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.	**CAUSE NO. 45508**

DIRECT TESTIMONY OF CHRIS ROHALY

ON BEHALF OF

INDIANA DISTRIBUTED ENERGY ALLIANCE

SEPTEMBER 20, 2021

I. INTRODUCTION

Q. Please state your name and business address

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

Q. Please describe your business activity.

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

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

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

Q. Please describe your professional background.

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

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

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

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

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

Q. Have you previously testified before the Indiana Utility Regulatory Commission ("IURC")?

A. No.

II. SUMMARY

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

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

III. NEGATIVE IMPACTS OF DEI'S PROPOSAL

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

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

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

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

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

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

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

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

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

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

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

IV. HARM TO INDIANA'S ECONOMY

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

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

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

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

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

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

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

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

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

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

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

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

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

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

V. BENEFITS OF CUSTOMER OWNED SOLAR GENERATION

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

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

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

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

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

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

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

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

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

Q. What are your recommendations to the Commission?

A. The Commission should reject DEI's "no netting" and overall EDG proposal and continue with monthly netting.

Q. Does this conclude your testimony?

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