

ORIGINAL

Commissioner	Yes	No	Not Participating
Huston	√		
Freeman	√		
Krevda	√		
Ober	√		
Ziegner	√		

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

IN THE MATTER OF THE VERIFIED)
PETITION OF INDIANAPOLIS POWER &)
LIGHT COMPANY D/B/A AES INDIANA) CAUSE NO. 45504
PURSUANT TO IND. CODE § 8-1-40-16 FOR)
APPROVAL OF RATE FOR THE) APPROVED: JAN 26 2022
PROCUREMENT OF EXCESS DISTRIBUTED)
GENERATION BY AES INDIANA)

ORDER OF THE COMMISSION

Presiding Officers:
Stefanie N. Krevda, Commissioner
David L. Ober, Commissioner
Carol Sparks Drake, Senior Administrative Law Judge

On March 1, 2021, Indianapolis Power & Light Company d/b/a AES Indiana (“AES Indiana” or “Petitioner”) filed a Verified Petition with the Indiana Utility Regulatory Commission (“Commission”) for approval of its proposed tariff rate (“Rider 16”) for the procurement of excess distributed generation (“EDG”) pursuant to Ind. Code § 8-1-40-16 (“Section 16”). That same date, Petitioner prefiled the direct testimony and workpapers of Matthew D. Fields, AES Indiana Senior Engineer, Regulatory Affairs. On May 28, 2021, AES Indiana filed supplemental direct testimony for Mr. Fields, and AES Indiana filed revisions to Mr. Fields’ supplemental direct testimony on September 14, 2021.

A Stipulation and Agreement upon the procedural schedule was filed on June 17, 2021, and a docket entry establishing the procedural schedule was issued on June 18, 2021.

Petitions to intervene were filed by Citizens Action Coalition of Indiana, Inc. (“CAC”) on March 3, 2021, Solar United Neighbors (“SUN”) on March 23, 2021, and the Indiana Distributed Generation Alliance (“IndianaDG”) on June 29, 2021. The petitions were granted by docket entries dated March 12, April 1, and July 8, 2021, respectively.

On August 17, 2021, the Indiana Office of Utility Consumer Counselor (“OUCC”) prefiled the testimony of Anthony A. Alvarez, Utility Analyst in the OUCC’s Electric Division. That same date, IndianaDG prefiled the testimony of Benjamin D. Inskeep, Principal Energy Policy Analyst with EQ Research LLC, and Kendall Ludwig, Director of Operations for Jefferson Electric LLC. On August 19, 2021, IndianaDG filed Mr. Inskeep’s workpaper.

On September 14, 2021, Petitioner prefiled the rebuttal testimony of its case-in-chief witness, Mr. Fields, along with the rebuttal testimony of James L. Cutshaw, AES Indiana Senior Manager, Rates and Regulations.

Prior to the hearing, the parties agreed upon certain facts, the admission of specific discovery responses, and waived cross examination of all witnesses. They also filed stipulated facts on October 15, 2021. The evidentiary hearing scheduled for October 18, 2021, at 9:30 a.m. was continued to November 16, 2021, at 1:00 p.m. in Room 222 of the PNC Center, 101 West Washington Street, Indianapolis, Indiana. At the November 16, 2021, hearing, Petitioner, the OUCC, CAC, SUN, and IndianaDG participated, by counsel, and the parties' evidence was admitted without objection.

Based upon applicable law and the evidence, the Commission finds:

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. AES Indiana is a public utility as defined in Ind. Code § 8-1-2-1 and an electricity supplier under Ind. Code § 8-1-40-4(a). Petitioner is subject to the Commission's jurisdiction in the manner and to the extent provided by Indiana law. Section 16 requires an electricity supplier to file a petition with the Commission requesting a rate for its procurement of EDG from that electricity supplier's customers. Accordingly, the Commission has jurisdiction over Petitioner and the subject matter of this proceeding.

2. Petitioner's Organization and Business. AES Indiana is a corporation organized and existing under Indiana law, with its principal office in Indianapolis, Indiana. Petitioner owns and operates plant and equipment within Indiana used for the production, transmission, delivery, and furnishing of electric service to the public. AES Indiana renders retail electric utility service to more than 500,000 customers located principally in and near the City of Indianapolis and in portions of the following Indiana counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Marion, Morgan, Owen, Putnam, and Shelby.

3. Applicable Law. With Senate Enrolled Act 309 ("SEA 309"), the Indiana General Assembly enacted the Distributed Generation Statutes (Ind. Code ch. 8-1-40) and established a new statutory paradigm under which Indiana's electricity suppliers, including Petitioner, will procure the electricity their customers with qualifying distributed generation ("DG") resources supply back to them at a rate established by a statutory formula. 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.

Subject to Ind. Code §§ 8-1-40-13 and -14, AES Indiana'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 Petitioner's most recent summer peak load or July 1, 2022. Ind. Code § 8-1-40-10 ("Section 10"). AES Indiana submitted evidence showing Petitioner reasonably expects its current net metering tariff will remain available until July 1, 2022.

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

The commission shall review a petition filed under section 16 [IC 8-1-40-16] 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 electricity¹ paid by the electricity supplier during the most recent calendar year; multiplied by
- (2) one and twenty-five hundredths (1.25).

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

Following approval of Rider 16, Section 16 requires AES 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.” Section 16. 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 16, AES Indiana requests approval of its proposed initial rate for the procurement of EDG, with that rate to be effective July 1, 2022, and remain in effect until replaced in a subsequent filing. Consistent with Ind. Code § 8-1-40-18 (“Section 18”), AES Indiana’s proposed Rider 16 will compensate customers via a credit on their monthly bill, with any excess credit carried forward and applied against future volumetric charges to the Rider 16 customer for as long as that customer receives service from AES Indiana at the premises. Petitioner proposes to use the readings on Channel 2 of its bidirectional meter as reflecting EDG because, according to Petitioner, each reading on Channel 2 reflects the difference between the electricity supplied by AES Indiana to the DG customer and the electricity supplied back to AES Indiana by the DG customer. AES Indiana also requests authority to update Rider 16 annually, by March 1, via a compliance filing, in addition to all other appropriate relief.

5. Petitioner’s Case-in-Chief. Mr. Fields presented Petitioner’s proposed rate for the procurement of EDG. He stated that per Section 17, the proposed rate is the product of the average marginal price of electricity paid by the electricity supplier during the most recent calendar year; multiplied by one and twenty-five hundredths (1.25). He testified that as shown in Petitioner’s Workpaper MDF-1, AES Indiana calculated the average marginal price of electricity by averaging the 2020 real time hourly locational marginal prices (“LMPs”) at the IPL.IPL load node for every hour in 2020, which resulted in an average marginal price of \$22.37 per MWh. Mr. Fields added that Petitioner selected the IPL.IPL node because AES Indiana is charged for energy at that node. As Mr. Fields explained, the average marginal price of electricity AES Indiana paid in 2020 (\$22.37/MWh) multiplied by 1.25 is \$27.96 per MWh, which is AES Indiana’s proposed initial

¹ Ind. Code § 8-1-40-6 (“Section 6”) of the Distributed Generation Statutes 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.”

EDG rate. When converted to a per kilowatt-hour basis (i.e., divided by 1,000) that rate is \$0.027960 per kWh.

Mr. Fields presented AES Indiana's proposed Rider 16. He testified that eligible DG customers will receive a bidirectional meter, meaning the meter has two channels. At any moment, electricity flows through AES Indiana's bidirectional meter in only one direction – electricity is either being supplied by AES Indiana to the DG customer or the electricity is being supplied back to AES Indiana by the DG customer.² Mr. Fields explained that meter Channel 1 reads the amount of electricity supplied by AES Indiana to the DG customer, and Channel 2 reads the amount of electricity supplied back to AES Indiana from the DG customer.³ If AES Indiana has supplied a DG customer with electricity in any instant, it necessarily means that at that instant, the DG customer's generation did not meet the customer's load, and the DG customer did not supply any electricity to AES Indiana in that instant; therefore, according to Mr. Fields, any reading on Channel 1 necessarily means the electricity AES Indiana supplied the DG customer (the amount read on Channel 1) exceeded the amount of electricity the DG customer supplied back to AES Indiana (which is zero).

