

Commissioner	Yes	No	Not Participating
Huston	٧		
Freeman	٧		
Krevda			V
Ziegner	٧		

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF DUKE ENERGY INDIANA, LLC		
FOR APPROVAL OF A TARIFF RATE FOR		
THE PROCUREMENT OF EXCESS	CAUSE NO. 45508	
DISTRIBUTED GENERATION PURSUANT TO		
INDIANA CODE 8-1-40 ET SEQ.	APPROVED: JUL 06 202	22

ORDER OF THE COMMISSION

Presiding Officers: Stefanie N. Krevda, Commissioner David E. Veleta, Senior Administrative Law Judge

On March 1, 2021, Duke Energy Indiana, LLC ("Duke Energy Indiana," "Company," or "Petitioner") filed its Verified Petition with the Indiana Utility Regulatory Commission ("Commission") for approval of a tariff rate for the procurement of excess distributed generation ("Rider EDG") pursuant to Indiana Code ch. 8-1-40 (the "Distributed Generation Statute").

Numerous Petitions to Intervene were filed. These included a Petition to Intervene filed on March 3, 2021, by Citizens Action Coalition of Indiana, Inc. ("CAC") and a Petition to Intervene filed on March 8, 2021, by Indiana Distributed Energy Alliance, Inc. ("IndianaDG"). On March 22, 2021, the Commission issued Docket Entries granting CAC's and IndianaDG's Petitions to Intervene. On March 23, 2021, Solar United Neighbors ("SUN") filed its Petition to Intervene, and on March 31, 2021, the Commission granted SUN's Intervention. On April 14, 2021, Solarize Indiana, Inc. ("SI") filed its Verified Petition to Intervene, and on April 28, 2021, the Commission granted SI's intervention. On May 14, 2021, Vote Solar and Environmental Law & Policy Center ("ELPC") both filed Petitions to Intervene, and on June 17, 2021, the Commission granted each of their interventions.

On May 27, 2021, Duke Energy Indiana filed its case-in-chief testimony, exhibits, and workpapers. On September 20, 2021, the OUCC, IndianaDG, and SI filed their respective case-in-chief testimony and exhibits. On September 21, 2021, the OUCC filed a Motion for Leave to Late File Joint Motion for Summary Judgment and Joint Movant's Motion for Summary Judgment. On September 23, 2021, Duke Energy Indiana filed a Motion for Protection of Confidential and Proprietary Information to cover the confidential materials certain intervenors were wanting to file as part of their cases-in-chief. Also, on September 23, 2021, Duke Energy Indiana filed its Response to Joint Movants' Motion for Summary Judgment.

On October 12, 2021, Duke Energy Indiana filed its rebuttal testimony and Petitioner's Objections to and Motion to Strike Portions of the Prefiled Testimony of Benjamin D. Inskeep, Chris Rohaly, Barry S. Kastner, Darrell T. Boggess, and Michael A. Mullett. On October 14, 2021, SI filed its Verified Motion for Leave to Supplement the Prefiled Testimony

of Barry S. Kastner, and the OUCC filed Joint Movants' Reply to Duke Energy Indiana's Response to Motion for Summary Judgment. On October 19, 2021, Petitioner filed its Opposition to SI's Motion for Leave to Supplement the Prefiled Testimony of Barry S. Kastner. On October 20, 2021, the Commission issued a Docket Entry granting Petitioner's Motion for Confidentiality. On October 21, 2021, IndianaDG and SI filed their Responses to Petitioner's Motion to Strike, and the OUCC filed its Notice of Filing Confidential Information. On October 25, 2021, the OUCC filed an Opposed Joint Motion to Continue the Evidentiary Hearing Pending Hearing and Order on Joint Motion for Summary Judgment. On October 28, 2021, the Commission issued a Docket Entry on the outstanding motions, denying Joint Movants' Motion for Summary Judgment, denying Petitioner's Motion to Strike, and denying SI's Motion to Supplement the prefiled testimony of Barry S. Kastner.

The Commission noticed this matter for an evidentiary hearing at 9:30 a.m. on November 1, 2021, in Hearing Room 222 of the PNC Center, 101 West Washington Street, Indianapolis, Indiana. Duke Energy Indiana, the OUCC, IndianaDG, SI, and CAC, by counsel, participated in the hearing, and the testimony and exhibits of Duke Energy Indiana, the OUCC, IndianaDG, and SI were admitted without objection. Also, additional cross-examination exhibits were entered into the record without objection including Public's CX-1 and CX-1C; IndianaDG CX-1 and CX-2; SI CX-1, SI CX-2, SI CX-3, and SI Administrative Notice Exhibit 1. At the outset of the evidentiary hearing, SI appealed to the full Commission the October 28, 2021 Docket Entry denying SI's Motion to Supplement the prefiled testimony of Barry S. Kastner and denying Joint Movants' Motion for Summary Judgment. CAC and IndianaDG also joined SI's appeal to the full Commission. The Commission allowed SI to enter SI OOP-1, the Supplemental Testimony of Barry S. Kastner, which was admitted into the record for the limited purpose of making an offer of proof. The appeals to the full Commission were taken under advisement. In the commission were taken under advisement.

Based upon applicable law and the evidence presented, the Commission now finds as follows:

- 1. Notice and Jurisdiction. Due, legal, and timely notice of the evidentiary hearing in this Cause was given and published by the Commission as required by law. Petitioner is a public utility within the meaning of Indiana Code § 8-1-2-1 and an electricity supplier within the meaning of Indiana Code § 8-1-40-4(a). Petitioner is subject to the jurisdiction of the Commission in the manner and to the extent provided by Indiana law. Indiana Code § 8-1-40-16 ("Section 16") requires an electricity supplier to file a petition with the Commission requesting a rate for its procurement of excess distributed generation from that electricity supplier's customers. Accordingly, the Commission has jurisdiction over Petitioner and the subject matter of this Cause.
- **2.** <u>Petitioner's Characteristics.</u> Duke Energy Indiana is a public utility organized and existing under the laws of the State of Indiana and has its principal office at 1000 E. Main

¹ With respect to the appeal to the full Commission as to the denial of SI's Motion for Leave to File Mr. Kastner's Supplemental Testimony ("Motion for Leave"), the Commission upholds the Presiding Officers' October 28, 2021 Docket Entry denying the Motion for Leave.

Street, Plainfield, Indiana 46168. Duke Energy Indiana is engaged in rendering electric utility service in the State of Indiana and owns, operates, manages, and controls, among other things, plants and equipment within the State of Indiana used and useful for the production, transmission, delivery, and furnishing of electric service to the public. Duke Energy Indiana directly supplies electric energy to approximately 858,000 customers located in 69 counties in the central, north central, and southern parts of Indiana, and supplies steam service to one customer from its Cayuga Generating Station. Duke Energy Indiana also sells electric energy for resale to Wabash Valley Power Association, Inc. ("WVPA"), Indiana Municipal Power Agency ("IMPA"), and to other utilities that supply electric utility service to numerous customers in areas not served directly by Petitioner.

3. Applicable Law. Senate Enrolled Act 309 ("SEA 309") enacted the Distributed Generation Statutes (Ind. Code § 8-1-40-1 *et seq.*) and established a new statutory paradigm under which Indiana's electricity suppliers, including Petitioner, will receive electricity their customers with qualifying DG resources supply and offset the cost of the electricity supplied to such customers. Under the Distributed Generation Statutes, "[n]ot later than March 1, 2021, an electricity supplier shall file with the commission a petition requesting a rate for the procurement of excess distributed generation by the electricity supplier." Section 16. Ind. Code § 8-1-40-10 ("Section 10") of the Distributed Generation Statutes further provides:

Before July 1, 2022, if an electricity supplier reasonably anticipates, at any point in a calendar year, that the aggregate amount of net metering facility nameplate capacity under the electricity supplier's net metering tariff will equal at least one and one-half percent (1.5%) of the most recent summer peak load of the electricity supplier, the electricity supplier shall, in accordance with section 16 [of the Distributed Generation Statutes], petition the commission for approval of a rate for the procurement of excess distributed generation.

Section 10.

Subject to Indiana Code §§ 8-1-40-13 and -14, Petitioner's net metering tariff must remain available to its customers until the earlier of the following: "January 1 of the first calendar year after the calendar year in which the aggregate amount of net metering facility nameplate capacity under the electricity supplier's net metering tariff equals at least one and one-half percent 1.5%)" of the supplier's most recent summer peak load or July 1, 2022. Section 10.

Once an electricity supplier files a petition under Section 16 for a rate for EDG, Ind. Code § 8-1-40-17 ("Section 17") provides:

The commission shall review a petition filed under section 16 of this chapter by an electricity supplier and, after notice and a public hearing, shall approve a rate to be credited to participating customers by the electricity supplier for excess distributed generation if the commission finds that the rate requested by the electricity supplier was accurately calculated and equals the product of:

- (1) the average marginal price of electricity² paid by the electricity supplier during the most recent calendar year; multiplied by
- (2) one and twenty-five hundredths (1.25).

In this proceeding, Duke Energy Indiana seeks Commission approval of its initial EDG rate.

Following approval of Rider EDG, Section 16 requires Duke Energy Indiana to annually submit, "not later than March 1 of each year, an updated rate for EDG in accordance with the methodology set forth in section 17 of this chapter." And Indiana Code § 8-1-40-18 ("Section 18") requires that Duke Energy Indiana compensate its customers from whom Petitioner procures EDG through a credit on the customer's monthly bill, with any excess credit carried forward and applied against future charges to the customer for as long as the customer receives electric service from Duke Energy Indiana at the premises.

Under Ind. Code § 8-1-40-15 ("Section 15"), amounts credited to a customer for EDG "shall be recognized in the electricity supplier's fuel adjustment proceedings under IC 8-1-2-42."

4. Relief Requested. Pursuant to Section 10 and 16, Duke Energy Indiana requests approval of a rate for the procurement of EDG. Petitioner submitted the proposed form of Rider EDG as part of its evidence. Per Section 18, proposed Rider EDG will compensate customers in the form of a credit on their monthly bill, with any excess credit carried forward and applied against future charges to the Rider EDG customer for as long as that customer receives service from Duke Energy Indiana at the premises.

Any applications received and approved while Duke Energy Indiana has remaining net metering capacity, as defined in Indiana Code § 8-1-40-12, will remain eligible for and be compensated under the terms of Duke Energy Indiana's Net Metering tariff (Standard Contract Rider 57) through July 1, 2032, assuming the customer's net metering facility is not removed or replaced, in accordance with Indiana Code § 8-1-40-13. In the event Duke Energy Indiana reaches the net metering capacity as defined in the Distribution Generation Statute, Indiana Code § 8-1-40-10(1) states that Net Metering will remain available for new customers until January 1 of the first calendar year after the net metering capacity is reached or July 31, 2022, whichever is earlier. Duke Energy Indiana anticipates that its Net Metering tariff will remain in effect until July 31, 2022.

5. Petitioner's Case-in-Chief. Petitioner provided the testimony of Roger A. Flick II, Manager, Rates and Regulatory Strategy, to explain and support Petitioner's Verified Petition, which was filed in this Cause on March 1, 2021 (Petitioner's Exhibit 1-A (RAF)) and Petitioner's proposed EDG Tariff (Petitioner's Exhibit 1-B (RAF)). Mr. Flick testified that Petitioner seeks the Commission's approval of: 1) the Company's proposed EDG rate; 2) the proposed netting period for use in applying the EDG rate; 3) the proposed EDG Tariff; and 4) certain relief related to the expiration of accrued EDG credits when a customer leaves a premise.

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² Indiana Code § 8-1-40-6 of the Distributed Generation Statute defines "marginal price of electricity" as "the hourly market price for electricity as determined by a regional transmission organization of which the electricity supplier serving a customer is a member."

Mr. Flick testified that he used the term "Distributed Generation" in his testimony as defined by Indiana Code § 8-1-40-3, which means electricity produced by a generator or other device that is: (1) located on the customer's premises; (2) owned by the customer; (3) sized at a nameplate capacity of the lesser of: (A) not more than one (1) megawatt; or (B) the customer's average annual consumption of electricity on the premises; and (4) interconnected and operated in parallel with the electricity supplier's facilities in accordance with the Commission's approved interconnection standards. The term does not include electricity produced by the following: (1) an electric generator used exclusively for emergency purposes; or (2) a net metering facility (as defined in 170 IAC 4-4.2-1(k)) operating under a net metering tariff. Mr. Flick further defined "Excess Distributed Generation" as used in his testimony as being consistent with the definition in Indiana Code § 8-1-40-5, which means: the difference between (1) the electricity that is supplied by an electricity supplier to a customer that produces distributed generation; and (2) the electricity that is supplied back to the electricity supplier by the customer.

Mr. Flick testified as to the statutory definition of the formula to determine the rate to be credited to customers for the procurement of EDG. He testified that under Indiana Code § 8-1-40-17, the proposed rate is the product of (1) the average marginal price of electricity paid by the electricity supplier during the most recent calendar year; multiplied by (2) one and twenty-five hundredths (1.25). He further testified that Duke Energy Indiana calculated the average marginal price of electricity the Company paid during the most recent calendar year in accordance with Indiana Code § 8-1-40-17. The Company calculated the average marginal price of electricity by averaging the 2020 day ahead hourly LMPs at the CIN.PSI load node. The average was calculated by summing the hourly LMPs for the preceding calendar year and then dividing by 8,784, which represents the total hours in the 366 days in 2020. The result was \$23.185/MWh. Mr. Flick further testified as to how the Company calculated the EDG rate for the procurement of EDG using the formula and input just described. He testified that the rate, as referenced above, is \$23.185 per MWh, which when converted to a per kilowatt-hours (i.e., divided by 1,000), is \$0.023185 per kWh. Indiana Code § 8-1-40-6 calls for that marginal cost of electricity, \$0.023185 per kWh, to be multiplied by 125%. The product of that formula is \$0.028981 per kWh. This rate, \$0.028981 per kWh, is offered for Commission review and approval for use valuing EDG. Workpaper 1 was offered to support the Company's rate calculation.

Mr. Flick testified as to the EDG netting period the Company was proposing. He explained that Indiana Code § 8-1-40-5 defines EDG as the difference between: (1) the electricity that is supplied by an electricity supplier to a customer that produces distributed generation (imports); and (2) the electricity that is supplied back to the electricity supplier by the customer (exports). Unlike the regulations setting the methodology for net metering,³ the statutory definition for EDG is silent as to the appropriate time period a utility should use to net a customer's imports and exports of energy. The Parties in Cause No. 45378 proposed two possibilities for the frequency of the statutorily required EDG calculation. The utility proposed that EDG be calculated instantaneously. Other Parties in Cause No. 45378 proposed that EDG be calculated monthly, just

³ 170 IAC 4-4.2-7 provides, in relevant part, that "[t]he investor-owned electric utility shall measure the difference between the amount of electricity delivered by the investor-owned electric utility to the net metering customer and the amount of electricity generated by the net metering customer and delivered to the investor-owned electric utility during the billing period[,]".

like net metering. The Commission's Order in Cause No. 45378 approved the instantaneous netting term. The Company is similarly proposing instantaneous netting for determining excess distributed generation.

Mr. Flick testified that there were other issues Petitioner sought to address in its testimony. Specifically, while Indiana Code § 8-1-40-18 requires participating customers to receive a credit on their monthly bills for the total EDG that month and any excess credit carried forward to the next month, the statute is silent as to the application of any excess EDG credit if a DG customer leaves the premises before that credit has been fully offset against the customer's other charges. As such, the Company proposes that when/if a customer leaves his/her premise any unused credits at the time of a customer leaving expire. Mr. Flick further testified that Sections 10 and 12 will not affect this proceeding as the aggregate amount of net metering facility capacity (62,440 kW)⁴ under Petitioner's net metering tariff was approximately 1.2% of its most recent summer peak load (5,091,000 kW)⁵ and, thus, is not expected to equal 1.5% of Petitioner's most recent summer peak load before July 1, 2022. Consequently, Petitioner reasonably expects that its current net metering tariff will remain available until July 31, 2022. The approach proposed herein will allow the Commission to determine the relevant issues in an orderly manner and in advance of July 1, 2022.

