

**STATE OF INDIANA**  
**INDIANA UTILITY REGULATORY COMMISSION**

**PETITION OF DUKE ENERGY INDIANA,  
LLC FOR APPROVAL OF A TARIFF RATE  
FOR THE PROCUREMENT OF EXCESS  
DISTRIBUTED GENERATION PURSUANT  
TO INDIANA CODE 8-1-40 ET SEQ.**

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**CAUSE NO. 45508**

**DIRECT TESTIMONY OF CHRIS ROHALY**

**ON BEHALF OF  
INDIANA DISTRIBUTED ENERGY ALLIANCE**

**SEPTEMBER 20, 2021**

**I. INTRODUCTION**

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

2 A. My name is Chris Rohaly, and I am the President and Owner of Green Alternatives  
3 Inc. (“GAI”). My business address is 702 E. Columbia St., Flora, Indiana 46929.

4 **Q. Please describe your business activity.**

5 A. GAI markets and installs solar energy systems. I have been in the renewable energy  
6 business since 2008.

7 **Q. Please describe your educational background, training and experience.**

8 A. I have a Bachelor of Science Degree in Electrical Engineering from Valparaiso  
9 University. In addition to certifications I obtained in the first half of my career, I  
10 have also been certified by a variety of solar equipment and battery manufacturers  
11 to install and maintain their equipment. I am currently on the Advisory Committee  
12 for the Renewable Energy program at Ivy Tech Lafayette. I hold membership in  
13 the Indiana Distributed Energy Alliance (“IndianaDG”) and the American Solar  
14 Energy Society, and am a past President of the Indiana Renewable Energy  
15 Association. I have also attended numerous business leadership and training  
16 programs. My experience includes about 12 years in the solar business and 35 years  
17 in electrical engineering for the automotive industry.

18 **Q. Please describe your professional background.**

19 A. After earning my engineering degree in 1983, I accepted a job with Delco  
20 Electronics in Kokomo. At the time, they were still a division of General Motors.  
21 I spent my career there in various engineering and engineering management roles.  
22 In 1998, my assignment changed to focus on all Delco’s international customers,

1 so I was able to travel extensively, learn foreign language basics, and understand  
2 business customs of several European and Asian countries. In 2008, when the  
3 market crashed, an associate and I both investigated renewable energy as a way to  
4 address energy costs for our parents, all of whom lost significant portions of their  
5 retirement savings in the economic crash around that time. While researching the  
6 possibilities, a local law office asked if we would sell them a system. At that point,  
7 we figured out how to start a solar business and installed 10 kW on a law office in  
8 Kokomo.

9 In 2016, I took an early retirement to focus on solar full time. We were on the cusp  
10 of significant growth when my co-founder died suddenly in January 2019. We have  
11 survived his loss, moved the primary operations from Kokomo to Flora in 2020,  
12 and have seen our business grow and hope it will help revitalize a small-town  
13 economy. But now my business growth and the local economic benefits it creates  
14 are threatened by Duke and other Indiana investor owned electric utilities ending  
15 monthly netting, changing to instantaneous or near no netting periods and offering  
16 a very low excess distributed generation (“EDG”) rate.

17 **Q. What are your duties, responsibilities, and goals with GAI?**

18 A. I oversee the solar business operation and engage in sales full-time with oversight  
19 of material supply, installation schedule, and after-install support. I also do the  
20 system designs and create the build documentation. I interact with prospective  
21 customers, discuss and understand their needs, preferences, and purchase barriers.  
22 To increase GAI’s positive economic impact, I am working to develop a business  
23 structure that would facilitate the transition to an employee-owned business.

1 **Q. Have you previously testified before the Indiana Utility Regulatory**  
2 **Commission (“IURC”)?**

3 A. No.

## II. SUMMARY

4 **Q. What is the purpose of your testimony in this Cause?**

5 A. My testimony will explain the adverse impacts that Duke Energy Indiana’s (“DEI”)  
6 EDG proposal would have on my business, other Indiana solar companies, our  
7 prospective customers, ratepayers served by DEI, and Indiana’s economy. I  
8 describe that DEI’s estimated value of EDG customer solar export electricity is  
9 unreasonably low. I explain that DEI’s EDG proposal will unreasonably lengthen  
10 the customer “payback” period for the cost of a new solar energy system. This will  
11 deter customers from installing solar energy systems at their homes and businesses  
12 and have serious negative impacts on Indiana solar installation businesses and in  
13 turn on Indiana’s economy.