Mr. Fields added that Channel 2 works similarly. He testified every Channel 2 reading reflects an instance when the DG customer supplied electricity back to AES Indiana and did not receive electricity from AES Indiana; therefore, whenever there is a reading on Channel 2 the amount of electricity supplied back to AES Indiana by the DG customer necessarily exceeds the amount of electricity AES Indiana supplied the DG customer (which is zero) at the time of the Channel 2 reading. Accordingly, each reading on Channel 2 reflects a positive difference between: (1) the electricity that is supplied by Petitioner to the DG customer and (2) the electricity supplied back to AES Indiana by the DG customer; consequently, each Channel 2 reading reflects EDG as defined in Ind. Code § 8-1-40-5 ("Section 5") for the read.

Mr. Fields testified that while Petitioner's meters read virtually every instance of electricity flow, either to the DG customer or back to AES Indiana, AES Indiana records only the aggregate of such flows for each 15-minute period. He stated the 15-minute data recorded on Channel 2 is the 15-minute sum of each instance in that period when the amount of electricity the DG customer supplied back to AES Indiana exceeded the amount of electricity AES Indiana supplied the DG customer. Thus, the recorded amount on Channel 2 for each 15-minute period reflects the total EDG for that 15-minute period. He testified the sum of the recorded amounts on Channel 2 for a month will, therefore, be the total EDG for that billing period which AES Indiana will procure at the approved EDG rate. Mr. Fields stated that, similarly, the 15-minute recording for Channel 1 is the 15-minute sum of each instance in that period in which AES Indiana supplied the DG customer with electricity for which Petitioner will charge the DG customer at retail rates.

Mr. Fields presented Table 1 at page 6 of his supplemental testimony to illustrate how AES Indiana will use the bidirectional meter data to calculate EDG. He explained that the total EDG

² Mr. Fields noted it is also possible for no electricity to flow through the meter. No electricity flow occurs when the customer's DG resource is perfectly supplying the customer's native load or times when there is no usage and no generation. In such an instance, AES Indiana does not supply the DG customer electricity, and the DG customer does not supply electricity back to AES Indiana.

³ The meters read current and voltage and convert those measurements to kWh. Petitioner's Ex. B, AES Indiana's Response to IndianaDG DR 3-1, Subpart (a).

for any period would not change if the Channel 2 readings were recorded more or less frequently. Recording electricity flow on Channel 1 and Channel 2 more frequently will only increase the data AES Indiana will have to manage, at increased cost to AES Indiana (and ultimately customers), with no discernable benefit.

Mr. Fields testified AES Indiana will provide DG customers with a bill credit for the total EDG for that billing period, calculated by multiplying the EDG rate in effect by the total kWh recorded on Channel 2 for the billing period. He stated any EDG credit will be applied to reduce retail volumetric charges but will not reduce Petitioner's Minimum Charge. He opined that this methodology is consistent with the Commission's Order in Cause No. 45378 approved on April 7, 2021, (the "45378 Order") and advised that customers will be able to access Channel 1 and Channel 2 data for at least each one-hour interval through Powerview® once the EDG procurement rate is implemented.

Mr. Fields testified that AES Indiana's methodology for calculating EDG directly follows Section 5 because every reading on Channel 2 identifies each instance when there is a positive difference between the electricity supplied by AES Indiana to a DG customer and the electricity that is supplied back to AES Indiana by a DG customer. Thus, the total reading on Channel 2 for a billing period identifies all EDG for that billing period. Mr. Fields testified Petitioner's proposed method for calculating EDG and compensating DG customers for EDG is also consistent with the 45378 Order. He explained that calculating EDG by taking the difference between the total monthly amount of electricity AES Indiana supplied to a DG customer and the total monthly amount of electricity a DG customer supplied back to AES Indiana would, however, impose an additional (or second) netting of those amounts not supported by the statutory language.

Mr. Fields presented AES Indiana Attachment MDF-1, the proposed Rider 16. He explained that Petitioner proposes to make Rider 16 available on and after July 1, 2022, and he advised that in accordance with Ind. Code § 8-1-40-10 ("Section 10"), the availability of Rider 16 is tied to net metering participation levels. AES Indiana expects its current net metering tariff will remain available until July 1, 2022, at which point Rider 16 will become available.

In explaining the customers eligible for Rider 16, Mr. Fields stated customers receiving retail electric service from AES Indiana who have a customer owned DG resource that meets the requirements of Ind. Code § 8-1-40-3 ("Section 3") and have executed an interconnection agreement with AES Indiana, installed compliant metering equipment, are not operating a net metering facility under Rider 9 (net metering), and otherwise comply with the terms of Rider 16 are eligible for Rider 16. He noted Rider 16 addresses insurance and indemnity, providing that any customer operating an eligible facility under Rider 16 must have reasonable amounts of insurance and agree to indemnify and hold AES Indiana harmless in accordance with 170 IAC 4-4.3-10. Mr. Fields added this is consistent with the 45378 Order.

Mr. Fields testified customers will receive a credit on their monthly bill and, consistent with Section 18, any portion of an EDG credit not used in a billing period ("Excess DG credit balance") will be carried forward and applied against future volumetric charges (excluding the Minimum Charge) so long as the customer elects to participate in Rider 16 and receives retail electric service from Petitioner at the premises. If the customer moves from the premises and at that time has an Excess DG credit balance, the amount of that unused Excess DG credit balance

will be credited to all retail customers through the Fuel Adjustment Clause (“FAC”). He stated this credit balance treatment is consistent with Section 18 and the 45378 Order. Petitioner proposes to update its EDG rate annually by March 1 in compliance with Section 16, with this update to be made via a compliance filing under this Cause.

Mr. Fields recommended the Commission approve AES Indiana’s method for calculating EDG and Petitioner’s proposed rate for the procurement of EDG. He also recommended the Commission approve AES Indiana’s proposals for the related EDG credits and authorize Petitioner to recover credits provided to Rider 16 customers through its FAC proceedings. Finally, he recommended the Commission approve Petitioner’s proposed Rider 16.

6. OUCC’s and Intervenors’ Direct Testimony.

A. OUCC’s Direct Testimony. Mr. Alvarez testified the definition of EDG in Section 5 is unambiguous. He stated that under Section 5, EDG means the difference between: (1) the electricity that is supplied by an electricity supplier to a customer that produces DG and (2) the electricity that is supplied back to the electricity supplier by the customer. Under Section 5, only two components must be present to determine EDG: (1) electricity that is supplied by an electricity supplier and (2) electricity that is supplied back to the electricity supplier by the customer. Mr. Alvarez stated Section 5 explicitly defines EDG as the resulting difference between these two components; therefore, to determine EDG, the utility must first take the difference between the electricity supplied to the DG customer and the electricity supplied back by the DG customer.

Mr. Alvarez opposed AES Indiana’s application of the term “excess distributed generation” and its metering and billing methodologies, and he recommended the Commission not approve proposed Rider 16. Mr. Alvarez stated he reviewed Petitioner’s methodology and suggests Petitioner maintain the consistency of using six decimal places throughout its calculations. He also expressed concern that based on Mr. Fields’ testimony and Rider 16, Channels 1 and 2 of Petitioner’s bidirectional meter for EDG customers registers multiple net readings of various energy components beyond the statute’s requirements of measuring EDG. He opined that the net measurements are fictitious in this situation.

Mr. Alvarez disagreed with Mr. Fields’ supplemental direct testimony regarding what Channel 1 and Channel 2 readings mean. After noting Mr. Fields acknowledged that, at any moment, electricity flows through AES Indiana’s bidirectional meter in only one direction, with one channel recording the flow of electricity one way and the other channel recording the flow of electricity the other way, per Mr. Alvarez, if electricity is flowing to or flowing from the customer, it is not possible to calculate a “net” flow if there is no “opposing” flow in the opposite direction; consequently, the meter is not netting any electricity. Mr. Alvarez testified that because energy can only flow in one direction at any given instant, instantaneous measurement will not record the two values the statute requires to calculate the difference to determine EDG. Thus, AES Indiana’s claim that the Channel 2 reading reflects EDG does not comply with the statutory definitions. He testified that taking the net in Channel 2 of energy provided to AES Indiana by the DG customer when there is no flow in the opposing direction is not netting. It is merely measuring the flow in Channel 2; consequently, the amount read on Channel 2 is not a net amount of electricity because at the time of the read on Channel 2 there is no electricity flowing on Channel 1. According to Mr.

Alvarez, when there is electricity flowing in one direction and no electricity is flowing in the other direction, it is impossible to take the “difference” as Section 5 requires for the EDG determination.

