple sites within a proposal must be individually metered. Further, respondents must note that interconnection impacts to the transmission or distribution system are unique to the specific design of each project and therefore may require new or modified equipment beyond the delivery point. Any interconnection-related costs incurred for new or modified equipment beyond the delivery point will also be the responsibility of the respondent.

In the absence of interconnection cost, a preliminary screening of responses will be conducted by Duke Energy Indiana to identify those proposals that provide the most value to Duke Energy
090013814-000015

Indiana in its sole discretion. Interconnection costs will then be estimated for the most economically attractive proposals and will impact the final selection.

Additional guidance on the distribution interconnection process can be found within the Indiana General Assembly- Indiana Administrative Code Database under Title 170, Article 4-4.3. A link to this information follows: <http://www.in.gov/legislative/iac/T01700/A00040.PDF?>

Additional guidance on the transmission interconnection process can be found via the following link, <http://www.ferc.duke-energy.com/DEW/MidwestConnection.pdf>.

E. Pricing

Pricing must be bundled for energy, capacity and RECs and stated in \$ per MWh. Proposal pricing may be on a fixed price or fixed escalation rate basis (e.g. 2%, 3% escalation rate). Escalation rates may not be tied to any indices. Pricing must include all capital costs, fixed and variable O&M costs, interconnection costs (if available, but are not required for initial proposal submittal on March 28, 2014, unless external to Duke Energy Indiana's territory), and any other associated costs. For projects external to MISO, pricing must include all costs to deliver energy to the MISO border. For projects that are connected to a transmission node, in the event that the Locational Marginal Price (LMP) for the energy at that delivery point is less than \$0.00/MWh in any hour, the payment for energy to the Respondent for that hour will be reduced by the difference between such negative LMP and \$0.00/MWh. Pricing may not be dependent on availability of production tax credits.

F. Site Control & Permits

Respondents must demonstrate control or own the right to acquire control over the project site. Documentation must also be provided to ensure proper zoning for proposed project or provide a permitting plan and timeline to secure the necessary approvals. Respondents must include a list of permits, licenses, environmental assessments or impact statements, etc. required to successfully complete project along with the status of each.

G. Respondent Experience/Operation and Maintenance Plan

Respondents must demonstrate sufficient relevant experience and expertise to successfully develop, finance, construct, and operate the project. Respondent experience can be conveyed

via identification of key members of respondent's team that have successfully developed a similar project or a renewable project with comparable complexity. Respondents must provide a maintenance plan to ensure reliable operations during the term of the contract including staffing levels, use of outside contractors, scheduling of major maintenance activity, and plan for testing. Respondents must demonstrate financial stability and creditworthiness.

III. Instructions to Respondents

A. Initial RFP Access

PowerAdvocate will be used for the administration of this RFP. PowerAdvocate will provide information and instructions for respondents.

Existing PowerAdvocate Account:

- Please share your interest in reviewing the RFP and response package with INDRenewableRFP@duke-energy.com. An invitation to the RFP event will be forwarded upon receipt of your email.

Register a New PowerAdvocate Account:

- In order to access the RFP event website, respondents must register their company information on the PowerAdvocate website at www.PowerAdvocate.com. Please allow at least one (1) business day for your registration to be completed. Once PowerAdvocate has accepted your registration, please share your interest in reviewing the RFP and response documents via an email to INDRenewableRFP@duke-energy.com. An invitation to the event will be forwarded upon receipt of your email.

All communications and responses will be shared via the PowerAdvocate platform. Individual questions submitted by respondents will be answered with responses via PowerAdvocate back to the respondent. Responses to frequently asked questions may be placed within PowerAdvocate under FAQs for the benefit of all respondents, although care will be taken not to identify any specific respondents.

B. Schedule

The RFP process will include the activities and events as indicated in the schedule shown below. Proposals will be reviewed for completeness, and offers that do not include the information requirements will be notified and allowed five days to conform.

Solar RFP Schedule

Event	Date
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Release of RFP	February 3, 2014
Proposal Submittal Deadline	March 28, 2014
Selection of Short List	July 18, 2014
Complete Negotiations	October 17, 2014

All response packages and any supporting information must be submitted via the PowerAdvocate platform on or before 5:00pm on March 28, 2014. Duke Energy Indiana will not guarantee evaluation of proposals associated with this RFP if submitted after that time.

C. Proposal Organization

The proposal must include an executive summary, proposal limitations, the technical and cost aspects and relevant company data.

1. Executive Summary

Please provide an overview of the proposal and project(s). Include an overview of the technology, project benefits and location(s).

2. Proposal Limitations

Please provide in reasonable detail any economic, operational or system conditions that might affect the respondent's ability to deliver capacity, energy and RECs as offered.

3. Company Data

Supporting information submitted should include information on the respondent's corporate structure (including identification of parent companies), a copy of the respondent's most recent quarterly report containing unaudited consolidated financial statements that is signed and verified by an authorized officer of the respondent attesting to its accuracy, a copy of the respondent's most recent annual report containing audited consolidated financial statement and a summary of respondent's relevant experience. Financial statements, annual reports and other large documents may be referenced via web site address via PowerAdvocate.