## III. NEGATIVE IMPACTS OF DEI’S PROPOSAL

14 **Q. Please describe the Hoosiers that express interest in solar installation and**  
15 **those who own solar generation.**

16 A. Those who own and those who are interested in owning solar generation units  
17 represent a cross section of Indiana. They include small residential customers,  
18 farms, municipal governments, schools, commercial business customers, and  
19 industrial customers. The vast majority of our customers purchase a solar energy  
20 system to provide a long term, cost-effective, fuel-less energy supply that, over a  
21 reasonable time, generates savings that offset the system’s cost, i.e. investment

1       payback period. Without a reasonable investment payback period, there would be  
2       very little demand for solar energy systems. My years of interaction with customers  
3       and their demands makes it clear that the payback periods resulting from DEI and  
4       other utilities' instantaneous netting and low EDG rate will seriously damage if not  
5       ruin my business.

6       **Q.     What are the common critical considerations for prospective solar installation**  
7       **customers?**

8       A.     The most critical consideration generally is system cost and the period over which  
9       the solar equipment and installation costs will be recovered. Most customers want  
10      a maximum 7-10 year payback period.

11      **Q.     How would DEI's "no netting" and approximate 2.6 cents per kWh EDG**  
12      **proposal impact customer payback periods?**

13      A.     DEI's proposal would increase the customer payback period to 20 years or more.  
14      Currently, residential customer solar investment payback is typically estimated to  
15      be 7-10 years. This is using a projected 3% future inflation rate. DEI's proposal  
16      would more than double this payback period and ruin the solar business.

17      **Q.     Would customer battery installation solve the increased customer payback**  
18      **financial problem?**

19      A.     No, it would not. Customer battery storage is too expensive to be a viable option  
20      for the vast majority of solar customers. It is generally not affordable. Frequently  
21      batteries are even difficult to receive with long wait periods because the bulk of  
22      production is going to states with favorable solar treatment.

23      **Q.     What is the current status of the federal tax credit for solar installations?**

1 A. The federal Investment Tax Credit (“ITC”) currently is 26%. The 26% credit would  
2 have expired but was briefly extended with the December 2020 Covid Stimulus  
3 Bill. In 2023, or only six months after DEI’s EDG Rider is scheduled to go into  
4 effect, the ITC will step down to a 22% tax credit. Beginning in 2024, the  
5 commercial ITC drops down to 10%, and the residential ITC will be eliminated for  
6 new systems. As ITC steps down and later ends, customer payback periods  
7 increase.

#### IV. HARM TO INDIANA’S ECONOMY

8 **Q. What would be the impact of DEI’s EDG proposal on customers’ interest in**  
9 **investing in solar generation?**

10 A. The resulting lengthening of customer investment payback period would make DEI  
11 customers extremely reluctant and likely unwilling to make the investment in solar.  
12 This will be devastating to Indiana’s solar industry, resulting in job losses and  
13 market contraction to an industry that was just beginning to blossom. This will push  
14 Indiana solar jobs and new job opportunities backwards instead of moving forward.

15 **Q. What would be the impact of DEI’s current EDG proposal on your company**  
16 **and other Indiana solar installation companies?**

17 A. It will be very detrimental to our business. My company alone currently employs  
18 11 people, and we hope to hire more. 5 of those are graduates of the Indiana Ivy  
19 Tech renewable energy program. They are some of the only graduates of that  
20 program who remain in state after graduation, most choosing to move to areas  
21 where solar is treated more fairly and has greater deployment. We also engage  
22 many subcontract workers including members of the International Brotherhood of  
23 Electrical Workers (“IBEW”). DEI’s proposal could force us to lay off workers