Mr. Alvarez provided his own calculations using Table 1 in Mr. Fields’ supplemental direct testimony. He concluded: (1) AES Indiana’s method for determining EDG does not comply with the Distributed Generation Statutes; (2) Petitioner’s definition and application of net inflow and net outflow to determine EDG do not conform with Section 5; (3) AES Indiana’s manner of capturing, measuring, and calculating EDG does not include the two values the statute requires when determining EDG; and (4) AES Indiana’s application of net outflow to measure EDG does not comply with the Distributed Generation Statutes’ requirement to calculate the marginal price of electricity and determine the appropriate rate to procure EDG. Mr. Alvarez recommended the Commission not approve AES Indiana’s proposed EDG Rider tariff.

B. IndianaDG’s Direct Testimony.

1. Benjamin D. Inskeep. Mr. Inskeep testified regarding AES Indiana’s EDG procurement rate, an alternative method for determining EDG, flaws in AES Indiana’s proposed EDG procurement rate, and flaws in Petitioner’s methodology for determining EDG. He also testified upon the availability of customer usage data through Petitioner’s Powerview® platform and the terms and conditions in proposed Rider 16 that he views as problematic.

In addressing Petitioner’s proposal to determine EDG based upon the readings on Channel 2 of a DG customer’s bidirectional meter, Mr. Inskeep took issue with this proposal and described why he believes it is inconsistent with the principles underlying just and reasonable rates. He asserted that maintaining monthly netting is sound policy, is supported by the plain language of the Distributed Generation Statutes, and makes logical and practical sense. Mr. Inskeep testified that AES Indiana’s proposal will have an adverse effect on potential purchases of solar DG resources. He also raised concerns with the terms and conditions of participation under proposed Rider 16. He recommended the Commission reject AES Indiana’s proposed EDG procurement rate and method for determining EDG, contending EDG should be determined by taking the difference between the total monthly amount of electricity AES Indiana supplies to a DG customer and the total monthly amount of electricity the DG customer supplies back to AES Indiana, as described in the net metering rules. If the Commission disagrees with his recommendation to maintain monthly netting under Rider 16, Mr. Inskeep recommends the Commission consider alternative policies that he views as less punitive than the methodology AES Indiana proposes. He also discussed his personal experience while trying to access granular usage data as an AES Indiana customer.

With regard to AES Indiana’s proposed EDG procurement rate, Mr. Inskeep testified that Petitioner calculated its EDG rate based on an average of the wholesale electricity price for all hours of the year. In his view, this calculation is unreasonable because Petitioner averaged the price for all hours of the year, including nighttime hours, which does not align with the hours a majority of DG systems generate electricity and, therefore, does not accurately reflect the marginal price of electricity during the hours a DG system provides EDG to Petitioner. Mr. Inskeep stated the EDG procurement rate should be based on the hours when the majority of DG resources (i.e., solar resources) produce electricity. He testified that Petitioner’s calculation using *all hours* in 2020, including nighttime hours, is not consistent with the purpose and intent of the EDG

procurement rate statute and leads to an unreasonable result. Mr. Inskeep opined that Petitioner should calculate the average marginal price of electricity AES Indiana paid during the most recent calendar year by using only the average marginal price when DG generation is being exported. He stated this results in a 2020 average LMP of \$25.34/MWh, or \$0.02534/kWh, which yields an EDG credit rate of \$0.03167/kWh. He stated this is 13.3% higher than Petitioner's proposed EDG credit rate. Mr. Inskeep testified the higher solar EDG credit from his calculation is an improvement on Petitioner's EDG credit calculation but is insufficient to meaningfully offset the more substantial negative impact of what he characterized as Petitioner's "no netting" proposal.

With regard to the issue of netting, Mr. Inskeep testified there is no language in the Distributed Generation Statutes stating monthly netting should stop or prescribing or inviting a new method for measuring EDG. Mr. Inskeep provided his research upon the legislative evolution of SEA 309. He stated AES Indiana's proposed method for determining EDG renders the first part of the definition of EDG meaningless. From his perspective, by defining EDG as the difference between electricity exports and imports, the Distributed Generation Statutes suggest netting values over time.

Mr. Inskeep asserted AES Indiana's proposal is insufficiently supported by its case-in-chief, creates perverse incentives rather than desirable price signals, substantially reduces the economic value of DG resources to customers thereby making these accessible primarily to higher income Hoosiers, produces a compensation rate that could be worse than Petitioner's Cogeneration & Small Power Production tariff, radically departs from current policy and best practices established in other states, and is not based on sound ratemaking or cost-of-service principles. He contended Petitioner's methodology for determining EDG will undermine solar jobs and economic development in Indiana, whereas monthly netting, as used in the current net metering rules, does not cause harm to AES Indiana or to non-DG customers. He shared his opinions upon the benefits of applying monthly netting as described in the net metering rules to determine EDG. According to Mr. Inskeep, if the Indiana General Assembly had intended all exported DG generation to be compensated at the EDG rate as occurs under Petitioner's proposal, the legislature could have defined EDG as the electricity that is supplied back to the electricity supplier by the customer, i.e., used only the second part of the statutory language and omitted the first part regarding the electricity that is supplied by the electricity supplier to a DG customer. Mr. Inskeep also discussed other netting periods and analyzed their impacts, and he recommended earned EDG credits be refunded to Petitioner's customers upon service termination.

Mr. Inskeep recommended the Commission reject Rider 16 and concluded Petitioner's proposal is inconsistent with the Distributed Generation Statutes. In his view, AES Indiana failed to prove its case and has not demonstrated its proposals will produce rates that are just and reasonable. He stated there are many good reasons why the Commission should reject AES Indiana's proposed method for determining EDG and, instead, maintain the longstanding, widely adopted, and commonsense monthly netting framework for determining EDG as Petitioner transitions from net metering by implementing Rider 16. Mr. Inskeep added that to the extent the Commission disagrees with his recommendation to maintain monthly netting when determining EDG, he recommends the Commission consider other alternatives to AES Indiana's proposed methodology, such as daily netting.

If the Commission approves AES Indiana's filing as proposed or with limited modifications, Mr. Inskeep recommended the Commission direct Petitioner to provide additional consumer information and education regarding Petitioner's Cogeneration & Small Power Production tariff to ensure eligible DG customers have access to and are fully informed of this rate option. He recommended the Commission also direct AES Indiana to modify its calculation methodology for the Rider 16 credit rate to recognize that solar produces and exports generation only during daylight hours and should be compensated accordingly. Mr. Inskeep also recommended the Commission ensure all DG customers are provided fair terms and conditions under net metering and Rider 16. Specifically, he testified the Commission should reject what he considers AES Indiana's taking without just compensation of EDG credits remaining at the end of a customer's service. He stated these terms are unjustified and will further harm EDG customers by imposing additional unnecessary costs or take away benefits DG customers are entitled to without providing fair compensation.

2. Kendall Ludwig. Mr. Ludwig testified about the adverse impact AES Indiana's EDG proposal will have on his business, other Indiana solar companies, his prospective customers, the ratepayers AES Indiana serves, and Indiana's economy. He stated that without a reasonable investment payback period, there will be very little demand for solar energy systems. Per Mr. Ludwig, his company and the other Indiana DG companies have many Indiana employees and also hire Indiana subcontractors, promoting economic development as well as increasing local and state tax revenues. He stated Indiana solar jobs totaled approximately 3,400 in 2020, but Petitioner's "no netting" proposal and low EDG rate could force the layoff of Indiana solar workers, cause companies like his to stop installing solar systems in Petitioner's service area, or result in Indiana solar jobs relocating to neighboring states with more favorable EDG rates. Mr. Ludwig testified it is inequitable for Petitioner to seek a regulatory treatment of EDG that will financially prevent Petitioner's customers from using the sun to illuminate, cool, and heat their homes. From his perspective, AES Indiana's EDG proposal is punitive and seeks to prevent customers from installing solar generation. Mr. Ludwig recommended the Commission reject AES Indiana's "no netting" and overall EDG proposal.

7. Petitioner's Rebuttal.

A. Matthew Fields. On rebuttal, Mr. Fields testified that AES Indiana determined its proposed EDG procurement rate by following the statutory language. He stated the statute does not direct that the EDG procurement rate be determined by averaging the price paid for electricity only during the subset of hours that are favorable to solar installations as IndianaDG advocates. Mr. Fields also explained that Midcontinent Independent System Operator ("MISO") provides its hourly LMP data, as shown in the workpaper provided with his direct testimony, in two decimal places per MWh pricing, i.e., \$XX.XX, with Mr. Alvarez failing to recognize that the data AES Indiana receives from MISO does not come in six decimals.

