

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF DUKE ENERGY INDIANA, LLC,)
SEEKING (1) APPROVAL OF AN ONGOING REVIEW)
PROGRESS REPORT PURSUANT TO IND. CODE)
CHAPTER 8-1-8.5 AND THE FINAL ORDERS IN)
CAUSE NOS. 44734, 44767, AND 45002; AND (2))
AUTHORITY TO REFLECT COSTS INCURRED FOR) CAUSE NO. 44932 REP-03
THE CRANE SOLAR FACILITY, THE MARKLAND)
HYDRO UPRATE PROJECT, THE CAMP)
ATTERBURY MICROGRID, AND NABB BATTERY)
PROJECT, THROUGH ITS RENEWABLE ENERGY)
PROJECT RIDER, STANDARD CONTRACT RIDER)
NO. 73 PURSUANT TO IND. CODE § 8-1-8.8)

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

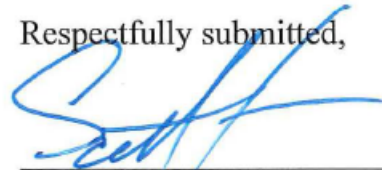
PUBLIC'S EXHIBIT NO. 2

TESTIMONY OF OUCC WITNESS

ANTHONY A. ALVAREZ

April 14, 2021

Respectfully submitted,



Scott C. Franson
Attorney No. 27839-49
Deputy Consumer Counselor

TESTIMONY OF OUCC WITNESS ANTHONY A. ALVAREZ
CAUSE NO. 44932 REP-3
DUKE ENERGY INDIANA, LLC

I. INTRODUCTION

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

2 A: My name is Anthony A. Alvarez, and my business address is 115 West Washington
3 Street, Suite 1500 South, Indianapolis, Indiana 46204.

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

5 A: I am employed as a Utility Analyst in the Indiana Office of Utility Consumer
6 Counselor's ("OUCC") Electric Division. I describe my educational background in
7 Appendix A to my testimony.

8 **Q: Have you previously testified before the Indiana Utility Regulatory**
9 **Commission ("Commission")?**

10 A: Yes. I have testified in several cases before the Commission, including electric
11 utility base rate cases; environmental and renewable energy Purchase Power
12 Agreement and tracker cases; Transmission, Distribution, and Storage System
13 Improvement Charge cases; and applications for Certificates of Public
14 Convenience and Necessity.

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

16 A: My testimony addresses Duke Energy Indiana, LLC's ("DEI") request for approval
17 of its Renewable Energy Project ("REP") Rider, Standard Contract Rider No. 73
18 ("REP Rider 73").¹ In particular, my testimony addresses DEI's ongoing progress
19 reports related to the 1) Crane Solar Facility, 2) Markland Hydro Uprate Project

¹ See DEI Petition, January 1, 2021.

1 (“Markland Uprate Project”), 3) Camp Atterbury Microgrid, and 4) Nabb Battery
2 projects. I recommend the Commission approve DEI’s current progress reports and
3 require DEI to continue providing progress reports, in future REP Rider 73 filings,
4 updating the Commission and the OUCC regarding on-going and remaining work
5 necessary to complete its projects at Naval Support Activity (“NSA”) Crane,
6 Markland, Camp Atterbury, and Nabb.

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

8 A: I reviewed DEI’s petition, direct testimonies and exhibits filed in this Cause. I
9 reviewed the Commission’s Orders in 1) Cause No. 45253, dated June 29, 2020,
10 DEI’s recent base rates case; 2) Cause No. 44734, dated July 6, 2016, related to the
11 Crane Solar Facility; 3) Cause No. 44767, dated December 14, 2016, related to the
12 Markland Uprate Project; and 4) Cause No. 45002, dated May 30, 2018, related to
13 the Camp Atterbury Microgrid and Nabb Battery project.