4. Response Package

Respondents to this RFP are required to complete a response package (Attachments A–F) provided by Duke Energy Indiana to compete in this solicitation process. Respondents must respond to all questions contained in the response package. All respondents will execute the NDA in the form attached

Attachment A: General Information
Attachment B: Technical Information
Attachment C: Siting and Interconnection
Attachment D: Production Profile

Attachment E: Pricing
Attachment F: Nondisclosure Agreement (NDA)

IV. Proposal Evaluation and Contract Negotiation

A. Initial Proposal Review

After the proposal submittal deadline, Duke Energy Indiana will review all responses for completeness and responsiveness. Duke Energy Indiana may request that a respondent provide additional information or clarification to its initial proposal. Duke Energy Indiana will make such requests within the PowerAdvocate platform and specify a deadline for compliance. Failure to provide the requested information or clarification by the deadline may result in disqualification of the proposal.

B. Short List Development

Duke Energy Indiana will then evaluate all proposals to provide the most value to the Duke Energy Indiana customers with a primary emphasis of the financial impact to Duke Energy Indiana and its customers. Proposals will be evaluated based on present value economics considering all costs (respondent-proposed costs, interconnection and system upgrade costs and all other cost impacts) and other factors that may include, but will not be limited to location, credit, relevant experience, technology feasibility, permitting, deliverability and impact to Duke Energy Indiana's balance sheet.

During the evaluation process, Duke Energy Indiana may or may not choose to initiate discussions with one or more respondents. Discussions with a respondent shall in no way be construed as commencing contract negotiations.

C. Contract Negotiations

Duke Energy Indiana will contact the respondent via the PowerAdvocate platform of its interest in commencing contract negotiations. Duke Energy Indiana's commencement of and participation in negotiations shall not be construed as a commitment to execute a contract. If a contract is negotiated, it will not be effective unless and until it is fully executed. The contract will include a condition precedent that Duke Energy Indiana has obtained all required regulatory approvals to perform under the contract and receive full recovery of all costs.

V. Reservation of Rights

Nothing contained in this RFP shall be construed to require or obligate Duke Energy Indiana to select any proposals or limit the ability of Duke Energy Indiana to reject all proposals in its sole and exclusive discretion. Duke Energy Indiana further reserves the right to modify the schedule, withdraw and terminate this RFP at any time prior to the proposal deadline, selection of a short list or execution of a contract. Duke Energy Indiana reserves the right to consider alternatives outside of this solicitation.

All proposals submitted to Duke Energy Indiana pursuant to this RFP shall become the exclusive property of Duke Energy Indiana and may be used for any reasonable purpose by Duke Energy Indiana. Duke Energy Indiana shall consider materials provided by respondent in response to this RFP to be confidential only if such materials are clearly designated as "Confidential". Respondents should be aware that their proposal, even if marked "Confidential", may be subject to discovery and disclosure in regulatory or judicial proceedings that may or may not be initiated by Duke Energy Indiana. Duke Energy Indiana will be permitted to disclose information in response to such requests or requirements without protective treatment. Duke Energy Indiana will be permitted to provide or produce materials and information without any prior consultation with or approval of the respondent.

OUCG
IURC Cause No. 44578
Data Request Set No. 4
Received: March 27, 2015

OUCG 4.20

Request:

Will the net benefits (proceeds) from REC sales be credited to customers through the FAC?

Response:

Yes. It is the Company's intent, subject to approval by the Commission, to flow through any net proceeds realized from the sales of RECs associated with these solar PPAs to customers through the Fuel Adjustment Clause ("FAC") Rider.

Witness: Suzanne E. Sieferman

OUCG
IURC Cause No. 44578
Data Request Set No. 4
Received: March 27, 2015

OUCG 4.21

Request:

Will DEI sell these RECS to affiliate companies?

Response:

It is currently the Company's intent to monetize the RECs either through sales on the open market or through sales to the Indiana GoGreen program or an affiliate company at market prices. The Company has requested authorization in this proceeding from the Commission to pursue any of these alternatives. Regardless of who the RECs are sold to, the sales would be executed at current market prices and the net proceeds of any such sales would be flowed through to customers via the FAC proceedings.

In the future, if Duke Energy Indiana becomes subject to a renewable portfolio standard, the RECs will be maintained and should count toward Duke Energy Indiana's required renewable energy percentage.

Witness: Suzanne E. Sieferman

OUCG
IURC Cause No. 44578
Data Request Set No. 4
Received: March 27, 2015

OUCG 4.7

Request:

For each REC purchased during the last three years, please state the date and the per unit price DEI paid. If the price included broker or other administrative fees, please provide a breakdown of those amounts.

Response:

Duke Energy Indiana states as follows:

GoGreen Indiana REC Purchases

Year	Purchase Date	Price per REC	Brokerage	Bkg Rate
2014	5/28/2014	\$1.35	included	N/A
2013	10/1/2013	\$1.50	included	N/A
2012	9/17/2012	\$0.80	additional	3.50%

Witness: Christine E. Smith