Mr. Flick also testified as to how, under Indiana Code § 8-1-40-15, Petitioner will procure the EDG produced by a customer at a rate approved by the Commission. He explained that as this procurement represents a purchase by Petitioner of excess generation that will serve other customers on Petitioner's system, these costs will be recovered as fuel costs, specifically, purchased power costs, in its monthly Fuel Adjustment Clause ("FAC").

Mr. Flick concluded his testimony by recommending the Commission approve Petitioner's requested rate, relief, and methods expressed in his testimony.

6. <u>OUCC's and Intervenors'</u> Direct Testimony.

A. OUCC's Direct Testimony. The OUCC provided the testimony of Anthony A. Alvarez, Utility Analyst at the OUCC in the Electric Division. Mr. Alvarez testified that the definition of EDG is unambiguous as codified in Indiana Code § 8-1-40-5 ("EDG Statute"). Indiana Code § 8-1-40-5 states "excess distributed generation" means the "difference between: (1) the electricity that is supplied by an electricity supplier to a customer that produces distributed generation; and (2) the electricity that is supplied back to the electricity supplier by the customer." He further explained that, as identified in this section, only two components must be present to determine EDG: 1) the electricity that is supplied by an electricity supplier; and 2) the electricity that is supplied back to the electricity supplier. Additionally, this section explicitly defines EDG as the resulting difference between these two components. Therefore, to determine EDG, the utility or electricity supplier must first take the difference between the electricity the utility

⁴ Figure reported in the Commission's 2020 year end Net Metering Report, dated March 2021.

⁵ Indiana Code § 8-1-40-10 provides: "Before July 1, 2022, if an electricity supplier reasonably anticipates, at any point in a calendar year, that the aggregate amount of net metering facility nameplate capacity under the electricity supplier's net metering tariff will equal at least one and one-half percent (1.5%) of the most recent summer peak load of the electricity supplier, the electricity supplier shall, in accordance with section 16 of this chapter, petition the commission for approval of a rate for the procurement of excess distributed generation."

supplies to the distributed generation ("DG") customer and the electricity supplied back to the utility by the DG customer. Mr. Alvarez also testified that marginal price of electricity is defined in Section 16, as "the hourly market price for electricity as determined by a regional transmission organization of which the electricity supplier serving a customer is a member." Mr. Alvarez further testified Section 17 states the rate "equals the product of (1) the average marginal price of electricity paid by the electricity supplier during the most recent calendar year; multiplied by (2) one and twenty-five hundredths (1.25)."

Mr. Alvarez testified as to Duke Energy Indiana's calculation of the EDG rate for the procurement of EDG. Mr. Alvarez described Petitioner's calculation as explained in Mr. Flick's testimony. Mr. Alvarez expressed concern that Mr. Flick claimed to use the 2020 real time hourly LMPs at the CIN.PSI load node while Petitioner used the Day-Ahead Hourly LMPs at the CIN.PSI load node in its workpaper, instead of the real time hourly LMPs described in testimony. Mr. Alvarez testified that Petitioner will change the reference from "real time" to "day ahead" to be consistent with the workpaper.

Mr. Alvarez testified on Petitioner's metering and billing methodology. He testified that Duke Energy Indiana's AMI electric meter is capable of measuring the flow of electricity in two directions (bidirectional capability) to capture periodic energy imports and exports. As he stated, Duke Energy Indiana's proposed EDG tariff defined the following:

- a. <u>Excess Distributed Generation (Exports)</u> The difference between the electricity that is supplied by the Company to a customer that produces distributed generation and the electricity that is supplied back to the electricity supplier by the customer.
- b. <u>Imports</u> The monthly aggregation of instantaneous measurements of energy supplied to customer from Duke Energy Indiana.
- c. <u>Instantaneous Netting</u> The shortest period of time Duke Energy Indiana's AMI technology measures and records the directional flow of energy, currently thirty (30) minutes.

Mr. Alvarez described Duke Energy Indiana's proposed methodology to determine EDG. He testified that Duke Energy Indiana proposes a methodology to determine its aggregate import and export positions - Duke Energy Indiana's metering and billing components for EDG - wherein its AMI electric meter will measure and record the "directional flow of energy" for periods of thirty (30) minutes. Mr. Alvarez testified Duke Energy Indiana indicates "[e]nergy netting is not being performed by the Company's metering equipment." Duke Energy Indiana accumulates the energy amounts for imports and exports in the respective channels, as shown in 30-minute intervals.

Mr. Alvarez testified that Duke Energy Indiana's methodology of measuring the two values to determine excess distributed energy does not comply with the statutory definition. Per Mr. Alvarez, Duke Energy Indiana admits that "netting" is not being performed by the meter. At any given instant, electricity can only flow in one direction, either in towards the customer from the utility or out towards the utility from the customer, but not both. Duke Energy Indiana's AMI electric meter has the bidirectional capability of measuring and recording the directional flows of

electricity. One channel will record the flow of electricity one way, or another channel will record if the flow of electricity is the other way. However, on an instantaneous basis, when electricity is flowing in one direction, Mr. Alvarez asserts it is not physically possible for electricity to flow in the opposing direction, so there is nothing to "net" against when measuring directional flow on an instantaneous basis. If electricity is flowing to or from the customer, according to Mr. Alvarez it is not possible for there to be an "opposing" flow from the opposite direction; therefore the meter is not "netting" or taking the difference of any electricity flow as required by Indiana Code § 8-1-40-5.

Mr. Alvarez further testified that Duke Energy Indiana's proposed methodology does not conform with the metrology of Duke Energy Indiana's AMI meters. As he explained, at any given instant, one channel will measure and record the "kWh delivered" if electricity flows from Duke Energy Indiana to the DG customer, or another channel will measure and record the "kWh received" if the electricity flows to Duke Energy Indiana from the DG customer, but not both in the same instant.

Mr. Alvarez testified that he does not agree with Duke Energy Indiana equating EDG to "exports" in its tariff and finds it brought more confusion. He stated Duke Energy Indiana's AMI meter is bidirectional with one channel recording the flow of electricity one way or another channel recording if the flow of electricity is the other way. If the "kWh delivered" meter channel is dedicated to "the electricity that is supplied by an electricity supplier to a customer that produces distributed generation," it naturally follows that the (other) "kWh received" meter channel should be dedicated to measure and record "the electricity that is supplied back to the electricity supplier by the customer." As Mr. Alvarez testified, based on the metrology of Duke Energy Indiana's AMI meter, it has the capability to precisely measure and record the two values required in the statute to determine EDG, although this cannot be done on an instantaneous basis as Duke Energy Indiana proposes. Therefore, to conform with the statute's definition of EDG, Duke Energy Indiana must take the difference between "kWh delivered" and "kWh received" as measured and recorded by its electric AMI meter to determine EDG.

Mr. Alvarez testified that he does not agree with Duke Energy Indiana's billing methodology of EDG/Exports and using "instantaneously determined" in the description. As he testified, on an instantaneous basis, there is nothing to "net" against because it is not possible to record the two values required in the statute to determine EDG. Therefore, the language describing the EDG/Exports billing methodology in the proposed tariff does not conform with the EDG Statute. He testified the appropriate methodology to determine EDG is to retain a monthly interval or "billing period" as stated in Commission rule 170 IAC 4-4.2-7(2), over which to take the difference required in Indiana Code § 8-1-40-5. He stated the DG Statute is silent on the period over which to take the difference and explained how the silence of the statute on this issue provides direction for the Commission. As he testified, the use of the billing period as the interval over which to take the difference was in the Commission rule for net metering customers when the DG Statute was enacted. The DG Statute focuses on determining the rate for EDG and is silent on the period over which to determine the amount of EDG. If the Legislature had wanted to address this period, it had the opportunity to do so when the DG Statute was enacted. Because the Legislature did not address this time period in the statute, Mr. Alvarez contends the Commission should follow the rule that is already in place, 170 IAC 4-4.2-7(2), and apply this to EDG

customers. Mr. Alvarez testified that the Commission has the authority to use other periods to determine EDG. Mr. Alvarez stated, because the statute is silent, the Commission has discretion to determine time periods other than the billing period; however, there must be a time period over which the difference is determined, as required in Indiana Code § 8-1-40-5. Additionally, because the Commission has already determined that the billing period is appropriate in its rule and statute does not provide direction on what time period to use, the Commission should use what it already has in place: using the billing period to determine EDG.

Mr. Alvarez testified that he does not believe that if a customer leaves its premises with unused EDG credits, Duke Energy Indiana should let the unused EDG credits expire. He believes Duke Energy Indiana should refund any unused EDG credits to all retail customers through Duke Energy Indiana's FAC.

Mr. Alvarez provided the following conclusions: (1) Duke Energy Indiana's application of EDG does not comply with the EDG Statute; (2) Duke Energy Indiana's application to "instantaneously determine" EDG does not conform with Indiana Code § 8-1-40-5; (3) Duke Energy Indiana's manner of capturing, measuring, and calculating EDG on an instantaneous basis will not record the two values required in the statute to determine EDG; (4) the language Duke Energy Indiana used to described the EDG/Exports billing methodology does not conform with the EDG Statute; (5) the Commission should retain the "billing period" from 170 IAC 4-4.2-7(2) as the interval over which to determine EDG as required in Indiana Code § 8-1-40-5; and (6) Duke Energy Indiana should refund any unused EDG credits to all retail customers through its FAC. Mr. Alvarez recommends the Commission deny Duke Energy Indiana's proposed EDG Rider tariff.

B. <u>IndianaDG's Direct Testimony</u>.

1. Benjamin D. Inskeep. Mr. Inskeep, Principal Energy Policy Analyst with EQ Research LLC, recommended the Commission deny Duke Energy Indiana's proposed EDG Rider and proposal to end monthly netting. If the Commission disagrees with Mr. Inskeep's recommendation, he asks the Commission to consider alternative policies that are less punitive to customers than the "no netting' proposed by Petitioner. If the Commission approves Petitioner's filing as proposed or with limited modifications, he recommends the Commission direct Petitioner to provide additional consumer information and education regarding its Rate QF — Parallel Operation for Qualifying Facility tariff to ensure all eligible DG customers have access to and are fully informed of this rate option. He also recommends Petitioner modify its calculation of the EDG Rider credit rate to reflect the average marginal price at the daylight times when solar DG systems are generating and exporting power to the grid. He also recommends the Commission reject Petitioner's proposal to take without compensation a DG customer's earned but unused EDG credits at the end of a DG customer's service and require DG customers to install an external disconnect switch.

Mr. Inskeep testified regarding his view of flaws in Duke Energy Indiana's EDG procurement rate methodology, the inappropriateness of Duke Energy Indiana's proposed method for determining EDG under the plain language of the DG Statutes, other major flaws in Duke Energy Indiana's proposed methodology for determining EDG, and other problematic terms and conditions of Duke Energy Indiana's EDG Rider. IndianaDG Ex. No. 1 Inskeep Direct.

First, Mr. Inskeep pointed out that Duke Energy Indiana customers do not have access to their granular usage data that would enable them to know their instantaneous electricity usage, and he concluded Duke Energy Indiana is proposing a tariff with price signals to which DG customers will be unable to effectively respond.

Next, Mr. Inskeep testified Duke Energy Indiana's calculations of its EDG rate are not reasonable because they are based on an average of the wholesale electricity price for all hours of the year. He testified that Duke Energy Indiana's calculation is unreasonable because Duke Energy Indiana has averaged the wholesale electricity price for all hours of the year, including nighttime hours which does not align with the hours in which a DG system actually generates electricity and, therefore, does not accurately reflect the marginal price of electricity during the hours in which a DG system is providing EDG to Duke Energy Indiana. Mr. Inskeep testified that Duke Energy Indiana's customers' highest summer demands typically occur during the afternoons when solar is typically generating electricity, and during these hours customers' EDG exports can help reduce the need for daylight market purchases when market prices for electricity are generally higher. Mr. Inskeep testified that Duke Energy Indiana should instead calculate "the average marginal price of electricity paid by the electricity supplier during the most recent calendar year" by using a weighting methodology for hourly LMPs that will result in the average marginal price for when DG generation is being exported. Mr. Inskeep testified that his approach results in a 2020 average LMP of \$26.30/MWh, or \$0.02630/kWh, which produces an EDG credit rate of \$0.032879/kWh, which is 13.5% higher than Duke Energy Indiana's proposed EDG credit rate.

Mr. Inskeep explained calculating the solar EDG rate based on daylight solar-producing hours simply avoids the irrational calculation and absurd result of solar EDG based in large part on the non-solar producing nighttime market price of wholesale electricity. But he said it alone does not result in a just and reasonable EDG rate as it still seriously undervalues EDG exports. More importantly, it will not yield a just and reasonable EDG framework or result. He stated the slightly higher solar EDG credit from his calculation is an improvement on Duke Energy Indiana's EDG credit calculation, but it is not sufficient to offset to any meaningful degree the far more substantial negative impact of the "no netting" proposal. He testified that while correcting the EDG credit rate calculation is logical, it is not a remedy for the harm to DG customers that will result from Duke Energy Indiana's "no netting" proposal. He explained that DEI reported that 58.091 MW out of 62.440 MW (93.0%) of its net metering capacity are solar resources, and 100% of new capacity additions in 2020 were solar resources. Since the current total deployment and the deployment rates of biomass and wind resources show these resources currently have an immaterial effect on the overall value of DG on average, and recent trends do not indicate this is likely to change in the foreseeable future, Mr. Inskeep concluded it is reasonable to use his proposed methodology for calculating the EDG rate based on solar for all DG resources. He noted applying his proposed EDG rate to solar, wind, and biomass will still not reflect the benefits EDG brings to the utility system and other customers.

With regard to the issue of netting, Mr. Inskeep testified there is no language in the DG Statute that says monthly netting should stop or that prescribes or invites a new method for measuring EDG. Mr. Inskeep provided the five bill versions' legislative history of Senate Bill 309 ("SB 309") from the 2017 Session of the Indiana General Assembly. Originally the first version

of the bill would have changed the netting methodology by expressly removing all netting. It would have established a buy-all sell-all tariff. He noted SB 309 was subsequently amended four times before becoming Senate Enrolled Act 309 ("SEA 309"). He provided copies of each of the amended bills with version 5 becoming SEA 309. Mr. Inskeep documented that none of the subsequent versions retained the buy-all, sell-all framework or stated a new netting or indicated a netting methodology different from the current normal monthly netting should be used. None of them invited or directed the Commission to consider a new netting methodology. Mr. Inskeep also provided testimony about additional legislative history regarding SEA 309, including SEA 309's author stating "by stepping us down over a fairly long period of time, so that we don't kill the solar industry, but we start to transition them to a market-driven rate...". Mr. Inskeep explained that in his review of the legislative hearings on SEA 309, he did not observe SEA 309's sponsor or other members of the General Assembly discuss any intent to modify the method of measuring EDG from monthly netting.