Mr. Fields was critical of Mr. Inskeep basing his proposed procurement rate only on the hours when solar resources generate the most electricity. He noted these hours are not necessarily the same for wind, biomass, or other eligible resources. He stated Mr. Inskeep attempts to justify his bias on the basis that nearly all DG systems are solar, but not all DG customers choose solar as their preferred resource. In addition, he stated Mr. Inskeep's proposed EDG procurement rate requires a more complicated calculation than Petitioner's and, therefore, conflicts with Senator

Hershman's expressed intent, as noted by Mr. Inskeep, that EDG procurement not be "all that complicated. . . . you and I can do [it] on the back of an envelope[.]" Petitioner's Exhibit No. 3 at p.3 quoting IndianaDG Exhibit No. 1 at p. 19 (quoting Senator Hershman). Mr. Fields testified that basing the EDG rate on a subset of hours, as Mr. Inskeep proposes, does not align with the Commission's findings in the 45378 Order at pp. 30-32 in which the Commission endorsed Vectren's EDG procurement rate being based on the marginal cost of electricity for all hours in the prior year consistent with Section 17.

Mr. Fields disagreed with Mr. Inskeep's "no netting" label when describing Petitioner's method for determining EDG. He testified every reading on meter Channel 2 reflects a positive difference between: (1) the electricity that is supplied by AES Indiana to the DG customer and (2) the electricity that is supplied back to AES Indiana by the DG customer; therefore, each Channel 2 reading reflects EDG as defined Section 5. He stated AES Indiana's proposed methodology compensates a DG customer for every kWh of EDG a DG customer supplies back to AES Indiana at the statutorily required rate.

Mr. Fields testified Mr. Alvarez incorrectly assumed that because electricity does not simultaneously flow through a bidirectional meter to both the DG customer and to AES Indiana, Channel 2 cannot capture the difference between the amount of electricity AES Indiana supplies the DG customer and the amount of electricity the DG customer supplies back to AES Indiana. He explained that Channel 2, however, captures the difference described in Section 5 at each read. Thus, the reading on Channel 2 reflects EDG at the time of each meter read, and the total recorded on Channel 2 for the month reflects EDG for the month. Mr. Fields provided the following hypothetical example to demonstrate the foregoing: Hypothetical Customer A has solar panels on her roof capable of generating 7 kW of electricity. At a given moment in time Customer A is generating at full capacity, 7 kW. At that same moment, she has only 5 kW of load at her home. For that moment, AES Indiana is supplying Customer A with zero electricity, but Customer A is supplying 2 kW of electricity back to AES Indiana. Under these facts, Channel 2 captures the 2 kW supplied back to AES Indiana, and at that moment, the difference between the electricity AES Indiana supplied Customer A (which was zero) and the amount of electricity Customer A supplied back to AES Indiana, is 2 kW, the value Channel 2 captured. Thus, Mr. Fields reaffirmed that for every given moment in time, Channel 2 captures the "difference" Section 5 describes and, therefore, captures and records EDG. Mr. Fields again stated the monthly total on Channel 2 is the sum of each recorded moment of EDG and reflects total EDG for the month.⁴

Mr. Fields stated Section 5 does not specify the time interval for determining EDG, as the Commission noted in the 45378 Order when stating, "[T]he statute [Section 5] is silent regarding the frequency with which a utility must calculate EDG." 45378 Order at p. 38. He testified nothing in Section 5 supports the conclusion that the difference, if any, must be determined monthly.

Mr. Fields testified that Section 5 also does not direct AES Indiana to make the three calculations Mr. Inskeep and Mr. Alvarez assert are required to determine EDG. He testified AES Indiana's methodology for determining EDG – the amount of electricity flow captured on Channel 2 of its bidirectional meters – depicts the calculation Section 5 requires and complies with

⁴ As indicated above in footnote 3, Petitioner's meters read current and voltage and convert these measurements to kWhs. Petitioner's Exhibit B, AES Indiana's Response to IndianaDG DR 3-1, Subpart (a).

the statutory language for determining EDG and the statutory simplicity the General Assembly intended. In contrast, Mr. Fields stated Mr. Alvarez and Mr. Inskeep's proposed methodology nets a second time what are already net values. He explained that the readings on Channels 1 and 2 each depict a net value – the difference at the time of each meter read between the amount of electricity AES Indiana supplies to the DG customer and the amount of electricity the DG customer is then supplying back to AES Indiana. Mr. Fields testified Mr. Inskeep and Mr. Alvarez propose to net the monthly total of these net numbers a second time, which is not appropriate or suggested in Ind. Code ch. 8-1-40.

Mr. Fields stated Mr. Alvarez and Mr. Inskeep's approach would allow DG customers the financial benefit of a battery without incurring the cost of a battery. By way of example, Mr. Fields explained that under their approach, if a DG customer has EDG of 5 kWhs on day 2 of the month, Mr. Inskeep and Mr. Alvarez allow the customer to carry that 5 kWhs forward into future days and use it to offset the DG customer's consumption on days when the customer actually receives more electricity from Petitioner than the customer supplies back. Thus, Mr. Inskeep and Mr. Alvarez allow the DG customer to, effectively, "bank" EDG kWhs to avoid paying for electricity the customer consumes on a later day which, substantively, is similar to the benefits a battery provides but without purchasing the battery. He also explained that allowing a customer to use EDG kWhs to offset electricity consumed from the utility – for which the customer would otherwise pay the retail rate – effectively values EDG at the retail rate, not the EDG rate Section 5 directs. Mr. Fields testified that even though Mr. Inskeep's proposed methodology does not literally require AES Indiana to store the DG customer's generation, his proposed monthly netting provides the DG customer the same financial benefit as if AES Indiana stored the customer's EDG. He testified that under Mr. Inskeep's monthly netting, the DG customer banks EDG then uses that EDG to offset consumption and avoids paying retail rates for that consumption just as if the customer had banked actual excess electricity and then later used that electricity to avoid paying for consumption.

Mr. Fields explained that DG customers require access to the grid to export EDG when their generation exceeds their respective loads, but the generation Petitioner receives from DG customers does not reduce AES Indiana's power plant operations. AES Indiana commits most of its generation into the MISO Day-Ahead Market. Mr. Fields stated the electricity Petitioner's residential DG customers generate is not dispatchable and is not sufficiently predictable for Petitioner to include that generation in its Day-Ahead generation and load estimates, noting that even if DG customers' generation were consistent and substantial, it would not be prolonged. Thus, if AES Indiana could temporarily meet load with reduced operations, it would inevitably have to increase those operations when DG customers' generation diminishes or stops. Mr. Fields stated a pattern of scaling back and then increasing operations would impose wear and tear costs on AES Indiana's generating assets, making it unlikely to justify the short-term benefit from DG customers' generation. In addition, AES Indiana will likely have to purchase electricity from the wholesale market as DG customers' generation diminishes while AES Indiana's generation ramps back up. Per Mr. Fields, these costs may practically preclude reducing power plant operations, even in the case of substantial generation from a DG customer.

Mr. Fields testified that in the 45378 Order at p. 37, the Commission found Vectren's instantaneous netting methodology for determining EDG is permissible under Section 5. He stated the Commission specifically found the electricity a DG customer supplies back to the utility through bidirectional meters like those AES Indiana uses is EDG as defined in Section 5. Mr.

Fields testified that while the parties' terminology may differ in these two cases, AES Indiana's proposed method for determining EDG is substantively identical to the methodology approved in the 45378 Order.

Mr. Fields described issues associated with Mr. Inskeep's payback calculations, including flaws he perceives in Mr. Inskeep's workpapers and in Mr. Inskeep valuing at least a portion of EDG at Petitioner's retail rate instead of the statutory EDG rate when calculating the monetary value of his netting methodologies.

In responding to Mr. Ludwig's testimony regarding the importance to DG customers of the payback period, Mr. Fields stated the Distributed Generation Statutes require utilities to procure EDG under the formula in these statutes, which is lower than retail rates. Accordingly, the change from net metering to EDG will necessarily increase a solar customer's payback period. He added that Mr. Inskeep in his testimony acknowledges this when stating, "The DG Statutes implements [sic] a new EDG credit rate to apply to EDG for customers served under a utility's EDG tariff and made other changes to DG policy in Indiana. This is a significant reduction in the value of a DG system and a significant change from the past net metering policy." Petitioner's Exhibit No. 3 at p. 17, *quoting* IndianaDG Exhibit No. 1 at p. 68. Mr. Fields asserted neither Mr. Ludwig nor Mr. Inskeep mention this important fact in their payback period discussions.