14 **Q: To the extent you do not address a specific item in your testimony, should it be**
15 **construed to mean you agree with DEI’s proposal?**

16 A: No. Excluding any topics, issues or items DEI proposes does not indicate my
17 approval of those topics, issues, or items. Rather, the scope of my testimony is
18 limited to the specific items addressed herein.

II. CRANE SOLAR FACILITY

19 **Q: Please briefly discuss the Crane Solar Facility?**

20 A: The Crane Solar Facility is a 17.25 MW alternating current solar generation plant
21 located at NSA Crane near Bloomington, Indiana and placed into service in late
22 January 2017.² DEI completed the feasibility study involving incorporating a new

² IURC Order dated June 29, 2020 in Cause No. 45253, Section 5(b), p. 12.

1 battery energy storage system (“BESS”) with the Crane Solar Facility on August
2 30, 2018.³ The Commission approved adding the BESS assets in Cause No. 45253.⁴
3 DEI integrated a 5 MW BESS with the Crane Solar Facility and placed it in service
4 in December 2020.⁵

5 **Q: Please discuss ongoing Crane Solar Facility progress updates.**

6 A: DEI completed its study regarding installing a remote operable switch at the Crane
7 Solar Facility.⁶ Work remains with installing the remote operable switch and
8 integrating its functionality with the solar and BESS facilities at NSA Crane
9 through 2021.⁷ Also, “the Navy may source the remaining diesel generators” in “a
10 separate yet coordinated scope of work,” according to Petitioner witness James A.
11 Hummel’s direct testimony, page 3.

12 **Q: Do you have any concerns with DEI’s on-going NSA Crane projects?**

13 A: No, I do not have any concerns regarding DEI’s on-going NSA Crane projects –
14 this being DEI’s first REP tracker filing after receiving a Commission Order in its
15 last base rate case. However, the OUCC will continue monitoring DEI’s progress
16 reports regarding installing the remote operable switch, including the operation and
17 performance of the BESS, in future REP Rider 73 filings. The OUCC expects DEI
18 will include updates on the Navy’s new diesel generator installations in future
19 progress reports.

³ Petitioner’s witness James A Hummel, Direct Testimony, p. 2, lines 19 – 21. *See also* IURC Order dated June 29, 2020 in Cause No. 45253, Section 5(b)(i), pp. 18 – 19.

⁴ Hummel Direct, p. 3, lines 13 – 14.

⁵ *Id.* at 4.

⁶ *Id.*

⁷ *Id.*

III. MARKLAND UPRATE PROJECT

1 **Q: Please provide an overview of the Markland Uprate Project.**

2 A: The Commission's Cause No. 44767 Order approved the Markland Uprate Project.
3 DEI projected a 10% increase in energy output of the Markland Generating Facility
4 from 374 gigawatt-hours/year ("GWh/yr.") to 413 GWh/yr.⁸ The Markland Uprate
5 Project involves overhauling each of the Markland Hydro Units 1, 2 and 3, and
6 upgrading the units' major components "with more modern and efficient options,"
7 as Petitioner's witness Mark D. Sager discussed in direct testimony, p. 4. In the
8 Spring of 2019, DEI completed replacing Markland's main power transformer and
9 protective relays.⁹ Overall, DEI anticipates the work on all units will be completed
10 by second quarter 2021, "then the demobilization and [work] site restoration will
11 follow during the remainder of 2021," as discussed in Mr. Sager's direct testimony,
12 page 6. The OUCC will continue monitoring the progress and completion of various
13 work on the Markland Uprate Project in future REP tracker filings.

14 **Q: Were there changes to the Markland Uprate Project overall cost estimate**
15 **approved by the Commission in Cause No. 44767?**

16 A: No. Mr. Sager states the Markland Uprate Project's estimated cost remains
17 unchanged "at this time."¹⁰ So far, estimated cost changes were fully covered by
18 the \$21.6 million contingency and management reserve the Commission approved
19 for this project.¹¹ However, should the estimated cost for the project exceed the

⁸ Petitioner's witness Mark D. Sager, Direct Testimony, p. 5, lines 1 – 3.