1 and quite possibly no longer install solar energy systems in DEI's service area.  
2 Instead of focusing on investing our time and resources in Indiana, we and other  
3 Indiana solar companies would have to shift focus to neighboring states like  
4 Kentucky, Illinois, and Michigan that treat solar installations reasonably, rather  
5 than punishing solar participants. For example, not far from us in Michigan, new  
6 residential DG customers receive substantially higher export credits. The credit rate  
7 for Indiana Michigan Power Company's Michigan new customers' exports, for  
8 example, is \$0.10024/kWh, about four times as much as DEI's proposed  
9 compensation rate right across the state line in Indiana. Similarly, Consumers  
10 Energy new residential customers' credit is \$0.119655/kWh for summer on-peak,  
11 \$0.080485/kWh for summer off-peak, and \$0.084785/kWh for all exports in non-  
12 summer months. If after July 1, 2022, the Indiana regulatory framework for EDG  
13 will be like that proposed by DEI, we will likely shift our business focus out of  
14 Indiana. We will cut our Indiana work force and replace them with out of state  
15 workers.

16 Other Indiana solar installation companies will suffer the same financial harm from  
17 EDG proposals like DEI's and will logically shift their solar business focus,  
18 employment opportunities, and financial stimulus to neighboring states that treat  
19 solar customers reasonably. Two other installers we collaborate with have already  
20 opened offices in Illinois and are working more frequently in Michigan. This would  
21 accelerate unless Indiana solar is treated more fairly.

22 **Q. What economic contribution does your solar business alone make to the**  
23 **wellbeing of DEI's service area and in Indiana as a whole?**

1 A. Last year, our solar business suffered from the Covid crisis, but in 2019 we earned  
2 revenue of \$1,680,544 from solar projects executed in Indiana. We paid  
3 approximately \$510,000 in Indiana wages with benefits estimated at an additional  
4 15%. We also regularly hire electricians and local contractors for various services:  
5 roofing, directional boring, and excavation, to name a few. When possible, we  
6 purchase materials and supplies locally. The money we inject into Indiana's  
7 economy gets re-spent and invested by the Hoosier recipients several times before  
8 those dollars leave Indiana. The business pays state and local taxes improving the  
9 ability of government to provide public services. GAI's solar business makes a  
10 substantial contribution to the economic well-being of Flora, Indiana, and Hoosiers  
11 in DEI's service area.

12 The Indiana operations of other Indiana solar installation companies provide the  
13 same types of economic benefits. Some have business operations larger than mine.  
14 EDG proposals like DEI's will financially harm Indiana solar businesses and the  
15 jobs, economic development, and stimulus they currently create.

16 **Q. Does Indiana and local government benefit from your solar business activity?**

17 A. Yes. Our company, employees, and contract workers pay local and state income  
18 taxes and sales taxes. The economic stimulus we create spurs more tax revenues  
19 from ripple effect beneficiaries as wages and profits get spent in local economies.

20 **Q. Is DEI's service area the only area of Indiana in which GAI does business?**

21 A. No, it is not. But all the other Indiana investor-owned utilities have filed EDG cases  
22 proposing instantaneous netting and low EDG rates that would also dramatically  
23 lengthen customer investment payback periods. Approval of these punitive EDG



1 proposals would force our company and other solar companies to focus business  
2 efforts in nearby states that do not discourage customer investment in solar energy  
3 generation and offer long netting periods and substantially higher EDG rates, e.g.  
4 9 to 11 cents / kWh.

**V. BENEFITS OF CUSTOMER OWNED SOLAR GENERATION**

5 **Q. Please describe the benefits that distributed customer owned solar generation**  
6 **bring to DEI and all DEI customers.**

7 A. Distributed solar generation has many benefits. First is improvement to the  
8 environment by displacing the need to burn carbon emitting coal, diesel, or natural  
9 gas to generate electricity. Second is reduced load on the transmission system.  
10 Electricity follows the path of least resistance, and DG export energy is therefore  
11 consumed by other DEI customers in the area it is generated. Third is reduced  
12 demand for electricity in daylight hours resulting in decreased purchased power,  
13 including during peak demand hours. Customer owned solar is an extraordinary  
14 form of customer financed demand side management reducing or eliminating solar  
15 customer peak period demand and shaving the utility's total peak demand. But  
16 instead of solar customers receiving additional compensation for this customer  
17 financed demand side management, DEI treats customer solar punitively with no  
18 netting and low EDG rates. Fourth is reduced transmission line loss by having the  
19 solar energy output used in the proximity of the customer demand. The reduced  
20 transmission load and line loss can be particularly financially beneficial for  
21 reliability during periods of peak customer demand, often encountered on very hot,

1 sunny, humid summer days. Fifth is avoided carbon-based fuel use and costs,  
2 among many other benefits not listed here.