Mr. Fields discussed Petitioner's customers' access to information through Powerview®, provided screenshots of usage information and reviewed AES Indiana's plan for enhancements. He stated that with respect to the concern Mr. Inskeep raises regarding available information, residential DG customers with an AMI meter will have access to this information once the interval usage integration between AES Indiana's systems is complete. This is currently scheduled to be completed in the first quarter of 2022. Mr. Fields stated customers who install DG resources and execute a valid interconnection agreement with AES Indiana will have a bidirectional AMI meter installed at their premises and, consequently, access to this information once integration is complete. Mr. Fields also testified Powerview® is not the only mechanism for a DG customer to access usage and generation information. He explained there are other mechanisms to access usage information and stated manufacturers of residential solar equipment market technology that also provides these consumers with the ability to access granular usage and generation information. For instance, Mr. Ludwig works for Jefferson Electric, LLC which, based on Jefferson Electric's website, offers its customers SolarEdge components. He stated SolarEdge manufactures and sells meters that, according to SolarEdge, provide "full insight into the electricity produced by your solar system and the consumption of your household 24 hours a day, displayed in the SolarEdge monitoring mobile app in an easy to understand format." Petitioner's Exhibit No. 3 at p. 20. Mr. Fields provided the marketing material as Petitioner's Attachment MDF-R3 and testified the information Mr. Inskeep criticizes AES Indiana for not yet providing is already in the marketplace and available to consumers..

Mr. Fields recommended the Commission approve AES Indiana's method of calculating EDG and Petitioner's proposed rate for the procurement of EDG. He also recommended the Commission approve AES Indiana's proposals for the related consumer EDG credits, authorize AES Indiana to recover the credits provided to Rider 16 customers through its FAC proceedings, and approve proposed Rider 16.

B. James L. Cutshaw. Mr. Cutshaw testified the purpose of Petitioner's filing is to calculate a rate for the procurement of EDG as directed in Section 16. This proceeding is not the forum for challenging the policy behind the Distributed Generation Statutes. Per Mr. Cutshaw, attacks centered upon public policy and the impact of this policy on the solar industry should be directed to the Indiana General Assembly and are misplaced in this proceeding.

Mr. Cutshaw took issue with Mr. Inskeep's representation that AES Indiana did not provide any information on its cost to serve DG customers. He stated Petitioner directed IndianaDG to AES Indiana's last basic rate case, Cause No. 45029, where the most recent complete cost of service studies and rate design are available. Mr. Cutshaw testified these materials in Cause No. 45029 are available on the Commission's electronic docket, and Petitioner offered to provide the associated confidential information upon IndianaDG's execution of a non-disclosure agreement. He stated that as shown by Petitioner's Attachment JLC-R2 (AES Indiana's response to IndianaDG DR 1-2), AES Indiana explained that the cost of service and rate design underlying Petitioner's current retail basic rates were presented in Cause No. 45029, and Petitioner's current residential rates have both a fixed and a volumetric charge. In other words, Petitioner's current retail rates are supported by a full class cost of service study and rate design. He stated AES Indiana further explained in discovery that as a general matter, as a net metering customer decreases its use of Petitioner's retail service through the customer's own generation, the customer's net usage may preclude AES Indiana from recovering the level of fixed costs that are to be recovered through its volumetric retail rates.

In response to Mr. Inskeep's claims that Petitioner's proposed EDG procurement rate is not just and reasonable, Mr. Cutshaw testified it rests with the Commission to establish just and reasonable rates for retail electric service. In this proceeding, the Commission is charged with establishing a wholesale rate for the procurement of EDG in accordance with the Distributed Generation Statutes, and following the statutory framework the Indiana General Assembly established is neither unfair nor unjust. Mr. Cutshaw testified Petitioner is required by statute to procure its customers' EDG at wholesale because in this context, the EDG customer is providing a service. He explained that when Petitioner procures EDG from a retail customer who also self-serves, this is a wholesale purchase. The procurement of EDG at a wholesale rate, as provided in the Distributed Generation Statutes, reduces the financial impact on non-EDG customers as compared to the purchase of such generation at the retail basic rate established in Cause No. 45029. Mr. Cutshaw testified that under the net metering framework, self-generators are paid approximately two to three times the actual value of their energy on the market, whereas SB 309 transitions such sales to a new paradigm. The Distributed Generation Statutes preserve the net metering framework for existing and near-term self-generators but require new self-generators, after the transition period, to be subject to a different paradigm. Mr. Cutshaw stated new self-generators can "sell the excess they produce back to the grid, receiving a credit based on the value of that same generation on the market, plus 25%." Petitioner's Exhibit No. 4 at p. 9. In other words, the Distributed Generation Statutes protect the self-generators while also offering "more fairness for all of the utility's customers who are paying for the incentives of Hoosiers who net meter today." Petitioner's Exhibit No. 4 at pp. 9-10 (quoting Indiana DG Exhibit 1, Attachment BDI-7, State Senator Brandt Hershman, *Utility fairness for Hoosier customers, Indianapolis Star Opinion*, February 23, 2017).

Mr. Cutshaw described the cost of service basis underlying the residential retail rates as approved by the Commission in Cause No. 45029. He stated an AES Indiana residential customer who also self-supplies is part of the residential retail service class. Because the majority of Petitioner's fixed cost of providing service is recovered through the volumetric residential retail service energy charge, AES Indiana does not completely recover its cost of providing service when a residential customer uses less electricity, but a DG customer continuously maintains full access to and use of Petitioner's retail service. It is, consequently, reasonable and consistent with cost causation principles for the DG customer to pay cost based rates for the retail service Petitioner provides and not use the Distributed Generation Statutes to gain a windfall at the expense of Petitioner's other retail service customers. Mr. Cutshaw took issue with Mr. Inskeep's contention that Petitioner has no understanding of the cost incurred to serve an EDG residential customer.

Mr. Cutshaw stated Petitioner's procurement of EDG is a wholesale transaction. The associated cost is not a cost to "provide service *to*" the customer; rather, it is a cost incurred by AES Indiana to buy something *from* the customer. He stated spending money to buy something from the customer will not cause Petitioner to recover more than its cost to provide retail service to that customer, adding that the cost of the required EDG purchase is recovered through retail service rates charged to all customers via the fuel charge. Mr. Cutshaw stated this purchase increases Petitioner's cost of providing retail service, and if the OUCC and IndianaDG's proposed phantom storage approach were adopted, the resulting cost increase would be significantly greater than Petitioner's proposed implementation of the Distributed Generation Statutes. Mr. Cutshaw opined that Mr. Inskeep's suggestion that Petitioner's wholesale purchase, plus the 25% premium, and proposed netting period are unfair to DG customers should be rejected.

Mr. Cutshaw explained that Mr. Inskeep's discussion of Dr. Gaske's testimony from Cause No. 45029 is incomplete, and he quoted the topic from Dr. Gaske's testimony that Mr. Inskeep omitted. Mr. Cutshaw testified a DG benefit-cost analysis or a value of distributed solar study is not necessary to calculate the wholesale procurement rate under the governing statute (Section 17) and that procuring EDG at a wholesale based rate rather than a retail rate better aligns the price with the nature of the transaction. Because Petitioner's DG customer is compensated for EDG, he disagreed with Mr. Inskeep's contention that this customer is somehow incented to waste the customer's EDG rather than be compensated as provided in Section 18. Mr. Cutshaw stated that to the extent a DG customer considers it more advantageous to store his or her self-generated electricity for later use, there are battery storage systems available that allow the customer to do so. He noted Mr. Ludwig's employer, Jefferson Electric LLC, advertises on its website that it has teamed up with Tesla Energy to offer certified installation of battery storage systems, whereas Petitioner's system is not designed to store customer-generated electricity for later use by a DG customer. He testified when a DG customer cannot supply that customer's load, AES Indiana supplies the customer with electricity from the grid and must always match all its customer load with generation/supply on an instantaneous/real-time basis.

Mr. Cutshaw testified the monthly netting the OUCC and IndianaDG propose would allow a self-serve customer to "bank" the excess electricity the customer's system produces for use during periods when the customer's load exceeds the capacity of its self-serve generator. These proposals, in effect, act as if the utility stores the excess for use later, but that is not what actually occurs. Mr. Cutshaw stated the EDG procured is not and cannot be reasonably stored; consequently, the EDG cannot be used by AES Indiana to supply electricity to that self-serve

customer at a later time. This is why Mr. Cutshaw views these proposals as phantom storage. He stated if a self-serve customer wants to store the electricity the customer's system generates, the customer—not Petitioner—is in the best position to do so.