Mr. Inskeep testified the DG Statute expressly provides that the measurement of EDG requires a calculation between the "difference between" (1) electricity supplied by the utility ("imports" of electricity from the DG customer's perspective) and (2) the electricity supplied by the DG customer to the utility ("exports" of electricity from the DG customer's perspective). Mr. Inskeep testified that under Duke Energy Indiana's methodology, Duke Energy Indiana is not actually taking the "difference between" electricity supplied by Duke Energy Indiana and by the customer to Duke Energy Indiana, respectively. He said that applying this methodology instead of the "difference between" prescribed by the DG Statute results in DG customers being compensated for all exported electricity at an extremely low compensation credit relative to the per-kWh credit to which they should have their excess generation netted, with no "difference between" offset to their imported energy consumption. Mr. Inskeep testified the statutory language implicitly defines EDG as occurring over a period of time and necessarily requires taking the difference between two values, electricity imports and exports over a period of time. He said that period of time should be the monthly billing period. Mr. Inskeep provided diagrams to visualize the statutory definition of EDG compared to the implementation of EDG in Duke Energy Indiana's EDG Rider. He identified that when asked in a data request to explain the components being netted under "instantaneous netting," DEI responded:

Solar generation and a customer's load on the customer's side of the delivery point are instantaneously netted and result in either energy being delivered to the customer from Duke Energy Indiana or exported to Duke Energy Indiana's grid.

Accordingly, Mr. Inskeep concluded that "instantaneous netting" as proposed by Duke Energy Indiana is measuring EDG as the difference between a DG customer's solar generation and a customer's load – not taking the difference between electricity provided by the DG customer to the utility and the electricity provided by the utility to the DG customer, as required by the DG Statutes.

Mr. Inskeep testified there is no indication in the DG Statute's language that the DG facility should be designed to limit EDG exports on an instantaneous basis; instead, the DG Statute requires that DG systems be designed to generate electricity only to meet a customer's average annual energy needs. He explained that had the General Assembly intended for all exported DG

generation to be compensated at the EDG rate as occurs under Duke Energy Indiana's proposal, it could have defined "excess distributed generation" as "the electricity that is supplied back to the electricity supplier by the customer" – i.e. using only the second part of the statutory language and omitting the first part regarding the "the electricity that is supplied by an electricity supplier to a customer that produces distributed generation." Duke Energy Indiana's proposal renders the first statutory component meaningless. He pointed out the DG statute speaks of the EDG credit being a rate approved by this Commission through a monthly bill credit, not an instantaneous credit.

In addition, Section 18 of the DG Statutes provides, in relevant part, that: An electricity supplier shall compensate a customer from whom the electricity supplier procures EDG (at the rate approved by the commission under section 17 of this chapter) through a credit on the customer's monthly bill...

He testified that in response to SEA 309, the Commission held collaborative meetings, issued Emergency Rulemaking 17-04, and General Administrative Orders 2017-2 and 2019-2. However, it did not issue any new regulations that modify the measurement of EDG as continues to be prescribed under its net metering rules. Currently, Commission Rule, 170 IAC 4-4.2-7 provides, in part, that:

The investor-owned electric utility shall measure the difference between the amount of electricity delivered by the investor-owned electric utility to the net metering customer and the amount of electricity generated by the net metering customer and delivered to the investor-owned electric utility during the billing period, in accordance with normal metering practices.

He explained that normal metering practice is monthly netting, not a new "no netting" metering.

Mr. Inskeep testified there are numerous other drawbacks of Duke Energy Indiana's no netting proposal, including that it is a departure from the current DG policy in Indiana and the best practices established in other states, that it is not based on sound ratemaking or cost-of-service principles, and that it is difficult to overstate the harmful effects the proposal will have on Indiana's solar market and industry. He stated Duke Energy Indiana's no netting proposal will result in a major policy change to how rooftop solar and other DG technologies will be compensated in the future compared to the monthly netting policy that has been in place for roughly 16 years in Indiana. He stated SEA 309 ended net metering with the lowered EDG rate. To impose "no netting" atop that is unwarranted and contrary to the DG Statute. Mr. Inskeep observed that Duke Energy Indiana's proposal is not supported with a class cost-of-service study or other evidence demonstrating that moving to a "no netting" framework will produce just and reasonable rates. He also said Duke Energy Indiana did not provide a DG benefit-cost analysis or a value of distributed solar study that demonstrates on a forward-looking basis that its "no netting" proposal produces net benefits rather than costs, or reflects an overall fair policy for compensating DG customers for the benefits they provide to both DG and non-DG customers. Mr. Inskeep stated Duke Energy Indiana did not include any information on how its proposal will impact future DG growth, solar installation businesses, their employment levels, or related economic impacts in its service territory. Mr. Inskeep testified that Duke Energy Indiana has not demonstrated its proposed no netting policy will not recover more than Duke Energy Indiana's cost to serve DG customers. Mr.

Inskeep testified that Duke Energy Indiana has failed to provide any reasonable basis on which the Commission can conclude its specific approach is the best or even a reasonable one compared to many alternatives. Mr. Inskeep said the Rider EDG rate itself is calculated through an arbitrary, albeit legislative, 25% adjustment to the average wholesale market locational marginal price. Mr. Inskeep testified the EDG rate changing every year will deprive an EDG customer of certainty regarding the financial metrics of purchasing a DG system. He said Duke Energy Indiana's proposal will also harm non-DG customers by limiting their ability to later adopt DG and by reducing the benefits non-DG customers can realize from having more clean, local, distributed generation on the grid.

Mr. Inskeep testified that the "no netting" component of the Rider EDG will create harmful perverse incentives by encouraging DG customers to increase their consumption during Duke Energy Indiana's highest-cost summer on-peak periods. He said instantaneous or "no netting" gives the DG customer a strong financial incentive to export as little electricity as possible and instead increase daylight hour usage when it is directly offset by solar production's highest output. He said this perverse incentive baked in to "no netting" will harm non-DG customers because non-DG customers will no longer be able to benefit from the EDG the DG customer would otherwise have provided during higher-cost peak daylight hours. Instantaneous netting creates a use it or lose it situation.

Mr. Inskeep also testified that Duke Energy Indiana's Rate QF – Parallel Operation for Qualifying Facility ("Rate QF") tariff could, under certain circumstances or for certain customers, be higher than Duke Energy Indiana's EDG Rider, and it contains certain provisions that are more favorable than Duke Energy Indiana's EDG Rider. He stated that providing a compensation rate for all exported electricity that could be below Duke Energy Indiana's PURPA avoided cost rate is unjust and unreasonable. Mr. Inskeep recommended that if the Commission adopts Duke Energy Indiana's EDG Rider as proposed or with only modest revisions, the Commission also direct Duke Energy Indiana to ensure prospective DG customers are clearly presented with the option of taking service under Rate QF on an equal basis to the EDG Rider.

Mr. Inskeep testified that monthly netting continues to be one of the most widespread and important components of DG compensation policies across the U.S., and states that have moved away from it have, in most cases, established a compensation rate for exported electricity that is significantly higher than the EDG rate Duke Energy Indiana proposes. Mr. Inskeep testified regarding the existence of monthly netting policies and how they have been widely adopted in various jurisdictions in the U.S., with most IOUs in 39 states and the District of Columbia currently offering monthly netting to new residential and small commercial customers. He also described the types of changes to DG policies that have been proposed, adopted, and rejected in other U.S. jurisdictions. He concluded that Duke Energy Indiana's proposed "no netting" policy in combination with its implementation of the EDG Rider to replace net metering will likely be more detrimental than the vast majority of the changes adopted to DG policies in other jurisdictions, including those with far greater DG deployment rates.

Mr. Inskeep testified that Duke Energy Indiana's "no netting" proposal is not consistent with long-standing ratemaking principles. These include the principle of gradualism, as Duke Energy Indiana's "no netting" proposal is an abrupt, far reaching, two-fold negative impact on

prospective DG customers and the Indiana businesses that install solar. Other violated principles were simplicity, understandability, public acceptability, and feasibility of application, as well as the fair apportionment of cost responsibility. He stated other utilities have used and other state utility regulators have required that utilities conduct load research on their actual net metering customers to produce an accurate class cost-of-service study prior to significantly modifying DG policies.

Mr. Inskeep testified that Duke Energy Indiana has provided no evidence that its "no netting" proposal is consistent with Duke Energy Indiana's cost to serve DG customers. He identified several ways that, when properly factored into a cost-of-service study, DG customers provide benefits to non-DG customers in their class. He concluded that when the utility is not only implementing a calculation of the EDG rate in accordance with the statute, but is also proposing additional, major policy changes that are a significant departure from important existing policies and not directed by the statute, such as Duke Energy Indiana's "no netting" proposal, then it is the utility's responsibility and burden to demonstrate these additional changes are just and reasonable as well as consistent with the DG Statutes. He testified Duke Energy has not done either.

Mr. Inskeep testified that while Indiana solar jobs have grown to more than 3,300, Duke Energy Indiana's proposal will significantly harm Indiana's residential and commercial sector solar industry, leading to job losses and reduced economic development benefits for communities in Indiana. He said that retaining monthly netting will not harm Duke Energy Indiana or non-DG customers, and DG customers are likely providing substantial net benefits, meaning the Commission should exercise its discretion in a manner that encourages the continued growth of DG in Indiana. Mr. Inskeep pointed out that through the end of 2020 Duke Energy had only 1,914 net metering customers out of more than 852,000 total customers. Those net metering customers had only 62.44 MW of installed capacity, compared to Duke Energy's peak demand of 5,573 MW. With Duke Energy's annual revenue requirement of approximately \$2.7 billion, he concluded even under conservative assumptions and assuming no system value is provided by EDG, monthly netting will only amount to a de minimis "subsidy" or cost shift to non-DG customers.

Mr. Inskeep summarized key advantages that have contributed to monthly netting becoming widely adopted, popular among customers, and effective at growing DG. He cited studies regarding the value of solar in other states with one review finding that 14 out of 24 value of solar analyses conducted in 2012-2018 calculated the value of solar was at or above the retail rate, and only one analysis calculated a value that was below 50% of the residential retail rate. Mr. Inskeep argued that retaining monthly netting represents a "no regrets" policy option for the Commission in this case.

Mr. Inskeep summarized the methodology and results of a quantitative analysis he conducted that compared the impacts on residential DG customers from net metering, monthly netting (with monthly net excess generation credited at the EDG rate), daily netting, and Duke Energy's proposed no netting. The results of his quantitative analysis found that no netting and hourly netting result in a 48.9% and 43.7%, respectively, value diminishment in the value of solar produced by a DG system relative to the current net metering policy, and a 45.3% and 39.7% value diminishment relative to monthly netting with EDG credited at the EDG Rider rate. He also found that daily netting results in only a 15.4% value diminishment of DG generation compared to the

current net metering policy, and a 9.4% value diminishment relative to monthly netting with EDG credited at the EDG Rider rate. Mr. Inskeep calculated that the payback period for a 9.3 kW system costing a residential customer \$3.05/watt is 25.9 years under Duke Energy Indiana's "no netting" proposal, compared to 13.4 years under the current net metering policy, or 14.4 years under monthly netting with EDG credited at the EDG Rider rate. Mr. Inskeep testified this will increase the payback period to the point where it no longer will save a customer money over an assumed 25-year life of a rooftop solar facility. If the federal Investment Tax Credit expires as planned for residential customers beginning January 1, 2024, the payback period of residential solar will increase to 32.5 years in Mr. Inskeep's analysis. Mr. Inskeep concluded that Duke Energy Indiana's proposal will have a devastating impact on the adoption rate of DG technologies like solar by financially preventing most customers from being able to install a DG system. Thus, only high-income Hoosiers and perhaps some larger businesses will be able to afford to invest in onsite DG technologies like rooftop solar.

He testified that batteries are too expensive for individual customers to install and should not be de facto mandatory for EDG participation. He indicated a normal size residential battery system costs \$7,000, plus additional costs that could add thousands of dollars, such as hardware costs, installation costs, and taxes. He pointed out that Duke Energy Indiana has not proposed any means of lowering customer battery costs to bring increased benefits to the Duke Energy Indiana grid. He stated the DG Statute does not require customers to install batteries. He pointed out that customer batteries will offer the most value by discharging during peak demand periods. In contrast, Duke Energy Indiana's proposed "no netting" policy would prompt customers to use the battery to avoid exports by charging during daylight hours and discharging when solar production is not available at night rather than during peak periods, thus decreasing the potential value DG batteries can bring to the utility system and other customers. He testified that monthly netting does not require the utility to serve as the EDG customer's battery and that monthly netting is merely a compensation framework that provides fair compensation measurement to a DG customer for excess generation they provide to the utility. He explained the greatest benefits to the grid accrue when exports, either from on-site solar alone or battery storage, are maximized during peak conditions. Devaluing exports during peak periods as Duke Energy Indiana proposes does exactly the opposite. It sends the wrong signal to customers from the standpoint of maximizing the value of a DG system in terms of the benefits it provides to all customers.

Mr. Inskeep also testified about how Duke Energy Indiana's proposed tariff will confiscate a DG customer's EDG credits when they terminate service. He testified the language in the DG Statute does not expressly specify how unused credits should be treated when a customer no longer receives retail electric service from the utility. He said it is common for states to allow net metering customers to cash out unused net metering credits, such as on an annual basis for any credits that accrued over the year, or at the end of service. He, therefore, recommended earned EDG credits be refundable to customers upon service termination or, if the DG customer moves but remains a Duke Energy Indiana customer, be carried forward to their subsequent Duke Energy Indiana bill.

Mr. Inskeep testified that, while Duke Energy Indiana requires all EDG customers to install a disconnection device at their expense, it is his understanding external disconnect switches are not necessary for isolating a small, inverter-based DG facility. He identified modern inverters that are part of rooftop solar facilities today meet Underwriters Laboratory Standard 1741, which

means the inverter has passed rigorous testing requirements that demonstrate the inverter provides for anti-islanding protections that will safely and quickly isolate the solar facility in the event of a grid outage. He noted Vectren's approved EDG tariff does not require Level 1 interconnections to install an external disconnect switch. Likewise, Duke Energy Indiana does not require Level 1 interconnections to install an external disconnect switch. He also cited to New York's Standardized Interconnection Requirements, which do not require a disconnect switch for an inverter-based DG system sized 25 kW or less, as well as the standards in place for California's large IOUs that have collectively installed more than 1 million solar net metering facilities. He claimed this provision in Duke Energy Indiana's Rider EDG is unnecessary, unfair, and unjustified and recommended the Commission direct Duke Energy Indiana to clarify in its Rider EDG that disconnect switches are not required for Level 1 interconnections. If the Commission declines to adopt his recommendation, he requests the Commission direct Duke Energy Indiana to keep records of the number of instances and circumstances in which its personnel use a DG customer's external disconnect switch so the Commission has more data to assess the reasonableness of this requirement in the future.

Mr. Inskeep recommended the Commission reject Duke Energy Indiana's EDG Rider and concluded that Duke Energy Indiana's proposal is inconsistent with the plain language of the Distributed Generation Statutes. He said Duke Energy Indiana has not demonstrated its proposals will produce rates that are just and reasonable. He stated there are many good reasons for the Commission to reject Duke Energy Indiana's proposed method for determining EDG and to maintain the longstanding, widely adopted, and commonsense monthly netting framework for determining EDG as it transitions away from net metering through implementation of Rider 16. He added that to the extent the Commission disagrees with his recommendation to maintain monthly netting to determine EDG, he recommends it consider other alternatives to Duke Energy Indiana's proposed methodology, such as less punitive daily netting. If the Commission approves Duke Energy Indiana's filing as proposed or with limited modifications, he recommended the Commission direct Duke Energy Indiana to provide additional consumer information and education regarding its Rate QF tariff to ensure all eligible DG customers have access to and are fully informed of this rate option, which could provide a more favorable compensation rate than the EDG Rider as proposed for certain DG customers. He recommended the Commission direct Duke Energy Indiana to modify its calculation methodology for the EDG Rider credit rate as described in his testimony to recognize the fact that solar is producing and exporting generation only during daylight hours and should be compensated accordingly. He also recommended the Commission ensure all DG customers are provided fair terms and conditions under net metering and the EDG Rider. Specifically, he recommended the Commission reject what he considered Duke Energy Indiana's taking without just compensation of EDG credits remaining at the end of a customer's service. He said these terms are unjustified and will harm EDG customers by imposing additional, unnecessary costs or take away benefits to which DG customers are entitled without providing fair compensation.