⁹ *Id.* at 5.

¹⁰ *Id.* at 7.

¹¹ Sager Direct, p. 3, lines 11 – 14. *See also* Petitioner's Confidential Exhibit 1-B (MDS) for direct cost changes in the project.

1 \$182.4 million the Commission approved, the OUCC expects DEI to report such
2 costs in a timely manner in a future REP Rider 73 filing.

3 **Q: Please discuss each Markland generator unit's uprate and overhaul status.**

4 A: DEI completed the Markland Unit 2 uprate and overhaul and returned the unit to
5 service on December 14, 2018.¹² Although there was an unanticipated slight delay
6 returning the Markland Unit 2 back into service, DEI completed the necessary
7 mechanical work in a reasonable timeframe.¹³ The estimated Markland Unit 2 cost
8 changes were within the Commission's approved contingency and management
9 reserve.¹⁴ DEI completed the Markland Unit 3 uprate and overhaul, returning it to
10 service on January 11, 2020, with minimal delay.¹⁵

11 Meanwhile, all Markland Unit 1's major equipment is on site and the unit's
12 final assembly is in progress.¹⁶ DEI expects minimal schedule delays; however, it
13 anticipates completing the project by second quarter 2021.¹⁷ DEI kept the Markland
14 Unit 1 estimated cost changes within the Commission's approved contingency and
15 management reserve.¹⁸

16 **Q: What other Markland Uprate Project issues are you monitoring?**

17 A: Mr. Sager testified DEI expects Markland Generating Facility's overall capacity
18 will increase following the Markland Uprate Project completion.¹⁹ However, the

¹² Sager Direct, p. 5, lines 11 – 12.

¹³ Sager, Direct, p. 6, lines 9 – 12. *See also* Pet. Conf. Exh. 1-B (MDS) estimated vs actual in-service dates of Markland Unit 2.

¹⁴ Pet. Conf. Exh. 1-B (MDS), Direct Cost Changes.

¹⁵ Sager Direct, p. 5, lines 12 -14. *See also* Pet. Conf. Exh. 1-B (MDS) estimated vs actual in-service dates of Markland Unit 2.

¹⁶ Sager Direct, p. 5, lines 17 – 18.

¹⁷ Sager Direct, p. 6, line 12. *See also* Pet. Conf. Exh. 1-B (MDS) estimated vs actual in-service dates of Markland Unit 1.

¹⁸ Pet. Conf. Exh. 1-B (MDS), Direct Cost Changes.

¹⁹ Sager Direct, p. 5, lines 3 – 5.

1 exact capacity increase remains to be determined “over the three years following
2 installation of the upgrade turbines.”²⁰ Also, Markland Units 2 & 3 cavitation
3 warranty inspections are underway early this year (2021).²¹ In future REP Rider 73
4 filings, the OUCC will continue monitoring the inspection results and any increase
5 in capacity.

IV. CAMP ATTERBURY MICROGRID AND NABB BATTERY

6 **Q: Please briefly discuss DEI’s annual report regarding competitive procurement**
7 **and construction of the Camp Atterbury Microgrid and Nabb Battery**
8 **Projects.**

9 A: The Commission’s Cause No. 45002 Order requires DEI to “report annually on the
10 competitive procurement and construction of the Camp Atterbury Microgrid and
11 Nabb Battery through its Rider 73 filings.”²² In this Cause, Mr. Hummel states that
12 in March 2018, DEI issued a request for proposals (“RFP”) to bidders for the Camp
13 Atterbury Microgrid Project. DEI awarded the Engineering, Procurement, and
14 Construction (“EPC”), and Operations and Maintenance (“O&M”) contracts to
15 “Doosan GridTech.”²³ Likewise, DEI issued an RFP to bidders for the Nabb
16 Battery Project and also awarded the EPC and O&M contracts to “Doosan
17 GridTech.”²⁴

²⁰ *Id.*

²¹ *Id.* at 6.