In response to Mr. Inskeep's recommendations concerning Petitioner providing additional consumer information (IndianaDG Exhibit No. 1 at p. 6), Mr. Cutshaw stated AES Indiana generally works to respond to inquiries from all its customers regarding rates and available program opportunities. He testified AES Indiana will be available to inform and educate customers regarding the Cogeneration & Small Power Production tariff and rate option, and Petitioner will continue to work with customers who contact AES Indiana to aid them in sorting out and determining the best rate options for that customer.

Mr. Cutshaw stated the Distributed Generation Statutes do not contemplate cash payments for the procured EDG. Rather, the statutes provide for bill credits to be carried forward and applied against future customer charges "for as long as the customer receives retail electric service from the electricity supplier at the premises." Section 18. He stated Petitioner's proposed treatment reflects that the procurement of EDG is mandated by statute, regardless of whether there is an actual need for the energy, and it is procured at a premium as compared to the wholesale market price. He stated if AES Indiana were to pay out remaining credits to its EDG customers, AES Indiana's other customers would lose the benefit of the forfeited credits through the FAC, plus the other customers would be required to pay rates reflecting Petitioner's cost of this payout. He stated Petitioner's proposed treatment of EDG credit balances after service ends does not "confiscate the property of its DG customers" as Mr. Inskeep states, is consistent with the 45378 Order at pp. 32-33, and should be approved. He testified Section 18 requires Petitioner to compensate its DG customers via a bill credit and does not contemplate cash payments for procured EDG.

Mr. Cutshaw testified the Distributed Generation Statutes replace the net metering paradigm with a construct that requires a rate to be credited for electricity delivered to the grid by customers at an average rate, similar to a wholesale power rate, plus 25%. Section 17. He testified that to properly implement the construct the statute requires for customers with new DG systems taking service after July 1, 2022, AES Indiana must change its billing practice to the process Mr. Fields discusses. Mr. Cutshaw testified the history of SB 309, as described by witness Cooper at page 7 of his rebuttal testimony in Cause No. 45506, shows this legislation started as a buy-all, sell-all bill and then evolved. It was never a net (energy) metering bill, except with respect to the grandfathering provisions.

8. Stipulated Facts and Admission of Discovery Responses.

On October 15, 2021, all the parties stipulated to the following facts:

- AES Indiana has not done an analysis specifically on the cost to serve its DG customers, because it does not regard DG customers as a separate customer class.
- AES Indiana has not developed estimates or calculations showing the financial impact of net metering service on its non-net metered customers, if any, or

estimates or calculations of potential cross-subsidies. AES Indiana has directed the other Parties to rate design testimony from its last rate case.

- AES Indiana’s position is that the EDG measurement method it has proposed is consistent with the EDG statute, but it is possible that other methods of calculating EDG like monthly, weekly, and daily netting may be consistent with the EDG statute’s silence on the netting interval. However, for the reasons outlined in both AES Indiana’s testimony in this case and the 45378 Order, it is AES Indiana’s opinion that its proposed method most closely aligns with the intent of the EDG statute and the public interest.
- Under its proposed EDG tariff, AES Indiana is not proposing that it calculate the difference between values recorded on Channel 1 of the customer’s meter and the values recorded on Channel 2 of the meter over any time interval.
- AES Indiana’s AMI meters, which are provided to DG customers, read electricity flow on either Channel 1 or Channel 2 approximately 2,520 times per second, or at a rate of 2.52 kHz.

Joint Exhibit A at pp. 1-2. The parties also stipulated to the admission of the following documents:

- The IURC 2021 Q1 Net Metering Report.
- AES Indiana’s Responses to IndianaDG’s Data Requests: 1-11, 1-13, 2-1, 2-7, 2-8, 2-20 (with Attachment 1), 2-22, 3-1, 3-2, and 3-3.
- IndianaDG’s Responses to AES Indiana Data Requests: 2-5, 2-6, 2-7, 2-11, 2-15, 2-27, 2-35, 2-36, 2-44, and 2-45.

Joint Exhibit A at p. 2; see Joint Exhibits B and C.⁵

9. Commission Discussion and Findings. This is the first EDG Rider Petition under the Distributed Generation Statutes for AES Indiana. Due to the timeline under the Distributed Generation Statutes for initiating these proceedings, all five of the large investor-owned electric

⁵ Consistent with footnote 1 in the Order issued in Cause No. 45505 on December 15, 2021, the Commission notes the parties agreed in this Cause to admit over 120 pages of new documentation at the hearing. While facilitating the waiver of cross-examination and, therefore, a brief evidentiary hearing, such agreements are ineffective in assisting the Commission with identifying the significance, if any, of new material since no witness explains or is cross examined concerning the stipulated documents. In this proceeding, the stipulated documents include a 91 page technical meter manual, but no related testimony was elicited about this manual. The practice of entering into stipulations to present additional documentation in lieu of conducting cross examination gained traction when the Commission and counsel were working remotely because of COVID-19 but should be revisited now that evidentiary hearings are again being conducted in person. If the material is properly for cross examination, parties are encouraged to conduct such examination so its significance is clear. If the material constitutes omitted case-in-chief, timely amendment or supplementation is encouraged, but wholesale agreement to admit dozens of stipulated pages is not helpful and invites little weight.

utilities in Indiana have either filed for their first EDG rate and received a Commission Order or are awaiting the Commission's Order on their respective petition. The 45378 Order issued on April 7, 2021, was the first such Order.⁶ In the 45378 Order, the Commission applied the Distributed Generation Statutes in light of the evidence presented in that proceeding. In this matter, additional and, in some instances, different evidence has been admitted. The Commission will again apply the Distributed Generation Statutes considering the evidence before us.

In the 45378 Order, the Commission directly addressed several contested issues that are, likewise, contested in this proceeding, including the following: (1) whether the reading on Channel 2 of a bidirectional meter captures EDG as defined in Section 5; (2) the appropriate rate under Section 17; and (3) recovery of EDG customers' credits upon discontinuing or terminating service under Section 18. It is noted AES Indiana does not use the term "instantaneous netting" as this term was used in Cause No. 45378, but based on AES Indiana's testimony in this matter, as discussed above, Petitioner agrees each meter read on Channel 2 of its bidirectional meters necessarily reflects the difference between the amount of electricity AES Indiana supplied to the DG customer and the amount of electricity the DG customer supplied back to AES Indiana at the time of the read.

A. Implementation and Calculation of Rider 16 under the Distributed Generation Statutes.

1. Timeliness of Petitioner's Filing for an EDG Rate. Section 10 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 one and one-half percent of its most recent summer peak load. Otherwise, Section 16 requires an electricity supplier to file a petition seeking approval of a rate for the procurement of EDG by March 1, 2021.

The Petition was filed on March 1, 2021. Petitioner's witness Fields testified that AES Indiana reasonably expects its current net metering tariff will remain available until July 1, 2022, based on participation levels. He stated AES Indiana's net metering tariff was 0.2% of its most recent summer peak load. The Commission finds AES Indiana filed its Petition by the Section 10 deadline and reasonably did not expect participation levels to necessitate an earlier filing.

2. Rider 16 Rate. Once a utility timely files for an EDG rate in accordance with Sections 10 and 16, Section 17 of the EDG Statutes requires the following:

The commission shall review a petition filed under section 16 [Ind. Code § 8-1-40-16] 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

⁶ The 45378 Order has been appealed, and that appeal is pending.

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, a credit construct is established, and the Commission is charged with approving the rate to be credited DG customers for EDG.

Mr. Fields explained and supported AES Indiana’s calculation of the Rider 16 rate. He testified that to determine the average marginal price of electricity under Section 17 that AES Indiana paid during 2020, i.e., the most recent calendar year, Petitioner averaged the 2020 hourly LMPs at AES Indiana’s IPL.IPL load node for all hours in 2020. That average marginal cost of electricity was \$22.37 per MWh. He testified the IPL.IPL load node is the node at which AES Indiana is charged for energy and is, therefore, representative of the marginal price Petitioner paid for energy. Mr. Fields multiplied the average marginal cost of electricity paid in 2020 by 1.25, yielding an amount of \$27.96 per MWh, which Petitioner converted to a per kWh basis (i.e., divided by 1,000) as shown below.

AES Indiana Excess Distributed Generation Rate Calculation	
2020 IPL.IPL Average Hourly Real-Time LMP	
Average LMP \$/MWh:	\$ 22.37
1.25 X Average LMP \$/MWh:	\$ 27.96
1.25 X Average LMP \$/kWh:	\$ 0.027960

OUCG witness Alvarez took issue with Mr. Fields’ methodology, suggesting AES Indiana maintain the consistency of using six decimal places throughout its calculations. He stated multiplying the average marginal price of \$22.37/MWh by 1.25 will yield \$27.962500/MWh, and converting it then to per kWh results in an EDG rate of \$0.027963 per kWh.