3 **Q. What direct economic benefits has customer-owned solar brought to all**  
4 **Hoosiers and to state and local Indiana governments?**

5 A. Customer-owned solar brings jobs and the economic stimulus they create. The  
6 Indiana solar industry has grown substantially over the past ten years. The number  
7 of solar jobs has increased to approximately 3,400 in 2020. The solar industry also  
8 engages in substantial contract work, often with union electrical workers. It buys  
9 local goods and materials. All of those economic benefits are multiplied by the  
10 ripple effect of solar employees' contractors and merchants spending their solar  
11 industry earnings locally in Indiana. State, county and municipal governments all  
12 thereby benefit from the various tax revenues that the solar economic stimulus  
13 creates. The full Solar Foundation 2020 Report describing the growth in solar jobs  
14 is available at <https://www.thesolarfoundation.org/national/>.

**VI. OTHER REASONS WHY DEI'S EDG PROPOSAL IS UNJUST,**  
**UNREASONABLE, AND INEQUITABLE**

15 **Q. You have described EDG's harm to DEI customers, to DEI solar installers,**  
16 **and to the Indiana and DEI service area economies. Are there other aspects**  
17 **of DEI's EDG proposals that in your opinion are unjust and should be**  
18 **discussed?**

19 A. Yes, there are. Solar installation companies like mine endured the cost and struggle  
20 of starting new Indiana businesses. We overcame all the challenges and created  
21 successful solar installation businesses. In particular, GAI has committed to and  
22 invested in a small Indiana town, providing a potential model for other small  
23 businesses to stimulate towns that need more business activity to maintain

1 economic vitality. Investor-owned electric utilities were promoting high cost, rate  
2 increasing rate base additions for coal fired pollution control and huge new gas fired  
3 generation. Now their focus is on customers paying for remaining net investments  
4 in old coal fired generation and shifting to large scale solar and wind farms. I fear  
5 they will build and “rate base” so much new solar generation that not only will their  
6 return on solar investments drive up utility rates, the rate based solar capacity may  
7 be used as an excuse to further chill customer owned solar. As they make the  
8 transition to renewable energy, DEI and others ask to deploy an EDG regime that  
9 clearly serves to financially constrict or end new customer solar DG and the  
10 businesses that install customer solar. It is one thing to have a monopoly service  
11 area for retail sales of electricity; but it’s completely inequitable and unfair to then  
12 seek regulatory treatments that serve to prevent customers from using the sun to  
13 illuminate, cool, and heat their homes with their own solar generation. The sun  
14 shines to sustain all our lives, not to become the monopoly tool of DEI and other  
15 utilities. So severely restricting the value of customers’ monthly solar generation  
16 exports moves DEI into monopolizing solar energy generation in its service area.  
17 Moreover, DEI has done nothing in its EDG proposal to offer customers value for  
18 DG’s environmental benefits, operational benefits like reduced line losses, and  
19 peak shaving. I believe DEI’s EDG proposals are punitive, seek to prevent  
20 customers from installing solar generation, and are unjust and unreasonable.

21 **Q. What are your recommendations to the Commission?**

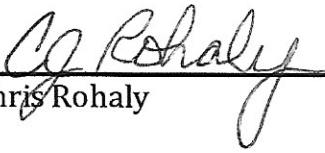
22 A. The Commission should reject DEI’s “no netting” and overall EDG proposal and  
23 continue with monthly netting.

1    **Q.**     **Does this conclude your testimony?**

2    **A.**     Yes, it does at this time.

VERIFICATION OF CHRIS ROHALY

I Chris Rohaly affirm that the foregoing Direct Testimony is to the best of my knowledge true and accurate.

  
Chris Rohaly

9-20-21

Date