2. <u>Chris Rohaly</u>. Mr. Rohaly is the President and Owner of Green Alternatives Inc. ("GAI"). He described the negative impacts Duke Energy's EDG proposals will have on his and other solar installation businesses, Duke customers, and local and state economies. He testified the vast majority of people, businesses, and government entities install solar DG to have a long term cost effective fuel-less energy supply, that over a reasonable time

offsets its cost through savings, i.e. investment payback period. Without a reasonable investment payback period, there would be very little demand for solar energy systems. He testified the current residential customer solar investment payback period is typically estimated to be 7-10 years, but he said Duke Energy Indiana's proposal will increase the customer payback period to over 20 years. Mr. Rohaly also testified that customer battery installation will not solve the increased customer payback financial problem as it is too expensive and generally not affordable. Also batteries have long wait times to receive because the bulk of them go to states with more favorable solar treatment. He also testified the federal tax credit will keep stepping down and will end in 2024 causing customer payback periods to increase. Mr. Rohaly testified the resulting lengthening of customer investment payback periods will make Duke Energy Indiana customers extremely reluctant or unwilling to make the investment in solar, which will be devastating to Indiana's solar industry, resulting in job losses and market contraction. He noted most Hoosiers who graduate from Ivy Tech renewable energy program take employment in other states that treat solar DG more favorably. Mr. Rohaly said Duke Energy Indiana's proposal could force his company to lay off workers, not hire independent contractors and union electricians, and possibly no longer install solar energy systems in Duke Energy Indiana's service area. He testified other Indiana solar installation companies will suffer the same financial harm from EDG proposals like Duke Energy Indiana's and will logically shift their solar business focus, employment opportunities, and financial stimulus to neighboring states like Kentucky, Illinois, and Michigan that treat solar customers more reasonably. He provided EDG rates from those states that are about four times what Duke Indiana proposed. He noted current Indiana solar jobs are approximately 3,400.

Mr. Rohaly then testified regarding the benefits of distributed generation. He said these benefits include improvement to the environment; reduction of load and wear on the transmission system; reduced demand for electricity in daylight hours; reduced transmission line loss; improved reliability, and avoided carbon-based fuel use and costs. He said customer-owned solar brings jobs, economic stimulus, and increased state and local tax revenues. Finally, Mr. Rohaly expressed concerns regarding Duke Energy Indiana's proposal because, in his view, it prevents customers from installing solar generation. He expressed concern that as utilities get customers to pay for abandoned coal fired generation plants and shift their rate base focus to installing utility owned renewable generation at customer expense, it will drive up customer rates and be used as an excuse to further prevent future customer owned solar. He explained it's one thing to have a monopoly service area, but it is completely inequitable to seek regulatory treatments that seek to financially prevent customers from using sunshine to illuminate, cool, and heat their homes and businesses. He stated the sun shines to sustain all our lives, not to become the monopoly tool of Duke Energy Indiana. He testified Duke Energy has done nothing in its proposals to give solar customers value for environmental benefits and operational savings. In sum, he concluded Duke Indiana's proposals are punitive, unjust, unreasonable, and their "no netting" proposal should be denied. Mr. Rohaly recommended the Commission reject Duke Energy Indiana's EDG proposal and continue with monthly netting.

C. SI's Direct Testimony.

1. <u>Michael A. Mullett</u>. Mr. Mullett is a distributed solar customer of Duke Energy Indiana, subject to that utility's net metering tariff, with longstanding support for

solar initiatives, including Solarize. Mr. Mullett's conclusions are: (1) Duke Energy Indiana's EDG proposal will result in an EDG billing procedure which does not comply with the DG Statute and will result in unjust and unreasonable rates; (2) Duke Energy Indiana is not ready to provide its EDG customer-generators with information required to decide on whether to install solar DG systems under Rate EDG with "instantaneous" netting as DEI proposed; (3) Duke Energy Indiana's proposal will not support the future expansion and integration of distributed energy resources ("DERs") owned by customer-generators contemplated by FERC Order 2222; and (4) serious harms can be avoided if the Commission rejects Duke Energy Indiana's proposal and/or requires it to modify and refile it. Given Mr. Mullett's conclusions, he recommends the Commission: (1) reject Duke Energy Indiana's proposal; (2) require Duke Energy Indiana to modify and supplement its proposal to comply with the DG Statute's definition of EDG and establish just and reasonable rates for its EDG customers; (3) require Duke Energy Indiana to modify and supplement its proposal to provide adequate service with respect to customer information and billing; and (4) direct Duke Energy Indiana to file its revised EDG proposal on or about April 1, 2022.

Mr. Mullett expressed the following six concerns he had with Duke Energy Indiana's proposal: (1) the proposed EDG rate of 2.8981 cents per kwh; (2) the proposed instantaneous netting of inflows and outflows of electric energy across Duke Energy Indiana's meters for calculating and billing distributed customer generators for energy received from Duke Energy Indiana at the current retail energy rate and for energy delivered to Duke Energy Indiana at the proposed EDG rate; (3) the incomplete, unpresented, and unreviewed programming required for retrieval of critical data from the Company's smart meters; (4) the potential liability of solar vendors under Indiana Code § 8-1-40-42; (5) double recovery of EDG credits through the FAC proceeding; and (6) the public policy implications of the proposed Duke Energy Indiana EDG Tariff.

Mr. Mullett opposes Duke Energy Indiana's proposed EDG tariff and rate. He explained that Solarize is concerned the proposed EDG rate of 2.8981 cents per kwh is arbitrary and confiscatory and, thus, not just and reasonable. According to Mr. Mullett, Solarize has been advised by counsel that just and reasonable is a statutory and constitutional standard and simply because the legislature, rather than the Commission, has set a rate does not mean that rate is just and reasonable as a legal matter. First and foremost, however, he stated Solarize is concerned the proposed EDG rate is arbitrary because it is not based on any detailed cost or value of service study or data specific to Duke Energy Indiana and the EDG service. Second, Mr. Mullett testified Solarize is also concerned that the author of SEA 309 expressly stated and restated during the General Assembly's legislative process that the EDG rate was "arbitrary."

Mr. Mullett testified the proposed EDG rate is confiscatory because it does not compensate customer-generators fairly and reasonably based on the cost of the Duke Energy Indiana service to the participating customers or the value of the participating customers' service to Duke Energy Indiana. Mr. Mullett further testified that based on advice of counsel, the applicable provision of SEA 309, codified as Section 17, defining the EDG rate and the method of its calculation as applied by Duke Energy Indiana in its EDG proposal is likely unjust and unreasonable under Indiana law. Mr. Mullet further testified, on the advice of counsel, that SI's challenge of this should be raised

in this Commission proceeding to document it in the record for subsequent appellate review and decision.

Mr. Mullett stated Solarize is also concerned about the proposed instantaneous measurement of inflows and outflows of electric energy and then using those measurements for calculating distributed solar customers' bills. Mr. Mullett opined that this violates the applicable provisions of SEA 309, i.e., Sections 5 and 18, because the legislative intent was to change the rate of compensation but not the method of calculating EDG followed under net metering. He noted Solarize has been advised by counsel that Sections 5 and 18 do not expressly authorize or require instantaneous netting of customer generation and consumption. For a more detailed legal analysis, he referred the Commission to the joint motion for summary judgment filed contemporaneously with his prefiled testimony. Mr. Mullett also testified that Duke Energy Indiana has not demonstrated any cost-of-service basis for proposing instantaneous netting rather than billing period netting to define and calculate EDG. He testified that instantaneous netting will materially lengthen the payback period and lower the internal rate of return for participating customers' capital investments in distributed solar installations. In addition, distributed solar customer bills will be higher than if the only change made was to compensate EDG, as defined and measured under net metering, at 2.9 cents per kwh rather than on a kwh for kwh basis.

Mr. Mullett testified Solarize also is concerned with the incomplete, unreviewed, and unapproved programming required for the retrieval and processing of critical data from Petitioner's smart digital meters for purposes of customers planning and operating distributed solar facilities and being billed for their use pursuant to the EDG tariff and rate. He stated that Petitioner appears to be proceeding on the mistaken assumption that there is no need to present to the parties and the Commission in detail its plans for such updated programming in this proceeding prior to its implementation of its EDG Tariff. Mr. Mullett also testified in detail as to the multiple important reasons such updated programming is required for "adequate service" to be provided by DEI both to existing Net Metering and future EDG customers as soon as possible but certainly prior to the transition from Net Metering to Distributed Generation for new customers that the Company plans to occur on July 1, 2022.

Mr. Mullett testified that Solarize is also concerned with potential solar vendor liability under Indiana Code § 8-1-40-23 ("Section 23") which establishes customers' rights regarding DG equipment. While he testified Solarize is zealous in respecting customer rights regarding DG, Mr. Mullett stated the ambiguity and uncertainty of Section 23 could become a trap for the unwary solar vendor. He testified the Attorney General has yet to promulgate the rules of Section 23, thus its interpretation and application are uncertain, which is a business risk for solar vendors. Mr. Mullett is also concerned that the absence of rules promulgated by the Attorney General could create confusion for vendors and customers and lead to disputes, lawsuits, and potential liability. In this context, Mr. Mullett believes Duke Energy Indiana's instantaneous netting proposal should entail an affirmative duty to warn its customers of its financial implications.

Mr. Mullett noted that, on its face, SEA 309 authorizes Commission approval of the recovery of EDG credits paid by the utility to EDG customers as purchased power expenses to be recovered through the utility's FAC. See Ind. Code §§ 8-1-40-15 & 19. Mr. Mullett stated Solarize

is concerned that, with respect to DG customers, this will constitute an impermissible double recovery of an energy delivery charge.

Mr. Mullett testified he is also concerned with the public policy implications of Duke Energy Indiana's EDG tariff as the unjust and unreasonable compensation proposed under Duke Energy Indiana's EDG tariff will be major impediments to continued adoption of solar distributed generation by the Company's retail customers. Mr. Mullett also provided testimony on the future of solar distributed generation and other distributed energy resources, especially in relation to Aggregated, Integrated Distributed Energy Resources ("AIDERs") and its subsets Solar Plus AIDERs and Solar MicroGrids. Mr. Mullett also provided testimony on the "Solarize Model" for the social diffusion of Solar DG technology.

2. <u>Barry S. Kastner</u>. Mr. Kastner is a founding board member of SI and serves as its Treasurer. Mr. Kastner provided analysis to show how the language of SEA 309 should be translated into a mathematical model for calculating the EDG compensation. Mr. Kastner prepared and submitted a financial model, SII - DEI EDG Tariff Financial Analysis Rev 1.0.xlsx. Mr. Kastner summarized his findings as follows:

Assumption 1: a typical household on Duke Energy Indiana's Residential Standard Tariff going solar in 2024 when the Federal Residential Solar Tax Credit will expire, by investing \$23,875 in a solar array rated at 9.55 kW called to produce 100% of the households 12,540 annual kWh consumption. The financial returns under various distributed generation tariffs are as follows:

	Net	SEA 309	DEI EDG
	Metering	Netting	No Netting
IRR	5.2%	4.4%	-0.2%
NPV (5% Hurdle)	\$478	(\$1,559)	(\$10,862)
Payback (Yrs)	14	15	25+
Cash Change at Term	\$ 20,928	\$ 17,230	\$ (817)

Based on the comparative analysis above, Mr. Kastner testified that the baleful financial returns resulting from DEI's EDG No Netting proposal will dissuade most prospects from going solar. As such, SI will not be able to make a financial case for households to go solar, thus quashing the distributed solar market in Duke Energy Indiana's service territory, reducing employment and sabotaging entrepreneurial capital formation to roll out new technology, reducing personal energy freedom, increasing the domination of monopoly interests, curtailing clean renewable energy, and reducing the injection of clean energy onto the grid when it is most needed to meet summer peak demand.

Mr. Kastner testified the SEA 309 netting alternative to DEI's EDG no netting proposal follows the DG statute by taking the difference between inflows and outflows for the monthly billing cycle. He testified the DEI EDG no netting proposal disregards SEA 309 language to take the difference between inflows and outflows for the monthly billing cycle and instead sums the inflows for the month and multiplies that sum by the retail rate and sums the outflows for the month and multiplies that sum by the EDG rate and then charges or credits the monetary difference. As he testified, monetizing the separate volumes of inflows and outflows without first taking the difference between them and monetizing that difference violates the DG statute, thereby maximizing the amounts DEI charges to its DG customers on their monthly bills.

Mr. Kastner concluded by stating that, in his experience, very few REMC customers go solar when faced with low "Net Billing" rates similar to Duke Energy Indiana's EDG Tariff. Those who do go solar invest in only smaller systems that do not send much clean energy to the grid. He expects that DEI's experience with its EDG Tariff will follow REMC experience with "Net Billing" rates. He further testified that overall, the amount of clean renewable energy fulfilling Hoosiers' needs will go down and utilities will generate more, polluting energy while the innovative, entrepreneurial solar business sector will suffer. It is further Mr. Kastner's opinion that few customers will continue to invest in small solar PV systems and as such he would not volunteer his time to promote solar under these terms. Mr. Kastner testified he knows inequity is a policy issue for the legislature, but before the Commission is Duke Energy Indiana's EDG tariff, and he believes application of the well-established principles of statutory interpretation adopted by the Indiana Supreme Court show the Indiana legislature meant that compensation for EDG should be calculated based on the billing period difference between inflow and outflow when it drafted, debated, and voted for the statutory provisions in SEA 309 relating to the definition and calculation of excess distributed generation.

3. <u>Darrell T. Boggess</u>. Mr. Boggess testified that he is knowledgeable of the legislative process and resulting provisions of SEA 309. He also discussed how the bill credit contemplated by SEA 309 differs from that provided by the existing Net Metering Rule. He testified the change intended by SEA 309 was to reduce the per kwh rate of compensation for excess distributed generation from the customer's average retail electric rate for its energy usage during a particular billing period to 125% of the average wholesale rate for the utility's purchased energy during the prior calendar year. Mr. Boggess testified that, in his opinion, the value of renewable energy will be significantly reduced as a result of the requested Duke Energy Indiana EDG rate tariff. He testified the value of renewable energy sent to the grid will not be financially acceptable to most DEI customers as justification for private investment in distributed renewable energy. It is also his view that, as a result, prices will increase, business will substantially decline for solar installers, and the number of volunteers willing to offer free online solarize webinars will significantly decrease, meaning such webinars are likely to be discontinued.

Mr. Boggess testified as to how meter replacements relate to billing changes. As he testified, newer smart meters can measure and report bi-directional energy delivered and received separately, but Duke Energy Indiana has not yet activated the metering and billing software required for measuring and reporting net kwh, which deprives net metering solar owners of real time data regarding their amount of kwh credits. Mr. Boggess testified that by installing smart meters, Duke Energy Indiana is essentially changing the monthly billing process for net metering

customers in advance of the 2022 transition to the new proposed distributed generation process. As Mr. Boggess testified, solar owners can obtain their kwh credits by calling or e-mailing Duke's renewable service center, but actual current meter readings are not provided on monthly bills or visible on digital meters. Mr. Boggess testified that accumulated kilowatt hour credits have intrinsic value. He also testified that the energy credits "use it or lose it" expectation has been a motivator to him to reduce his usage of gasoline and natural gas by buying an electric vehicle and converting from natural gas to electric heat pumps for his dryer and water heater to make sure his kwh credits are used as they are generated. As Mr. Boggess further testified, typical solar performance warranties are for 80 to 90% of original production after 25 years so accumulation of 10,000 kwh credits early in the first decade of operation is prudent to compensate for 25,000 kwh performance degradation forecasted over the expected 25-year life of solar systems. In this context, he testified transparent disclosure on DEI's monthly bills of the cumulative amount of unused kwh credits is important information to solar owners.