Mr. Fields explained in rebuttal that the data AES Indiana receives from MISO does not come in six decimals. MISO’s hourly LMP data is provided in two decimal places per MWh pricing, i.e., \$XX.XX. He testified that when calculating the average LMP for 2020 and adding 25% per the statute, AES Indiana maintained the same paradigm. When the rate was converted to a per kWh price, the price was divided by 1,000, and it was then converted to six decimal place pricing, i.e., \$0.027960. Since AES Indiana cannot dictate how MISO provides LMP data, and MISO data is provided to Petitioner in two decimal places as evidenced in Petitioner’s Workpaper MDF-1, the Commission finds Mr. Fields’ explanation and Petitioner’s methodology for conversion to a kWh price is reasonable.

IndianaDG recommended the Commission reject AES Indiana’s proposed methodology for determining the EDG procurement rate and advocated alternative methods for calculating this

rate. More specifically, IndianaDG witness Inskip contends that because solar resources comprise the majority of DG resources the “average marginal price of electricity paid by the electricity supplier during the most recent calendar year” should be determined by using only the hours in which solar resources produce electricity instead of using the LMPs for all hours in 2020 or, at a minimum, that the EDG rate should be weighted in favor of the hours during which solar resources produce electricity. Mr. Fields did not agree with IndianaDG’s position. He asserted that AES Indiana determined its proposed rate by following the statutory language, and neither Indiana DG nor the OUCC contend otherwise with respect to this computation.

The Commission is a creature of statute. *See* Ind. Code § 8-1-1-2. As such, the Commission “derives its power and authority solely from the 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 like the Commission is limited to the authority expressly 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 General Assembly directed how the “rate to be credited to participating customers by the electricity supplier for excess distributed generation” shall be calculated. “When the Legislature has specified the manner in which something is to be done, that is how it is to be done.” *Re Indianapolis Power & Light Co.*, Order in Cause No. 39437 at p. 54, 1993 WL 13811976, 145 P.U.R. 4th 513 (IURC August 18, 1993). In Cause No. 39437, the Commission found no authority in the statute to impose caps or guarantees. *Id.* In the current proceeding, when determining the rate to be credited to participating customers by Petitioner for EDG, Section 17 states the average marginal price of electricity for purposes of determining the EDG procurement rate shall be based on the “average marginal price of electricity paid by the electricity supplier during the most recent calendar year.” The Commission finds the average “during the most recent calendar year” reasonably refers here to the entirety of 2020, as the most recent calendar year. Section 17 does not direct that the EDG procurement rate be determined by averaging the price paid for electricity in 2020 during any subset of hours, including a subset of hours only favorable to solar installations. If the General Assembly had intended the “the average marginal price of electricity paid” to be the average price paid only during certain hours, the legislature could have stated that. It did not, directly or indirectly. Moreover, the Commission finds the phrase “paid by the electricity supplier during the most recent calendar year” is not reasonably interpreted to only refer to the LMPs paid at any point in time during the most recent calendar year since the possible different time periods for such a measurement would become innumerable and invite inconsistency in calculating the EDG rate.

Given the evidence and the applicable statutory language, the Commission finds the rate for procuring EDG and the calculation Mr. Fields presented are derived from, and consistent with, the formula directed in Sections 6 and 17. We will not diverge from the most reasonable reading of the Distributed Generation Statutes and calculate that rate based only on a subset of hours chosen by IndianaDG witness Inskip but not identified or endorsed in the statute. Accordingly, the Commission finds Petitioner’s proposed rate and its calculation were shown to be reasonable and comply with Sections 6 and 17; therefore, the Commission approves Petitioner’s proposed rate for crediting and procurement of EDG.

3. Carryover of EDG Credits. AES Indiana seeks approval of a crediting mechanism that affords a Rider 16 customer a credit on the customer's monthly bill, with any excess credit carried forward and applied against Petitioner's future volumetric charges to that EDG customer for as long as the customer receives electric service from Petitioner at the premises. AES Indiana's proposal to carry EDG credits forward is consistent with Section 18 and was not opposed; however, IndianaDG witness Inskeep objected to Petitioner's proposal that, upon discontinuing service at the premises, whatever EDG credit balance remains be credited to all AES Indiana retail customers through the FAC. Mr. Inskeep recommended remaining credits be paid to Rider 16 customers upon their termination service. He asserts the credits represent the approved value of EDG the customer generated, so to not compensate them for that value improperly takes the DG customer's property.

In evaluating the alternatives, the Commission looks first to the following directives in Section 18:

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 [Ind. Code § 8-1-40-17] 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. (emphasis added).

There is no language in Section 18 directing or supportive of a cash payment to Rider 16 customers. In this regard, the Commission finds it is important to recognize what the Distributed Generation Statutes say as well as what they do 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 charges for electric service which is consistent with the premise that the contemplated EDG credit is a retail rate crediting mechanism. Similar to Section 18, Sections 15 and 17 provide for the approved EDG rate 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. It is also noted that under Ind. 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, not to generate more energy than the customer needs, limiting the likelihood of a credit-positive position over the course of time. Petitioner must accept all EDG and in exchange is required to apply a credit against its charges, not make financial payouts. The extent of any credit when service is terminated rests with the DG customer, and any credits left by the terminating customer will be returned to Petitioner's customers via the FAC; they are not kept by AES Indiana. In addition, Mr. Cutshaw testified that under Indiana DG's proposal, Petitioner's other customers would lose the benefit of the forfeited (not confiscated) credits through the FAC, plus the other customers would be required to pay rates reflecting Petitioner's cost of any payout. We find the foregoing supportive of the General Assembly's omission of any reference to cash compensation or, ultimately, a cash refund.

Based on the Distributed Generation Statutes, the Commission approves AES Indiana's proposal to adopt the proposed retail rate crediting mechanism that affords Rider 16 customers a credit for EDG at the then-existing EDG rate, 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. Compliance Filing Updates. In accordance with Section 16, Petitioner proposes to update its Rider 16 rate annually, by March 1, via a compliance filing under this Cause. 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.” Section 16.

Having reviewed above (and approved) Petitioner’s method of calculating the EDG rate under Section 17 and after reviewing the evidence presented upon AES Indiana’s methodology for annually updating Rider 16, the Commission finds Petitioner’s proposal for annually updating its EDG rate is consistent with, and meets the requirements of, Section 16.

5. Recovery of Amounts Credited to Rider 16 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.” This was not opposed by any party. Based on the statutory language and Petitioner’s proposal, the Commission finds AES Indiana should be authorized, consistent with Section 15, to recover amounts credited to Rider 16 customers through its FAC.

B. EDG Tariff Determination. In addition to seeking approval of its EDG procurement rate, AES Indiana asks the Commission to approve its proposed EDG tariff, i.e., Rider 16, so Petitioner can apply the EDG procurement rate. Under Rider 16 as proposed, monthly EDG will be determined from the sum of recorded readings on Channel 2 of each Rider 16 customer’s bidirectional meter because each such reading reflects the difference between the amount of electricity supplied by Petitioner to the Rider 16 customer and the amount of electricity the Rider 16 customer supplied back to AES Indiana at the time of the meter read, and thus, each such read complies with the statutory definition for EDG.

The OUCC and Intervenors challenged Petitioner’s position. They contend the “difference” between the amount of electricity supplied to the Rider 16 customer and the amount of electricity the Rider 16 customer supplied back to AES Indiana must be calculated over some time interval. IndianaDG primarily urges that the “difference” be calculated monthly – i.e., that the total amount of electricity supplied to the DG customer be calculated for the month; that the total amount of electricity the DG supplies back to AES Indiana be calculated for the month; and then the difference between those two monthly totals is calculated. The Commission addresses these issues below.

1. Section 5. 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 each Channel 2 reading reflects the difference between the amount of electricity Petitioner supplied to the Rider 16 customer and the amount of electricity the Rider 16 customer supplied back to AES Indiana at the time of the meter read. Thus, each such read meets the statutory definition for EDG. As Mr. Fields explained on rebuttal:

[A]t any moment electricity flows through AES Indiana's bidirectional meter in only one direction—electricity is either being supplied by AES Indiana to the DG customer or electricity is being supplied back to AES Indiana by the DG customer. The meter reads the amount of that flow, in either direction, at each moment in time. Channel 2 records the electricity the DG customer supplies back to AES Indiana. A DG customer supplies electricity back to AES Indiana only if the customer's generation at that time exceeds his or her load. Channel 1 records the electricity AES Indiana supplies to the DG customer, which does not occur when the DG customer's generation exceeds his or her load. Stated alternatively, AES Indiana supplies electricity to a DG customer only when the customer's generation does not satisfy the customer's load.