²² IURC Order dated May 30, 2018 in Cause No. 45002, para. 7, p. 12.

²³ Hummel Direct, p. 8, lines 12 – 19.

²⁴ *Id.* at 9, lines 13 – 20.

1 DEI started constructing the Camp Atterbury Microgrid Project in March
2 2019,²⁵ and placed it in-service in November 2019.²⁶ DEI started constructing the
3 Nabb Battery Project in June 2019²⁷ and placed it in-service in December 2020.²⁸
4 **Q: Do you have any concerns related to the Camp Atterbury Microgrid and Nabb**
5 **Battery Projects?**
6 A: No. DEI already placed these projects in-service. The OUCC will monitor progress
7 of the projects' remaining final segments not completed in 2020.²⁹ The OUCC
8 expects DEI will report the progress of these remaining final segments in future
9 REP Rider 73 filings.

V. RECOMMENDATION

10 **Q: What do you recommend in this proceeding?**
11 A: I recommend the Commission approve DEI's current progress reports and require
12 DEI to continue providing progress reports, in future REP Rider 73 filings, updating
13 the Commission and the OUCC regarding on-going and remaining work necessary
14 to complete its projects at NSA Crane, Markland, Camp Atterbury, and Nabb.
15 **Q: Does this conclude your testimony.**
16 A: Yes.

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.* at 10, line 4.

²⁸ *Id.*

²⁹ The projects' remaining final segments are: 1) the islanding function of the Camp Atterbury Microgrid, *see* Hummel Direct, p. 9, lines 8 – 10; and 2) reliability improvement at the Nabb Station, *see* Hummel direct at 10, lines 8 – 10.

APPENDIX A

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

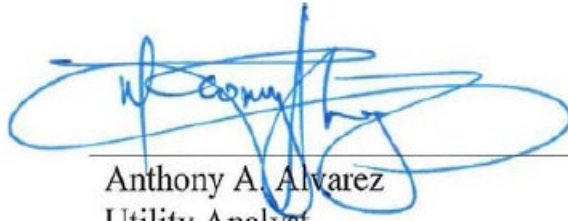
2 A: I hold a Master of Business Administration degree from the University of the
3 Philippines (“UP”), in Diliman, Quezon City, Philippines. I also hold a Bachelor of
4 Science degree in Electrical Engineering from the University of Santo Tomas
5 (“UST”), in Manila, Philippines.

6 I joined the OUCC in July 2009 and have completed the regulatory studies
7 program at Michigan State University sponsored by the National Association of
8 Regulatory Utility Commissioners (“NARUC”). I have also participated in other
9 utility and renewable energy resources-related seminars, forums, and conferences.

10 Prior to joining the OUCC, I worked for the Manila Electric Company
11 (“MERALCO”) in the Philippines as a Senior Project Engineer responsible for
12 overall project and account management for large and medium industrial and
13 commercial customers. I evaluated electrical plans, designed overhead and
14 underground primary and secondary distribution lines and facilities, primary and
15 secondary line revamps, extensions, and upgrades with voltages up to 34.5 kV. I
16 successfully completed the MERALCO Power Engineering Program, a two-year
17 program designed for engineers in the power and electrical utility industry.

AFFIRMATION

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

A handwritten signature in blue ink, appearing to read 'Anthony A. Alvarez', is written over a horizontal line.

Anthony A. Alvarez
Utility Analyst
Indiana Office of Utility Consumer Counselor

Cause No. 44932 REP-03
Duke Energy Indiana, LLC

Date: April 14, 2021

CERTIFICATE OF SERVICE

Indiana Office of Utility Consumer Counselor Public's Exhibit No. 2 Testimony of
OUCW Witness Anthony A. Alvarez has been served upon the following counsel of record in the
captioned proceeding by electronic service on April 14, 2021.

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