Mr. Boggess concluded his testimony stating that Duke Energy Indiana's proposal lacks assurances for future EDG customers that legislatively mandated protections for them will be followed because those previously provided for legacy net metering customers are not being enforced. In Mr. Boggess's view, this bait and switch contributes to an erosion of confidence in Duke Energy Indiana and state government and its ability to act in the best interest of the citizens of Indiana.

- 7. <u>Petitioner's Rebuttal Evidence</u>. Petitioner provided the rebuttal testimony of Roger A. Flick II. Mr. Flick summarized the issues raised by the Public and Intervening Parties as to Duke Energy Indiana's EDG tariff proposal as follows:
- (1) The calculation of the EDG rate -- including a proposal to use only daylight hours, claims of confiscation, lack of cost-of-service study, and purported arbitrary nature of the EDG rate calculated pursuant to the DG Statute;
- (2) The use of instantaneous netting;
- (3) The treatment of unused EDG credits;
- (4) Purported double recovery of EDG payments;
- (5) Customer information requirements, including information about Duke Energy Indiana's PURPA/QF rate;
- (6) Duke Energy Indiana's external disconnect switch requirement;
- (7) Concerns about Duke Energy Indiana's customer information systems and information available to potential distributed generation ("DG") customers;
- (8) Concerns about potential liability of solar vendors under the DG Statute;
- (9) Concerns about grandfathered net metering customers; and
- (10) Various policy issues, including impacts on solar companies, potential solar DG customers, and the economy, as well as what other states are doing.

Mr. Flick addressed the policy issues that IndianaDG and SI witnesses raised with respect to Duke Energy Indiana's proposed EDG rate and methodology as they argued the proposed EDG rate will adversely impact solar companies, solar customers, and Indiana's economy. As Mr. Flick testified, the Indiana General Assembly considered various policy issues and made a policy decision to end net metering in Indiana (except for grandfathered customers), and that policy

decision is memorialized in the DG Statute. Accordingly, these policy issues are arguably irrelevant in this case. However, in addition to the lack of relevance, Duke Energy Indiana disagrees that net metering and/or monthly netting should be continued due to these policy concerns.

IndianaDG and SI also argued that Duke Energy Indiana's proposal will negatively impact the market for solar DG products and services; however, as Mr. Flick testified, it is not Duke Energy Indiana's proposal that changed the DG landscape; it was the DG Statute, as net metering is no longer available to new customers on or after July 1, 2022. Duke Energy Indiana's proposal simply is an effort to comply with the DG Statute. IndianaDG witness Inskeep also argued that Indiana should utilize monthly netting as other states do. Mr. Flick testified that this argument is not persuasive as the Indiana General Assembly has determined the policy choice it believes is appropriate for Indiana, and Duke Energy Indiana's proposal is consistent with the DG Statute.

Mr. Flick testified as the calculation of the EDG rate, testifying that Section 17 provides:

The commission shall review a petition filed under section 16 of this chapter by an electricity supplier and, after notice and a public hearing, shall approve a rate to be credited to participating customers by the electricity supplier for excess distributed generation if the commission finds that the rate requested by the electricity supplier was accurately calculated and equals the product of:

- (1) the average marginal price of electricity⁶ paid by the electricity supplier during the most recent calendar year; multiplied by
- (2) one and twenty-five hundredths (1.25).

He further testified that Duke Energy Indiana calculated its proposed EDG rate by using day-ahead hourly LMP values for the previous calendar year (2020) at the CIN.PSI load node. OUCC witness Alvarez suggests on page 6 of his testimony that Duke Energy Indiana should calculate its EDG rate by using real time hourly LMPs instead of day-ahead hourly LMPs; however, Mr. Flick testified that he does not believe this change is warranted. As Mr. Flick testified, some years the annual average day ahead LMP value is slightly higher than the real time, and other years the opposite is true. In recognition that the differences are small and the vast majority of electricity being procured by Duke Energy Indiana through the MISO markets is actually priced in the day-ahead rather than real-time market, Mr. Flick testified the use of a day-ahead price is reasonable.

IndianaDG witness Inskeep argued on pages 9-13 of his testimony that Duke Energy Indiana should calculate the EDG rate using only daylight hours to calculate the average wholesale rate as most DG customers have solar panels that only produce electricity during daylight hours. Mr. Flick testified that he does not agree. As he testified, the DG Statute requires the EDG rate to be calculated using a historical average annual wholesale power price – the statute says nothing about limiting the calculation to daylight hours. Further, in making Mr. Inskeep's argument that the EDG rate would be higher if only daylight hours were used in the calculation, he ignores that

⁶ Section 6 of the DG Statute defines "marginal price of electricity" as "the hourly market price for electricity as determined by a regional transmission organization of which the electricity supplier serving a customer is a member."

the statute includes a 25% adder to the average annual wholesale price. In addition, the statute does not limit the EDG Rider to only solar customers and, in fact, Duke Energy Indiana has DG customers operating non-solar generation. For all of these reasons, Mr. Inskeep's proposal to use only daylight hours to calculate the EDG rate should be rejected.

Mr. Inskeep and Mr. Mullett in their testimony both criticized Duke Energy Indiana's proposed EDG rate because it is not supported by a cost-of-service study. Mr. Flick testified this is not a valid criticism, because at issue here is a statutorily prescribed rate based on competitive wholesale prices, not a utility-developed rate. The results of a cost-of-service study of the costs imposed on the system by DG customers as a class are not needed to comply with the DG Statute, given the statute's focus on putting the EDG rate on a level playing field with other wholesale power options. The EDG rate is analogous to a market-based wholesale rate, which is not developed by means of a cost-of-service study. SI witness Mullett also claimed that the author of the DG statute characterized the EDG rate as "arbitrary"; however, Mr. Flick testified that he does not agree with this criticism as only the author of the DG Statute knows precisely what he meant. Mr. Flick testified that he read the author's use of the word "arbitrary" as referring to the 25% adder, not the calculation of the base wholesale EDG rate itself. As the Senate Bill clearly shows, the rate of 25 percent premium over wholesale was determined by Mr. Hershman, who said that is an arbitrary number modeled after reviewing what other states have done.

In regard to instantaneous netting, Mr. Flick testified that Indiana Code § 8-1-40-5 defines excess distributed generation as "the difference between: (1) the electricity that is supplied by an electricity supplier to a customer that produces distributed generation; and (2) the electricity that is supplied back to the electricity supplier by the customer." OUCC witness Alvarez, IndianaDG witness Inskeep, and SI witness Mullett all claim that Duke Energy Indiana's proposal does not meet the statutory definition; however, Mr. Flick disagreed. As Mr. Flick testified, Duke Energy Indiana's proposal will compensate a DG customer for all excess distributed generation at the statutorily-required rate. The definition of excess distributed generation, along with other provisions of Indiana Code ch. 8-1-40, requires the utility to compensate a DG customer for electricity produced by the customer and delivered to the grid, over and above any electricity produced by the customer and used for the customer's own electricity requirements, at a certain rate (essentially an average wholesale price plus 25%). Duke Energy Indiana's proposal will accomplish just that. At any point in time where a DG customer is producing more electricity than it needs for its own requirements and delivers that surplus electricity to the grid, under Duke Energy Indiana's proposal, the Company will compensate the customer for that excess electricity at the statutorily-required EDG rate. Mr. Flick further testified that he does not take the language in the DG Statute "the difference between" to make it a requirement to net customer excess generation with energy supplied by the utility and used by the customer. As he testified, the difference between the electricity being supplied by the utility to the customer and the electricity being supplied back to the utility by the customer will be determined instantaneously under Duke Energy Indiana's proposed methodology. Duke Energy Indiana's EDG proposal will establish through very specific means the difference between the electricity supplied by the utility to a DG customer and the electricity supplied back to the utility by the DG customer, as required by the DG Statute. Duke Energy Indiana's EDG proposal will, thus, precisely measure and capture both energy delivered by Duke Energy Indiana to the customer and energy delivered by the customer to Duke Energy Indiana. Mr. Flick further testified that while it is accurate that in any instant,

energy can only flow in one direction, as a matter of physics, in that instant the energy produced and delivered by one party will be netted against zero, which is the amount of energy being delivered by the other party in that same instant. The OUCC and intervenors fail to appreciate that zero can be netted against the instantaneous flow of energy going in one direction or the other, and that netting of a customer's load and generation output is continuously occurring to arrive at EDG. The Commission recognized this in its Order in Cause No. 45378, where it stated as follows:

... it is useful to conceptualize the difference at each instant of time, where the electricity supplied by the supplier and the customer's distributed generation meet at the meter as opposing forces, with the stronger force determining the direction of the flow. If the customer needs less electricity than its distributed generation is supplying, the statute terms the excess or difference between what is being supplied at that instant by [the utility] and what is flowing from behind the customer's meter as EDG. . . . We find, however, that because [electricity] can only flow one way, to become outflow, both components of Section 5 are netted at the meter to arrive at EDG. (45378 Order, at 36.)

If Duke Energy Indiana took the result of the meter measurements and then net again over some period of time during the billing process, the utility would have, effectively, netted the customer generation against the utility supply a second time. Duke Energy Indiana's metering will track separately, energy supplied by the utility that is used by the customer and energy sent back to Duke Energy Indiana's distribution infrastructure (the grid) that is produced by the customer in excess of what the customer used. The monthly billing statement will include charges for utility-provided energy consumed by the customer and credits for all excess energy the customer produced and sent back to the grid.

IndianaDG witness Inskeep also contends that the use of "difference" in the definition of EDG implies the use of monthly netting; however, Mr. Flick testified that he does not agree as there is nothing in the definition that implies the use of monthly netting. Just as there is nothing in the DG Statute that implies the continuation of net metering (except for grandfathered customers). Mr. Flick provided an example of how Duke Energy Indiana's EDG proposal will benefit customers who have invested in their own distributed generation. As he stated, assuming that a DG customer, at noon on a sunny day, generates 100 Watts of electricity from solar panels on the customer's home, while they consume only 60 Watts of their own generation. At that point in time, Duke Energy Indiana is supplying 0 Watts to the customer, and the customer is sending their excess generation of 40 Watts to the grid via Duke Energy Indiana's electrical infrastructure. The difference between the amount of energy Duke Energy Indiana is supplying at that moment to the customer, and the quantity the customer is supplying back to Duke Energy Indiana's electrical infrastructure is 40 Watts. The reverse of this scenario will also be present when the customer's generation is less than the amount they are consuming, so they consume all of their own generation plus an amount generated and delivered by the utility. Duke Energy Indiana's metering equipment will measure the amount of customer generation that exceeds the customer's consumption (or vice versa) at any point in time, and the Company will compensate the customer for any excess generation as required by the statute (or will charge the customer at the retail rate for any amount

supplied by Duke Energy Indiana and consumed by the customer). The cumulative amount of Watts provided by the customer to the utility and by the utility to the customer in all such instances over a month, will be translated to kilowatt hours. To finish the example, at the end of the month, if the customer has generated 1,000 kWh in which they consume 600 kWh for their own use, the excess 400 kWh was sent back to the utility. In addition, the customer consumed 300 kWh of energy supplied by the utility when their generation was less than what they needed. The customer benefits both by avoiding paying the utility the retail rate for 600 kWh they consumed from their own generation and they are getting credited the EDG rate for the 400 kWh of excess generation going back to Duke Energy Indiana's distribution grid. The customer pays the utility the retail rate for the 300 kWh delivered by the utility and consumed by the customer.

Mr. Flick further described how the same example works under the netting methodology the intervernors proposed. As he testified, under the apparent IndianaDG definition of how the Duke Energy Indiana EDG tariff should work, the customer not only benefits in the two ways Mr. Flick described above, but they also want to incorporate a process of netting in which the customer generation and energy provided by the utility are netted against each other over a long period of time (i.e., over a month). This effectively compensates the customer at the retail rate for the quantity of kWh being netted – just as net metering did. In a monthly netting scenario, the customer in the example above will benefit by avoiding retail rates for the 600 kWh that was generated by the solar system and consumed by the customer. In addition, the customer's 400 kWh of excess generation is now able to be netted against the customer's 300 kWh of usage supplied to them by the utility leaving the customer with 0 kWh to be billed for by the utility at retail rates – even though there were times throughout the month when the customer needed and used electricity supplied by Duke Energy Indiana equipment and facilities. The 100 kWh of excess customer generation sent back to the Duke Energy Indiana grid (and not utilized in the netting step) is credited on the customer's monthly bill at the EDG rate for use against future charges. See Figure 1 below for clarity. The common billing determinants between both proposals are: Customer generation - 1,000 kWh; Customer consumption of own generation -600 kWh; Customer consumption from utility supply - 300 kWh, and EDG sent back to Duke Energy Indiana distribution grid – 400 kWh.

Figure 1

	Statute-Driven Duke Energy Indiana Proposal	IndianaDG Monthly Netting Proposal
Customer pays retail rate	300 kWh	0 kWh
Netted at retail rate	0 kWh	300 kWh
Credit at EDG rate	400 kWh	100 kWh

Mr. Flick testified that he did not agree with IndianaDG witness Inskeep, on page 18 of his testimony, that the DG Statute requires the calculation of a rate but does not require a change to the netting methodology from the methodology used in net metering. As Mr. Flick testified, the DG Statute ends net metering (except for grandfathered customers) and puts in place a new paradigm for paying customers for their excess electricity produced by customers and delivered to the grid. Other than the grandfathering provisions, there is nothing in the DG Statute that indicates parts of the old net metering paradigm should remain in place. Mr. Flick further testified that he does not agree with IndianaDG witness Inskeep that the history and amendments to SB 309

(enacted as Indiana Code 8-1-40) support his position that the intent of the legislature was to keep the monthly netting portion of the net metering paradigm in place. As Mr. Flick testified, the DG Statute ends the net metering paradigm and replaces it with a paradigm that requires payment for electricity delivered to the grid by customers at an average rate similar to a wholesale power rate (plus 25%). The fact that SB 309 started out as a "buy all, sell all" structure then changed to a "net billing" structure in no way implies that the statute was intended to keep part of net metering in place. It is helpful to consider that there are three basic DG paradigms in place across the U.S. today, commonly referred to as: (1) net energy metering (what we refer to as net metering); (2) buy all, sell all; and (3) net billing (the Indiana Code ch. 8-1-40 paradigm). SB 309 was never a net (energy) metering bill – except with respect to the grandfathering provisions.

Mr. Flick further refuted IndianaDG witness Inskeep's testimony on page 19 that Duke Energy Indiana's proposal resembles a buy all, sell all proposal in some respects. As Mr. Flick testified, if Duke Energy Indiana's proposal were a buy all, sell all proposal, the DG customer would pay the utility for all its electricity requirements at standard tariff rates and would be compensated for all the electricity the customer produces at the EDG rate. Instead, Duke Energy Indiana's proposal – consistent with the DG Statute – allows the customer to serve itself first and be charged standard tariff rates only for its incremental usage the utility supplies above the amount of electricity the customer produces. Like the DG Statute, Duke Energy Indiana's proposal falls within the category of net billing, not buy all, sell all. Mr. Flick further testified that he does not agree with IndianaDG witness Inskeep's contention that the DG statute's sizing constraint (i.e. limited to average annual energy needs) implies the use of monthly netting. As Mr. Flick testified, participation in state programs such as net metering and EDG were established by statute to allow customers to self-serve their own electrical needs, and the DG Statute reflects that. Customers wishing to fundamentally exceed their own electrical needs and operate as commercial electrical generating facilities have other avenues, such as participating in the wholesale capacity and energy markets through the MISO Interconnection Queue.

Mr. Flick testified that the OUCC and SI recommend the Commission reject Duke Energy Indiana's proposal. IndianaDG recommends rejection as well, unless monthly netting is retained; however, Mr. Inskeep recommends the Commission approve Duke Energy Indiana's proposal with daily netting if monthly netting is disallowed. As Mr. Flick testified, Duke Energy Indiana recommends the Commission approve its EDG rate proposal, which is consistent with the DG Statute. As the DG Statute ends net metering, there is nothing in the statute which directs the retention or use of monthly netting or the adoption of daily netting. Duke Energy Indiana disagrees with Mr. Inskeep's proposal. Mr. Flick also testified that he did not agree with Mr. Inskeep's characterization of monthly netting/continuation of net metering as a "no regrets" policy choice for the Commission. The "no regrets" proposal that IndianaDG supports would effectively maintain net metering beyond the required end date of July 1, 2022, in conflict with the DG Statute.

Mr. Flick further testified that he does not agree with Mr. Inskeep's argument that monthly netting/continuation of net metering better comports with Bonbright's principles of ratemaking and the principle of gradualism than Duke Energy Indiana's proposed EDG rate. As Mr. Flick testified, he believes the DG Statute exemplifies gradualism, through its lengthy grandfathering periods for existing DG customers. In addition, the statutory EDG rate calculation is simple and easy to understand – it approximates a level playing field with other wholesale power options; and

it is calculated once a year based on actual historical wholesale power prices. Also, the statutory EDG rate calculation is fair and avoids undue discrimination by recognizing that DG customers use utility facilities and equipment, and by putting utility purchases from DG customers on more of a level playing field with competitive wholesale power purchases. Finally, the EDG statute represents a considered policy choice made by the legislature. As the DG Statute is silent on the issue of netting, Mr. Flick testified as to why Duke Energy Indiana believes instantaneous netting is reasonable. As he states, Duke Energy Indiana believes instantaneous netting is consistent with the overall intent of the DG Statute – to terminate net metering and replace it with a compensation system for excess distributed generation that more closely approximates Duke Energy Indiana's other purchased power alternatives. This new EDG compensation is beneficial to Duke Energy Indiana's customers as a whole as it provides a more competitive price for the excess distributed generation that the Company is required to purchase. Furthermore, it is fair to DG customers because it provides a competitive price, plus a 25% adder, for their excess generation supplied back to the Duke Energy Indiana grid.

Mr. Flick addressed the public and intervenor's concerns regarding treatment of unused EDG credits. Mr. Flick testified that Duke Energy Indiana is agreeable to the OUCC's recommendation to refund any unused EDG credits to customers through its FAC proceeding rather than let unused EDG credits expire. He further states that Duke Energy Indiana is agreeable to modifying its proposed tariff to provide that any unused credits will flow back to all retail customers through the FAC process, which is consistent with the Commission's decision in the Vectren South Order (IURC Cause No. 45378). As to Mr. Inskeep's proposal to provide cash to individual DG customers for their unused EDG credits, Mr. Flick testified this is not workable nor does the DG Statute require cash compensation. It only talks in terms of credits.

Mr. Flick also addressed the purported double recovery of EDG payments that SI witness Mullett claims in his testimony. Mr. Flick testified that Mr. Mullett is not correct in his claim that a utility's recovery of EDG credits paid to FAC customers will constitute double recovery as costs eligible for recovery in the FAC are recovered based on energy (kWh) consumed by customers. In the case of an EDG customer, the FAC charges will be applied to the measurement of energy delivered to the customer on their meter, which represents fuel costs associated with the energy consumed by the EDG customer. In other words, there is no double recovery – the customer will be paying the variable FAC based on energy consumed which is separate and distinct from the Rider EDG credits paid for EDG. The same FAC rate is applied to all rate schedules, with the only difference representing the line loss applied.

Mr. Flick also addressed IndianaDG witness Inskeep's concern that Duke Energy Indiana's PURPA/QF tariff rate could be higher than the EDG rate. Mr. Flick testified this is not correct, and Mr. Inskeep is comparing apples and oranges. The PURPA/QF rate stems from the federal PURPA, which was enacted in 1978 and was intended to provide incentives to the development of certain qualifying facilities and was instituted before the existence of a robust and competitive wholesale power market. Since PURPA was enacted, not only has a competitive wholesale market developed, but so have regional transmission organizations, including MISO of which Duke Energy Indiana is a member. In fact, in 2005 the Energy Policy Act of 2005 provided a new PURPA section that requires FERC to excuse host utilities from entering into new purchase or contract obligations if there is access to a sufficiently competitive market for a QF to sell its power.

The two rates are the result of two different government-prescribed calculations. The PURPA/QF rate calculation is prescribed by PURPA, as implemented by an IURC rule, while the EDG rate calculation is prescribed by the DG Statute. That said, if a customer meets the eligibility requirements for both tariffs, that customer may choose which tariff it wants to participate in. Mr. Flick testified that Duke Energy Indiana rejects Mr. Inskeep's proposal to impose an affirmative duty upon it to provide information to customers about PURPA/QF rates versus EDG rates, Duke Energy Indiana will, of course, answer any questions customers may have about its various rates.

In regard to Mr. Inskeep's recommendation that the Commission reject the provision in Duke Energy Indiana's proposed Tariff that requires customers to install a disconnect switch, Mr. Flick testified that Duke Energy Indiana does not agree with this recommendation. As Mr. Flick testified, the disconnect switch provides an option of last resort to quickly and easily isolate a customer generator from the grid. He further stated there are several circumstances when the Company may need to isolate a customer's generation equipment: (1) the inverter is broken and not properly isolating the system; (2) the system is no longer in compliance with IEEE 1547, either through equipment, software, firmware updates resulting in an islanding situation; or (3) storm restoration where technicians are working around affected areas and are not sure if a DG system is fully isolated or not. In the last case, the Company can disconnect the system out of an abundance of caution, but the result is the same, Duke Energy Indiana has isolated the customer's generator/battery without having to cut their service line or pull their meter. Without that disconnect, the only reliable options the Company would have to disconnect the customer's generator will be to completely disconnect the customer's service, which is not a good option for customers. Not isolating the generator at certain times may put utility employees or the public in harm's way. First responders may need to utilize the disconnect in case of fire or other hazards at the property. The General Interconnection provisions section of the Indiana Administrative Code, 170 IAC 4-4.3-4(d), states: "The utility may require the applicant to include a disconnect switch as a supplement to the equipment package." In addition to the foregoing reasons, changes incorporated into the 2020 National Electric Code ("NEC") continue to become more stringent to reduce accidental electrical contact. Changes include the addition of whole house surge protection and Ground Fault Circuit Interrupter ("GFCI") protection for A/C units for one- and two-family dwellings. NEC 230.85 speaks directly to the requirement of an exterior, readily accessible emergency disconnect switch for first responders. As states adopt the 2020 National Electric Code, this disconnect switch will become a basic requirement for service. As such, it is Mr. Flick's opinion that Mr. Inskeep's recommendation, including his proposed recordkeeping and reporting recommendation, should be rejected.

Mr. Flick also testified that he does not agree with SI witness Mullett's recommendation that the Commission reject Duke Energy Indiana's proposal and require the Company to refile its case with detailed information about its customer information systems. As Mr. Flick testified, details about Duke Energy Indiana's customer information systems are not necessary to the resolution of this proceeding. Section 17 outlines the scope of this proceeding, and details concerning the utility's customer information systems are not within this limited statutory scope. Mr. Flick also testified that SI witness Mullett's concerns about solar vendors' liability under the DG Statute are not relevant to this proceeding as Section 17 outlines the scope of this proceeding, and solar vendors' liability is outside this scope. Indiana Code § 8-1-40-23 is a separate part of the DG Statute that sets out DG customers' rights vis a vis solar vendors.

Mr. Flick addressed SI witness Boggess' concerns about protections for legacy net metering customers. As Mr. Flick testified, the DG Statute provides specific protections for legacy net metering customers through its grandfathering provisions. Accordingly, Mr. Flick does not understand what concerns Mr. Boggess has. However, protections for legacy net metering customers are not a necessary part of this proceeding. Section 17 outlines the scope of this proceeding, and protections for legacy net metering customers are not within this limited statutory scope. Again, Indiana Code §§ 8-1-40-13 and -14 adequately address protections for legacy net metering customers, and Duke Energy Indiana will comply with these grandfathering provisions for qualifying legacy net metering customers.

Mr. Flick concluded his rebuttal testimony by again reiterating that it is his opinion that Duke Energy Indiana's proposed EDG tariff will produce just and reasonable rates. Furthermore, Duke Energy Indiana's proposal complies with the DG Statute and is consistent with the Commission's Order in the Vectren South case (IURC Cause No. 45378). In addition, the DG Statute and Duke Energy Indiana's proposal levels the playing field between DG power and other wholesale power options available to Duke Energy Indiana. This will benefit Duke Energy Indiana's customers as a whole, as they will be paying a more competitive amount for DG power than they do under net metering. At the same time, the EDG rate will provide DG customers with a reasonable rate for their excess distributed generation – 25% above what Duke Energy Indiana pays on the wholesale market. The OUCC's and intervenors' positions consider only the DG customer (and solar vendor) side of the equation. The DG Statute, in contrast, considers both the interests of DG customers and the remainder of Duke Energy Indiana's retail customers. Mr. Flick also testified that after reviewing their proposed EDG tariff rate language, he believes Duke Energy Indiana's proposal closely aligns with Vectren South's as Vectren South has a straightforward marginal DG price calculation that follows the statute, they treat the inflow and outflow of energy the same as in Duke Energy Indiana's proposal, and do not utilize any system of netting the customer generation with utility supplied generation.

8. Commission Discussion and Findings. In this proceeding under the Distributed Generation Statute, the Commission is being asked to approve an EDG Rider. In the Vectren Order, we directly addressed several of the contested issues that are likewise contested in this proceeding. These issues include but are not limited to: (1) whether instantaneous netting complies with Section 5; (2) whether instantaneous netting results in rates that are just and reasonable; (3) the appropriate Rider EDG rate under Section 17; and (4) recovery of EDG customers' credits upon discontinuance or termination of service under Section 15.

A. Implementation and Calculation of Rider EDG under the Distributed Generation Statutes.

1. <u>Timeliness of Petitioner's Filing for an EDG Rate</u>. Section 10

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⁷ The Indiana Court of Appeals in *Indiana Office of Utility Consumer Counselor, et al. v. Southern Indiana Gas and Electric Company*, No. 21A-EX-821, 2022 WL 260015 (Ind. Ct. App Jan. 28, 2022) reversed the Commission's approval of Rider EDG and remanded the case for further proceedings. On March 14, 2022, Southern Indiana Gas and Electric Company and the Commission each filed Petitions to Transfer to the Indiana Supreme Court. On June 1, 2022, the Indiana Supreme Court granted the Petition to Transfer.

requires a utility to make its net metering tariff available until the earlier of July 1, 2022, or "January 1 of the first calendar year after the calendar year in which [Petitioner's] aggregate amount of net metering facility nameplate capacity . . . equals at least one and one-half percent (1.5%) of [Petitioner's] most recent summer peak load." Section 10 further requires a utility to petition the Commission for approval of a rate for the procurement of EDG if, before July 1, 2022, the utility reasonably anticipates, at any point in a calendar year, that the aggregate amount of its net metering facility nameplate capacity will equal at least 1.5% of its most recent summer peak load. Otherwise, an electricity supplier must file a petition seeking approval of a rate for the procurement of EDG by March 1, 2021.

Petitioner initiated this proceeding on March 1, 2021. Petitioner's witness, Mr. Flick, testified that Duke Energy Indiana is requesting approval of a rate for the procurement of excess distributed generation in accordance with this statutory requirement.

The propriety of the timing of Duke Energy Indiana's filing for approval of a rate for EDG under Section 10 was not disputed. Based on Petitioner's evidence, the Commission finds that Duke Energy Indiana's Petition seeking approval of a rate for the procurement of EDG was timely filed.

2. <u>Rider EDG Rate</u>. Once a utility timely files a request for an EDG rate in accordance with Section 10, Section 17 of the DG Statute requires the following:

The commission shall review a petition filed under section 16 of this chapter by an electricity supplier and, after notice and a public hearing, shall approve a rate to be credited to participating customers by the electricity supplier for excess distributed generation if the commission finds that the rate requested by the electricity supplier was accurately calculated and equals the product of:

- (1) the average marginal price of electricity paid by the electricity supplier during the most recent calendar year; multiplied by
- (2) one and twenty-five hundredths (1.25).

Thus, under Section 17, the Commission is charged with approving a rate to be credited.

Mr. Flick explained and supported Duke Energy Indiana's calculation of the Rider EDG rate. He stated that, consistent with Indiana Code § 8-1-40-18, Duke Energy Indiana calculated the average marginal price of electricity paid by the Company by averaging the 2020 day ahead hourly LMPs at the CIN.PSI load node. Mr. Flick testified the average was calculated by summing the hourly LMPs for the preceding calendar year and then dividing by 8,784, which represents the total hours in the 366 days in 2020, resulting in \$23.185/MWh or \$0.023185 per kWh. This results in Duke Energy Indiana's proposed EDG rate of \$0.028981/kWh in its initial tariff.

No party took issue with Mr. Flick's calculation; however, SI and IndianaDG disputes whether Duke Energy Indiana's calculation of the EDG credit rate is just and reasonable. Mr. Mullett testified that Duke Energy Indiana's rate is arbitrary and confiscatory and, thus, not just and reasonable. Mr. Mullett supports his contention stating that Duke Energy Indiana did not base

its rate on any detailed cost or value of service study or data specific to Duke Energy Indiana. Mr. Inskeep took issue with Duke Energy Indiana averaging the wholesale electricity price for all hours of the year, when solar facilities only produce electricity and export power during daylight hours. He asserted this does not accurately reflect the marginal price of electricity during the hours in which a DG is providing EDG to Duke Energy Indiana. Mr. Inskeep suggested that an alternative method for calculating the rate would be more reasonable; specifically, he recommends calculating the average marginal price of electricity paid by the electricity supplier during the most recent calendar year by using the average marginal price for when DG is being exported (*i.e.* only daylight hours).

After reviewing the critiques from SI and IndianaDG, we decline each of their requests. The Commission is a creature of statute. See Ind. Code § 8-1-1-2. As an administrative agency, the Commission "derives its power and authority solely from statute, and unless a grant of power and authority can be found in the statute it must be concluded that there is none." Indiana Bell Tel. Co. v. Indiana Util. Regulatory Comm'n, 715 N.E.2d 351, 360 n.3 (Ind. 1999) (citations omitted). The authority of a state agency is limited to the express authority conferred by statutory enactment. Board of Comm'rs of Morgan County v. Wagoner, 699 N.E.2d 1196, 1199 (Ind. Ct. App. 1998); Indiana. Dept. of Natural Res. v. Town of Syracuse, 686 N.E.2d 410, 411 (Ind. Ct. App. 1997).

We find that in Section 17, the legislature directed how the "rate to be credited to participating customers by the electricity supplier for excess distributed generation" shall be calculated. Section 17 does not state that a certain subset of hours be used, nor does it state that specific hours are to be given greater weight than others. It plainly states that "the average marginal price of electricity paid by the electricity supplier during the most recent calendar year" is to be used. In addition, we note that omitting certain hours from the rate calculation may benefit DG customers with solar resources at the expense of DG customers utilizing other technologies (i.e., wind or battery storage). Duke Energy Indiana averaged each hour of the most recent calendar year in calculating the Marginal DG Price. This is admitted by Mr. Inskeep, when he correctly notes that "DEI has averaged the wholesale electricity price for all hours of the year."

The Commission finds the rate for crediting of EDG and the calculation thereof presented by Petitioner are derived from, and consistent with, the process directed in the DG Statute, Sections 6 and 17. We decline the invitation to diverge from the DG Statute and calculate this rate differently as suggested by IndianaDG and SI's witnesses. Accordingly, the Commission finds Petitioner's proposed rate and its calculation were shown to be reasonable and in compliance with Sections 6 and 17; therefore, the Commission approves Petitioner's proposed calculation of the EDG rate.

3. <u>Carryover of EDG Credits</u>. Petitioner seeks approval of a retail rate crediting mechanism that affords an EDG customer a credit on the customer's monthly bill, with any excess credit to be carried forward and applied by Petitioner against future charges to that EDG customer for as long as such customer receives electric service at the premises from Petitioner. Petitioner's proposal to carry credits forward consistent with Section 18 was not opposed; however, certain parties took issue with what Petitioner proposed to happen to those credits when a customer elected to discontinue Net Metering service at their premises. Mr. Inskeep took issue with Petitioner's proposal that, upon discontinuance of service, any unused credit will

be granted to the Company. Mr. Inskeep recommended earned EDG credits be refundable to customers upon service termination. OUCC witness Alvarez recommended Duke Energy Indiana refund any unused EDG credits to all retail customers through Duke Energy Indiana's FAC if a DG customer leaves the premises instead of the unused credits being forfeited.

In evaluating these alternatives, the Commission looks first to the requirements of the DG Statute. Section 18 provides:

An electricity supplier shall compensate a customer from whom the electricity supplier procures excess distributed generation (at the rate approved by the commission under section 17 of this chapter) through a credit on the customer's monthly bill. Any excess credit shall be carried forward and applied against future charges to the customer for as long as the customer receives retail electric service from the electricity supplier at the premises.

There is no language in the DG Statute directing or supportive of a cash payment to Rider EDG customers. In this regard, the Commission finds it important to recognize what the statute says as well as what it does not say. See Van Orman v. State, 416 N.E.2d 1301, 1305 (Ind. Ct. App. 1981). Section 18 calls for a credit to be applied against future charges for electric service which is consistent with the premise that EDG is a retail rate crediting mechanism. Similar to Section 18, Sections 15 and 17 also provide for the approved rate to EDG customers to be credited, with Section 17 providing that the Commission shall "approve a rate to be credited to participating customers by the electricity supplier for excess distributed generation." Section 17. We also note that under Indiana Code § 8-1-40-3(a)(3), to be properly sized, a DG customer's system is to be sized to meet the customer's load, limiting the likelihood of a credit positive position over the course of time.

Based on the DG Statute, the Commission approves Duke Energy Indiana's proposal to adopt a retail rate crediting mechanism that affords Rider EDG customers a credit, with any credit balance remaining when the participating customer is no longer a customer at the premises credited to all retail customers through the FAC.

- 4. <u>Compliance Filing Updates</u>. Section 16 provides that after approval of the initial rate, a utility shall "submit on an annual basis, not later than March 1 of each year, an updated rate for excess distributed generation in accordance with the methodology set forth in section 17 of this chapter." Accordingly, Petitioner proposes updating its Rider EDG annually, by March 1, via a compliance filing under this Cause. Having reviewed and approved Petitioner's method of calculating the EDG rate under Section 17 and after reviewing the evidence presented upon Duke Energy Indiana's methodology for annually updating Rider EDG, the Commission finds Duke Energy Indiana's proposal for annually updating its EDG rate is consistent with, and meets the requirements of, Section 16.
- 5. Recovery of amounts credited to EDG customers through the FAC. Section 15 provides, "Amounts credited to a customer by an electricity supplier for excess distributed generation shall be recognized in the electricity supplier's fuel adjustment proceedings under IC 8-1-2-42." SI witness Mullett testified that SI is concerned that, with respect to DG

customers, recovery of EDG credits through the FAC will constitute a double recovery of an energy delivery charge.

As Mr. Flick explained on rebuttal, there is no double recovery because the costs eligible for recovery in the FAC are recovered based on energy (kWh) consumed by customers. In the case of an EDG customer, the FAC charges will be applied to the measurement of energy delivered to the customer on their meter, which represents fuel costs associated with the energy the EDG customer consumed. Mr. Flick testified there is no double recovery because the customer pays the variable FAC based on energy consumed which is separate and distinct from the Rider EDG credits paid for EDG. Given Petitioner's rebuttal and the recovery of only energy costs in the FAC, the Commission finds that applying Section 15 as Petitioner proposes does not result in a double recovery from EDG customers. Rather, the EDG customer will pay the variable FAC charge based on energy consumed which is separate and distinct from the Rider EDG credits paid for EDG; therefore, the Commission authorizes Petitioner, consistent with the statute, to recover amounts credited to EDG through its FAC.

B EDG Tariff Determination. In addition to seeking approval of its rate for EDG, Duke Energy Indiana asks the Commission to approve its proposed EDG tariff, i.e., Rider EDG, so Petitioner can apply the rate. As proposed, Rider EDG is based upon measuring in each instant, i.e., instantaneously measuring the difference between the amount of electricity a customer receives from Duke Energy Indiana and the amount of electricity the customer supplies to Duke Energy Indiana. Under Rider EDG, the net electricity a customer supplies Duke Energy Indiana is measured in each instant.

The OUCC and Intervenors challenged Petitioner's position, moved for summary judgment, and subsequently, when that motion was denied, appealed that denial to the full Commission. In denying summary judgment, the Presiding Officers found "the Commission should have the benefit of a full evidentiary hearing upon the issues and [were] not persuaded Joint Movants have shown there are no genuine issues as to any material fact and they are now entitled to the requested judgment as a matter of law."

1. <u>Section 5</u>. In evaluating the parties' respective positions, the Commission will look first at Section 5 which states:

As used in this chapter, 'excess distributed' generation means the difference between:

- (1) the electricity that is supplied by an electricity supplier to a customer that produces distributed generation; and
- (2) the electricity that is supplied back to the electricity supplier by the customer.

Petitioner's evidence shows its EDG tariff defines EDG consistent with Section 5, and that in measuring electricity "received" from a DG customer, both electricity "delivered" and "received" in any instant are effectively netted at the meter to arrive at EDG. The EDG the meter measures is the "difference between" these components, not merely one component. As Mr. Flick explained

in his rebuttal testimony:

Let's assume that a DG customer, at noon on a sunny day, is generating 100 Watts of electricity from solar panels on the customer's home, while they consume only 60 Watts of their own generation. At that point in time, Duke Energy Indiana is supplying 0 Watts to the customer and the customer is sending their excess generation of 40 Watts to the grid via Duke Energy Indiana's electrical infrastructure. The difference between the amount of energy Duke Energy Indiana is supplying to the customer, and the quantity the customer is supplying back to the Duke Energy Indiana electrical infrastructure is 40 Watts.

Pet. Ex. No. 2, p. 11.

The OUCC offered testimony that the proposed Rate EDG tariff does not comply with the definition of Section 5 because what Duke Energy Indiana's tariff describes is not the difference between the electricity supplied by an electricity supplier to a customer that produces distributed generation and electricity supplied back to the electricity supplier by that customer. As Mr. Alvarez testified, "DEI's AMI electric meter has the bidirectional capacity of measuring and recording the directional flows of electricity....However...If electricity is flowing to or from the customer, it is not possible for there to be an 'opposing' flow from the opposite direction, and therefore, the meter is not 'netting' or taking the difference of any electricity flow as required by Ind. Code § 8-1-40-5."

The Commission finds the OUCC's position does not take into consideration the difference is measured at the meter on an instantaneous basis, to arrive at EDG. See Vectren Order, at 35. The Commission finds the instantaneous calculation the meter performs of the difference between the electricity Duke Energy Indiana is delivering and the electricity the customer is supplying (received by Duke Energy Indiana) properly measures EDG under Section 5. Our finding is supported by the substantial evidence Duke Energy Indiana presented explaining why electricity received by Duke Energy Indiana is calculated in accordance with Section 5 and accounts for the difference between the electricity supplied by the customer to Petitioner (received by Duke Energy Indiana) and the electricity Duke Energy Indiana delivered to the DG customer in every instant.

Consistent with Duke Energy Indiana's testimony, the proposed Rider EDG tariff defines EDG in accordance with Indiana Code § 8-1-40-5 as the difference between: (1) the electricity that is supplied by an electricity supplier to a customer that produces distributed generation and (2) the electricity that is supplied back to the electricity supplier by the customer. *Petitioner's Exhibit 1-B (RAF)*. An example we used in the Vectren Order is also helpful here.

[I]t is useful to conceptualize the difference at each instant of time, where the electricity supplied by the supplier and the customer's

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⁸ While Mr. Inskeep and Mr. Rohaly, refer to Duke Energy Indiana's proposal as "no netting" throughout their testimony, it is actually more accurate to refer to the monthly netting proposal proffered by IndianaDG as "double netting," as it would net the electricity received by Duke Energy Indiana and electricity delivered by Duke Energy Indiana on a monthly basis, when netting has already occurred instantaneously. For this reason, we do not use the term "no netting" in our Discussion and Findings and, instead, utilize the term "instantaneous netting."

distributed generation meet at the meter as opposing forces, with the stronger force determining the direction of the flow. If the customer needs less electricity than its distributed generation is supplying, the statute terms the excess or difference between what is being supplied at that instant by [Petitioner] and what is flowing from behind the customer's meter as EDG.

Vectren Order, page 36.

Although the OUCC and Joint Intervenors are correct that in any instant, energy can only flow through the meter in one direction, as a matter of mathematics the energy the meter measures represents the energy one party supplied netted against zero, which is the amount of energy being supplied by the other party in that same instant to arrive at the difference. The OUCC and Joint Intervenors fail to appreciate that zero is an amount that must be netted against the energy flow to arrive at the difference the meter measures.

Having reviewed the evidence, as discussed above, the Commission finds the electricity that flows from the customer through the meter and registers as electricity received by Duke Energy Indiana is the EDG produced by a customer's DG for purposes of Section 5. This excess electricity registered as "received" on the meter is the electricity Duke Energy Indiana must accept from the DG customer, regardless of whether that excess electricity is then needed or not to meet Duke Energy Indiana's overall system needs. The amount of electricity Duke Energy Indiana must accept from the customer is the amount of electricity that is supplied to Petitioner by the customer in excess of the amount Duke Energy Indiana supplied to the customer, i.e., the difference between the two components of Section 5 occurring at that instant and time.

In contrast, under the OUCC's interpretation of Section 5 and under IndianaDG's proposal to require Duke Energy Indiana to utilize monthly netting, Section 5 requires a utility to permit DG customers to net the amount of the EDG they deliver to Petitioner at various times during the month against the amount of electricity supplied by the utility to them over the course of the same month. As discussed below, the DG Statute does not require the monthly or billing period netting which Mr. Inskeep proposes. In fact, the monthly netting proposal will effectively keep net metering in place, contrary to the intent of the DG Statute. Accordingly, if the OUCC and IndianaDG's view were adopted, the Commission finds it will result in over-valuing EDG beyond what the Statute directs. The result will, essentially, be a continuation of net metering under which Rider EDG customers could continue to bank their EDG on the utility's system at no charge until needed at some time later in the month, thereby improperly providing Rider EDG customers the retail rate allowed under net metering for "banked" excess generation throughout the month. Only at the end of the monthly netting period will excess energy "received" by the electricity supplier's grid be valued at the EDG rate.

IndianaDG witness, Mr. Inskeep, argued that "[t]here is no language in the statute that says monthly netting should stop." IndianaDG Exhibit 1, page 14, lines 1-2. Also, IndianaDG witness, Mr. Rohaly, states that "the Commission should reject DEI's 'no netting' and overall EDG proposal and continue with monthly netting." IndianaDG Exhibit 2, page 11, lines 22-23. We do not believe the General Assembly enacted the DG Statute to sunset net metering and replace it

with a construct that achieves a similar outcome. Our conclusion is buttressed by the legislature having capped the amount of net metering capacity on electricity suppliers' systems but placing no comparable cap on EDG.

Based on the substantial evidence of record, the Commission finds that, at any given moment in time, Duke Energy Indiana's meters will register the difference between: (1) the electricity that is delivered by an electricity supplier to a customer that produces DG; and (2) the electricity that is received by electricity supplier from the DG customer, and that instantaneous netting is permissible under Section 5; therefore, the Commission affirms the denial of the Motion for Summary Judgment.

2. <u>Reasonableness of rates and charges</u>. Mr. Inskeep argues that Duke Energy Indiana's netting proposal "is inconsistent with the principles underlying just and reasonable rates" and testifies extensively as to why he believes Duke Energy Indiana's proposal is "inconsistent with longstanding ratemaking principles." Mr. Inskeep and Mr. Rohaly again advocate for a monthly netting period.

As discussed below, the Commission finds the measurement of EDG, i.e., netting as that term is used herein, using the components the General Assembly set forth in Section 5 and calculating the rate per Section 17, yields rates that are just and reasonable. In so finding, we believe the DG Statute is intended to be a transition away from the net metering construct for new DG customers, with the primary value of DG creation in the retail rate context being its offsetting of the DG customer's demand behind the meter, a value overlooked or unreasonably discounted by IndianaDG's focus upon prospective payback and bill differences. Nevertheless, the EDG rate must be reasonable.

There is no dispute that under Duke Energy Indiana's proposed Rider EDG, DG customers continue to be able to use the output of their DG systems to offset their need to procure energy from Duke Energy Indiana at the full retail rate. We have already found that instantaneous netting reasonably determines the excess DG the customer provides to Duke Energy Indiana, net of their own usage, and that Duke Energy Indiana has properly calculated a rate to compensate its customers for their EDG. As a result, while we address many of the specific arguments raised by Mr. Inskeep, it is clear that Duke Energy Indiana's proposed EDG tariff is reasonable.

The evidence reflects that netting the two elements set forth in Section 5 on a monthly basis, has the effect of substantially reducing the DG customer's bill for energy Petitioner provides, but this reduction is shifted to the Duke Energy Indiana customers that do not have a behind-themeter generation resource. IndianaDG witness Inskeep presented a comparison of monthly netting, hourly netting, and instantaneous netting, which shows the amounts DG customers will pay for electricity they consume are lower under a monthly netting paradigm.

Although IndianaDG and Solarize Indiana raised some cost-of-service concerns, a large portion of Mr. Inskeep's testimony is focused on the payback period for customers that install a DG system. Mr. Rohaly similarly offers testimony on this topic. For instance, Mr. Inskeep testified a customer's payback period will go from 14.4 years under monthly netting to 25.9 years under instantaneous netting, and Mr. Rohaly testified that "DEI's proposal would increase the customer payback period to 20 years or more" where "currently, residential customer solar investment payback is typically estimated to be 7-10 years." Intervenor IndianaDG's Exhibit 2, p. 5. SI witness

Kastner provided an analysis to show that under Duke Energy Indiana's proposal, a breakeven payback period goes beyond the 25-year planning horizon, and SI witness Mullett testified that Duke Energy Indiana's proposal "will lengthen the payback period and lower the internal rate of return for participating customer's capital investments." Intervenor Solarize's Exh. 1, p 14. IndianaDG and SI witnesses may believe this longer payback period is evidence that the instantaneous netting proposal is not just and reasonable, but the Commission is concerned with the reasonableness and implications for DG customers and non-DG customers.

It is important to consider that the DG Statute's rate for EDG is based on wholesale power prices. This has two significant implications. First, because the prescribed EDG rate is a market-based rate, not a cost-based rate, the DG Statute has obviated the need for a cost-of-service study to justify the EDG rate. Second, by basing the EDG rate on wholesale power prices, the DG Statute works to ensure that non-DG customers will not be paying significantly more for power provided by DG customers than they would pay for other power options available on the wholesale market.

We find the evidence in this proceeding demonstrates that DG customers' accelerated payback periods lead to the utility's non-DG customers paying costs associated with the excess electricity Petitioner's DG customers export to its system – exports the utility is obligated to accept – including through the FAC. Under a monthly netting paradigm, Duke Energy Indiana's non-DG customers would also pay for the electricity consumed by the DG customers when they take electricity from Petitioner at no cost, at a different time later in the month. EDG is not, literally, stored for the DG customer's future use. Accordingly, we cannot conclude it is just and reasonable for Petitioner's other customers to subsidize the payback periods of DG customers by the continuation of monthly netting, as opposed to instantaneous netting. Monthly netting is prescribed for net metering customers. The legislature created a specific EDG rate that differs from the net metering retail rate. Furthermore, the DG Statute does not prescribe the frequency with which a utility must calculate EDG, leaving it to the Commission to exercise its expertise and discretion in determining the reasonableness of a utility's proposed netting period for EDG.

Without acknowledging the legislative intent to limit the amount of DG that utilities must accept, Mr. Inskeep asserts that Duke Energy Indiana's instantaneous netting proposal is not "reflective of the value of the benefits DG customers provide." Intervenor IndianaDG's Exh. 1, p. 28. Similarly, Mr. Rohaly offers testimony about the purported benefits that distributed customer owned solar generation bring to DEI and all DEI customers. However, the Commission finds the record does not support finding any such benefit justifies subsidization by non-DG customers of DG customers' payback periods.

If a DG customer wants to continue the monthly netting paradigm and use the electricity they produce over the course of a month to offset their consumption later in the month, they have the option to do so by installing additional behind the meter equipment such as a battery. Mr. Inskeep may complain that "DEI offers no proposal to mitigate the upfront cost of customer investments in battery energy storage systems, or innovative proposals. . . that would help customers and the grid benefit from batteries' capacity located on the customer's premises," but this is no justification for rejecting Duke Energy Indiana's Rider EDG. *Id.* at 74. It is also not surprising that Duke Energy Indiana's Rider EDG, which Petitioner repeatedly noted is intended simply to comply with the DG Statute, would not include proposals to subsidize battery energy

storage. This does not change the fact that batteries for home solar systems are available in today's market and can be purchased by DG customers if they so choose. Mr. Inskeep and Mr. Rohaly testified that battery energy storage systems are typically too expensive for individual customers to install, which would presumably lengthen the financial payback time for a solar energy investment.

The Commission is not persuaded the evidence IndianaDG offered, including but not limited to a lengthened payback period, requires Duke Energy Indiana to continue allowing its customers that own DG resources to, effectively, use its electric system as their battery by using EDG credited during prior periods to offset inflows occurring throughout the month. We also note that Section 19 provides support that legislative intent was otherwise, by providing a means to eliminate any subsidy if the EDG tariff does not do so. We find the instantaneous netting Duke Energy Indiana proposes reasonably limits using the grid as DG customer storage.

Based on the evidence, the Commission finds Petitioner's proposed instantaneous netting will reasonably result in new Rider EDG customers paying for the energy they are supplied by Duke Energy Indiana, no more and no less. Likewise, such instantaneous netting will compensate the DG customer for the energy they produce in excess of the amount Duke Energy Indiana supplied at that time at the prescribed EDG rate. Accordingly, the Commission finds Petitioner's proposed instantaneous netting mechanism yields rates that are just and reasonable for Duke Energy Indiana DG and non-DG customers, consistent with the DG Statute. The fact that DG customers are generating behind the meter and, consequently, buying less, will generate value and return on their private investment.

Additionally, Mr. Inskeep notes that Duke Energy Indiana's QF tariff represents Duke Energy Indiana's avoided cost rate under the PURPA, and as such, reflects Duke Energy Indiana's incremental cost. He argues that "[i]t would be an absurd result and illogical to assume the General Assembly intended for DG customers to be compensated at a rate that could be below DEI's avoided cost rate while also potentially experiencing less certainty in pricing from year-to-year." Above, we have found that Duke Energy Indiana's EDG rate is both compliant with the DG Statute and just and reasonable. This argument by Mr. Inskeep does not change our determination on this issue.

- C. <u>Technology</u>, <u>Tariff</u>, <u>and Other Concerns</u>. Intervenors raised various concerns related to Petitioner's ability to implement Rider EDG, including bill accuracy, data retrieval and processing, and provisions in Petitioner's proposed Sheet No. 54 implementing Rider EDG. These issues are addressed below.
- 1. <u>Technology Issues</u>. SI's witness Mr. Mullett questioned Petitioner's ability or readiness to implement Rider EDG and accurately bill DG customers under Rider EDG. Mr. Mullett also requested that the Commission reject Duke Energy Indiana's proposal and require the Company to refile with detailed information about its customer information systems. Petitioner presented substantial evidence supporting its capabilities, readiness, and ability to implement and accurately bill customers under Rider EDG, and in fact, Petitioner's witness, Mr. Flick, testified that "Details about Duke Energy Indiana's customer information systems are not necessary to the resolution of this proceeding. Section 17 outlines the scope of this proceeding, and details

concerning the utility's customer information systems are not within this limited statutory scope." Petitioner's Exh. 2, p. 23. Furthermore, Petitioner's evidence reflects it is currently retrieving and processing data from its AMI meters and will be positioned to implement its Rider EDG rates with the ability to properly and accurately bill its EDG customers.

Duke Energy Indiana's Rider EDG related to disconnecting devices. As Mr. Inskeep testified, Duke Energy Indiana "will continue to require the installation of an external disconnect for all generation interconnections' and '[t]he disconnect, by mechanical operation, must interrupt the flow of energy on the electric conductors physically connected to the generation source. The use of contactors, relays inverters or other similar equipment are not permitted." Intervenor IndianaDG's Exh. 1, p. 79. Mr. Inskeep testified that, based on his understanding, external disconnect switches are not necessary for isolating a small, inverter-based DG facility, such as a Level 1 interconnection. On this basis, he requested the Commission direct Duke Energy Indiana to clarify in its Rider EDG that disconnect switches are not required for Level 1 interconnections, and if the Commission declines to do such, that it direct Petitioner it to keep records of the number of instances, as well as the circumstances in which, its personnel use a DG customer's external disconnect switch.

On rebuttal, Duke Energy Indiana witness Mr. Flick stated this requirement provides an option of last resort to quickly and easily isolate a customer generator form the grid. He also testified there are several circumstances when the Company may need to isolate the customer's generation equipment: (1) the inverter is broken and not properly isolating the system; (2) the system is no longer in compliance with IEEE 1547, either through equipment, software, or firmware updates resulting in an islanding situation; or (3) storm restoration where technicians are working around affected areas and are not sure if a DG system is fully isolated or not. Such instances allow Duke Energy Indiana to isolate a customer's generator/battery without having to cut their service line or pull their meter. It also allows Duke Energy Indiana's personnel and first responders to utilize the disconnect in case of fire or other hazards at the property, ensuring their safety. As Mr. Flick further testified that under Indiana Administrative Code, 170 IAC 4-4.3-4(d), "The utility may require the applicant to include a disconnect switch as supplement to the equipment package." Petitioner's Exh. 2, p. 22. He also testified to changes in the 2020 National Electric Code ("NEC"), which include requiring an exterior, readily accessible emergency disconnect switch for first responders. Accordingly, it is Duke Energy Indiana's position that Mr. Inskeep's recommendation, including his proposed recordkeeping and reporting recommendation, should be rejected.

Notably, under Section 22 of the Distributed Generation Statute:

A customer that produces distributed generation shall comply with applicable safety, performance, and reliability standards established by the following:

- (1) The commission.
- (2) An electricity supplier, subject to approval by the commission.
- (3) The National Electric Code.

- (4) The National Electrical Safety Code.
- (5) The Institute of Electrical and Electronics Engineers.
- (6) Underwriters Laboratories.
- (7) The Federal Energy Regulatory Commission.
- (8) Local regulatory authorities.

Upon review of the evidence and tariff language, the Commission finds it is acceptable for Duke Energy Indiana to require disconnect switches for all DG facilities, no matter their size. Petitioner has presented evidence that disconnect switches on all DG equipment will further ensure safety of Duke Energy Indiana's personnel, Duke Energy Indiana's customers, and emergency personnel. If Level 1 interconnections for DG facilities were excepted from this requirement, this would lead to inconsistency between all other Level 1 interconnections and Level 1 DG interconnections, which could lead to confusion by Duke Energy Indiana's employees who service equipment, especially in an emergency. On the other hand, by allowing disconnect switches to be required on Level 1 interconnections for DG facilities, personnel servicing any customer-owned generation facility (whether DG or otherwise) will know that such equipment is required for all levels of interconnection. Duke Energy Indiana's disconnect requirement is also consistent with Section 22 of the DG Statute. On this basis, the Commission will not require Duke Energy Indiana to clarify its Rider EDG or require Duke Energy Indiana to remove the disconnect switch requirement for Level 1 interconnections. As such, this Commission also rejects SI's witness Inskeep's recommendation to require Duke Energy Indiana to keep records of the number of instances, as well as the circumstances in which, its personnel use a DG customer's external disconnect switch.

- 3. <u>Solar Vendor's liability</u>. Mr. Mullett raised concerns with potential solar vendor liability under Indiana Code § 8-1-40-23, Customer's Rights regarding Distributed Generation Equipment. As Mr. Mullett testified, "SI is concerned that the ambiguity and uncertainty of this Section of SEA 309 could become a 'trap for the unwary' insofar as solar vendors are concerned." Intervenor Solarize's Exh. 1, p. 32. He also testified that "we are concerned that these provisions taken together could create confusion in the minds of both vendors and customers which could lead to dispute, lawsuits and potential liability." *Id.* On rebuttal, Mr. Flick responded to Mr. Mullett's concerns. As Mr. Flick testified, he does not believe these concerns are germane to this proceeding as, "solar vendors' liability under the DG Statute is not relevant to this proceeding. Section 17 outlines the scope of this proceeding, and solar vendors' liability is outside of this scope. Indiana Code § 8-1-40-23 is a separate part of the DG Statute that sets out DG customers' rights vis a vis solar vendors." Petitioner's Exh. 2, p. 23. We agree with Mr. Flick that solar vendors' liability is not at issue in this proceeding, and we decline to address such in this proceeding.
- 4. <u>Cost-of-Service</u>. Mr. Inskeep, testified Duke Energy Indiana's instantaneous netting proposal is not based on sound ratemaking or cost-of-service principles and addressed how other states, such as Arkansas, justify its proposal by using a timely and properly designed cost-of-service study. In regard to Solarize Indiana's cost-of-service concerns, Mr. Mullett testified that "DEI simply has not demonstrated any cost-of-service basis for the 'instantaneous' netting proposed to define and calculate EDG" and is a departure from "best practices established in other states, and is not based on sound ratemaking or cost-of-service

principles." Intervenor Solarize's Exh. 1, p. 12.

While we understand and appreciate IndianaDG and SI's concerns, we do not agree. The DG Statute does not require a cost-of-service study to determine the rate for Rider EDG customers. This statutory framework—and this proceeding—relate to how DG customers will be compensated for the EDG that utilities must accept. Accordingly, the Commission finds it is beyond the matters at issue in this proceeding to mandate how Petitioner should present its cost-of-service study in a future base rate case.

5. Grandfathered Net Metering Customers. Mr. Boggess expressed concerns regarding protections for legacy net metering customers. Specifically, Mr. Boggess testified that, "absent from the DEI Proposal for future EDG customers are assurances that legislatively mandated protections are being provided for legacy NM customers". Intervenor Solarize's Exh. 3, p. 16. Mr. Flick responded in his rebuttal testimony, "the DG Statute provides specific protections for legacy net metering customers, through its grandfathering provisions." Petitioner's Exh. 2, p. 24. Mr. Flick further testified that "protections for legacy net metering customers are not a necessary part of this proceeding." *Id.* Section 17 outlines the scope of this proceeding, and protections for legacy net metering customers are not within this limited statutory scope.

While we understand and appreciate SI's concerns, we agree with Mr. Flick. This statutory framework, and this proceeding, relate to how DG customers will be compensated for the EDG utilities must accept. Accordingly, the Commission finds it is beyond the matters at issue to require Duke Energy Indiana to include in its proposal assurances and protections for legacy NM customers. Additionally, Indiana Code §§ 8-1-40-13 and -14 adequately address protections for legacy net metering customers and Mr. Flick testified that "Duke Energy Indiana will comply with these grandfathering provisions for qualifying legacy net metering customers." *Id*.

6. Other Issues. Mr. Inskeep recommended that, if we approve Duke Energy Indiana's Rider EDG, we "direct DEI to provide additional consumer information and education regarding its Rate QF – Parallel Operation for Qualifying Facility tariff to ensure all eligible DG customers have access to and are fully informed of this rate option, which might be more financially beneficial to certain DG customers or under certain circumstances than the proposed EDG tariff." IndianaDG's Exh. 1, p. 6.

Petitioner's Rider EDG is before the Commission to comply with the General Assembly's statutory directives, including the rate calculation, set forth in the DG Statute. Duke Energy Indiana's electric tariff is available on its public website at all times. The Commission, therefore, declines to require Petitioner, as part of this proceeding, to take additional steps to market or otherwise inform potential customers about Rate QF. This proceeding is mandated under Ind. Code § 8-1-40-10, which does not encompass other potential offerings for DG customers.

9. <u>Confidential Information</u>. Petitioner filed a Motion for Protection of Confidential and Proprietary Information on September 23, 2021, which was supported by an affidavit showing certain information to be submitted to the Commission constitutes trade secret information within the scope of Indiana Code §§ 5-14-3-4(a)(4) and 24-2-3-2. Specifically, the customer specific load

profiles and the meter technical reference guide utilized by IndianaDG witness, Mr. Inskeep, in his Workpaper 1 and OUCC witness, Mr. Alvarez, in his exhibits.

On September 22, 2021, IndianaDG filed its Notice of Intent to File Confidential Workpapers. On October 20, 2021, a Docket Entry was issued in which the Commission found the information outlined in the Motion for Protection of Confidential and Proprietary Information was confidential on a preliminarily basis. On October 21, the OUCC filed its Notice of Filing Confidential Information. The Commission finds all such information should continue to be afforded confidential treatment under Indiana Code §§ 8-1-2-29 and 5-14-3-4 and is, therefore, exempt from public access and disclosure by Indiana law and shall be held and protected from public access and disclosure by the Commission.

IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:

- 1. Duke Energy Indiana's calculation of its proposed rate for the procurement of EDG is approved. Duke Energy Indiana is directed to file in this Cause, no later than March 1, 2023, an update to its EDG rate, calculated in the same manner.
- 2. Duke Energy Indiana's Rider EDG is approved, including the use of instantaneous netting and the requirement for disconnect switches, effective July 1, 2022, subject to annual updates to the EDG rate as required by the DG Statute and Ordering Paragraph 1.
- 3. Duke Energy Indiana is authorized to recover credits provided to Rider EDG customers through its FAC proceeding. Any unused EDG credits shall be flowed back to customers through Duke Energy Indiana's FAC proceedings.
- 4. Prior to implementing Rider EDG and proposed Sheet No. 54 of Duke Energy Indiana's Tariff for Electric Service, Duke Energy Indiana shall file an updated EDG Tariff under this Cause for approval by the Commission's Energy Division. Such updated Tariff should include the language agreed to by Duke Energy Indiana stating that any unused credits will be flowed back to all retail customers through the FAC process.
- 5. Until otherwise ordered, Duke Energy Indiana shall annually update its approved EDG rate by March 1 via a compliance filing under this Cause based on updated LMP data for the prior calendar year.
- 6. The materials filed in this Cause under seal are declared to contain trade secret information and deemed confidential under Indiana Code §§ 5-14-3-4 and 24-2-3-2, are exempt from public access and disclosure, and shall be held by the commission as protected from public access and disclosure consistent with Finding No. 9 above.
 - 7. This Order shall be effective on and after the date of its approval.

HUSTON, FREEMAN, AND ZIEGNER CONCUR; KREVDA ABSENT:

APPROVED: JUL 06 2022

I hereby certify that the above is a true And correct copy of the Order as approved.

D V

Dana Kosco Secretary of the Commission