If at moment A the DG customer generated 7 kW of electricity but her load was only 5 kW of electricity, then Channel 2 would read 2 kW. In that same moment Channel 1 would read 0 since AES Indiana was not supplying any electricity to the DG customer at that moment, because customer generation exceeded her load. In that example, the amount of electricity supplied back to AES Indiana by the DG customer (i.e., the amount read on Channel 2) necessarily exceeds the amount of electricity AES Indiana supplied the DG customer (which is zero) by the amount read on Channel 2. Because electricity flows in only one direction through AES Indiana's meters at a time, that is the case for every Channel 2 reading. Every reading on Channel 2 reflects a positive difference between: (1) the electricity that is supplied by AES Indiana to the DG customer; and (2) the electricity that is supplied back to AES Indiana by the DG customer, and therefore each Channel 2 reading reflects EDG as defined in Ind. Code § 8-1-40-5 for the read moment. Each Channel 2 reading necessarily reflects the net difference between Channel 1 and Channel 2 at each moment a read occurs. Mr. Inskeep's characterization of AES Indiana's method for calculating EDG as 'no netting' is simply inaccurate. Mr. Inskeep's statement that AES Indiana's methodology 'does not take "the difference between" part one and part two of the EDG definition' (IndianaDG Witness Inskeep, p. 25) is also inaccurate. The 'difference' between the 'inflow' and 'outflow' (as Mr. Alvarez and Mr. Inskeep use those terms) is captured each moment by AES Indiana's meters.

Petitioner's Exhibit No. 3 at pp. 5-6.

In explaining the effect of the OUCC and IndianaDG's proposed "monthly netting" method for determining EDG, Mr. Fields also testified as follows:

First, Mr. Alvarez’s and Mr. Inskeep’s proposed methodology nets a second time what already are net values. As explained above, the readings on channels 1 and 2 each depict a net value—the difference each moment between the amount of electricity AES Indiana supplies to the DG customer and the amount of electricity the DG customer supplies back to AES Indiana. Mr. Inskeep and Mr. Alvarez propose to net the monthly total of those net numbers, for a second time. That second netting is not mentioned in Ind. Code § 8-1-40. Second, Mr. Alvarez’s and Mr. Inskeep’s proposed methodology is more remunerative for DG customers than the statutory methodology AES Indiana has proposed. ... Third, Mr. Alvarez’s and Mr. Inskeep’s approach allows DG customers the financial benefit of a battery without incurring the cost of a battery. ... Fourth, allowing a customer to use EDG kWh to offset electricity consumed—for which the customer would otherwise have to pay the retail rate—effectively values EDG at the retail rate, not the EDG rate articulated in the statute.

Petitioner’s Exhibit 3 at pp. 10-11.

The Commission finds the OUCC and IndianaDG’s position that EDG should be determined by taking the difference between the total monthly amount of electricity Petitioner supplied to the DG customer and the total monthly amount of electricity the DG customer supplied back to AES Indiana is not supported by the Distributed Generation Statutes or the evidence, particularly Mr. Fields’ rebuttal testimony. Section 5 does not specify a time interval for determining EDG. IndianaDG admits that fact. Joint Exhibit C, IndianaDG’s Response to AES Indiana DR 2-45. IndianaDG’s monthly netting proposal also conflicts with Section 17. As discussed above, Section 17 requires AES Indiana to procure EDG at a statutory rate which is less than Petitioner’s retail rate. IndianaDG’s monthly netting proposal, however, values a portion of the DG customer’s EDG at Petitioner’s retail rates. Specifically, by allowing a DG customer to use EDG as an offset against the amount of electricity the customer received from AES Indiana, IndianaDG effectively gives the EDG used as an offset the retail value, contrary to Section 17. IndianaDG admits this in Joint Exhibit C, IndianaDG’s Response to AES Indiana DR 2-44. Separately, by allowing DG customers to “bank” (i.e., use EDG from an earlier period to setoff the cost of electricity later received from AES Indiana), IndianaDG’s proposed “monthly netting” effectively continues the net metering construct despite the General Assembly’s passage of the Distributed Generation Statutes. The legislature opted to sunset net metering and replace it with the Distributed Generation Statutes. *See* Petitioner’s Exhibit 4 at pp. 20-21. Given those decisions, the Commission finds it is not reasonable to infer that under Section 17 net metering’s “monthly netting” is to continue. Our conclusion is buttressed by the General Assembly having capped the amount of net metering capacity on an electricity suppliers’ systems but placing no comparable cap on EDG.

Having reviewed and weighed the evidence presented and considered the Distributed Generation Statutes, the Commission finds each reading on Channel 2 of AES Indiana’s bidirectional meters captures at that time the difference between the amount of electricity AES Indiana is then supplying the DG customer (which is zero if there is a reading on Channel 2) and the amount of electricity the customer is supplying back to AES Indiana; therefore, each reading on Channel 2 reflects EDG as defined in Section 5 and the monthly total of the readings on Channel 2 reflects EDG for any given month. We reach this conclusion mindful that if two separate

meters were installed at the DG customer's premises, one to measure only "the electricity that is supplied by an electricity supplier to a customer that produces distributed generation" and one to measure "the electricity that is supplied back to the electricity supplier by the customer," the net reading from these two meters will reflect "the difference between" the two statutory components under Section 5 used to compute EDG and will also reflect the same result as shown on Channel 2 of AES Indiana's bidirectional meter at that same moment if that meter was also installed at the customer's premises. Our finding is further supported by the substantial evidence Petitioner presented, summarized in Mr. Fields' following testimony:

[T]he readings on channels 1 and 2 each depict a net value—the difference each moment between the amount of electricity AES Indiana supplies to the DG customer and the amount of electricity the DG customer supplies back to AES Indiana.

Petitioner's Exhibit No. 3 at p. 10.

Every reading on Channel 2 reflects a positive difference between: (1) the electricity that is supplied by AES Indiana to the DG customer; and (2) the electricity that is supplied back to AES Indiana by the DG customer, and therefore each Channel 2 reading reflects EDG as defined in Ind. Code § 8-1-40-5 for the read moment. Each Channel 2 reading necessarily reflects the net difference between Channel 1 and Channel 2 at each moment a read occurs.

Petitioner's Exhibit No. 3 at p. 6.

Consistent with Mr. Fields' testimony, the Commission finds proposed Rider 16 determines EDG in accordance with Section 5 of the Distributed Generation Statutes. Each reading on Channel 2 of AES Indiana's bidirectional meter reflects at the time of the meter read 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 and, therefore, meets the statutory definition for EDG. That electricity only flows one direction at the time of the read does not mean the reading on Channel 2 is not EDG. The Commission finds a reading on Channel 2 of AES Indiana's bidirectional meter reflects the difference between both components of Section 5 at the time of that read and identifies EDG. AES Indiana's 15-minute recording of the Channel 2 readings does not change the calculation of EDG nor will totaling the 15-minute readings for a month; consequently, the Commission approves Petitioner's methodology for determining and calculating EDG. We do not, however, approve how EDG is described in Rider 16 on Original No. 172.2 in the second paragraph under "BILLING." In that provision of Rider 16, Petitioner relays net inflow and net outflow, but then extrapolates EDG instead of clarifying that EDG is the difference with respect to each read between outflow, i.e., the electricity Petitioner supplies to the DG customer, and inflow, i.e., the amount of electricity the DG customer supplies back to AES Indiana, consistent with Mr. Fields rebuttal testimony quoted above and Section 5. Petitioner is, therefore, directed to revise Rider 16 via a compliance filing with the Commission's Energy Division made under this Cause within 10 days of the date of this Order to clarify that under Rider 16, EDG is the difference set forth in Section 5.

The Commission further finds that AES Indiana's proposed aggregate recording of each Channel 2 reading in 15-minute intervals is permissible under Section 5. It does not affect the EDG calculation.

2. Reasonableness of rates and charges. IndianaDG witness Inskeep testified there is no language in the Distributed Generation Statutes that says monthly netting should stop. He urges the Commission to retain monthly netting, asserting that monthly netting is most consistent with producing just and reasonable rates. Mr. Inskeep also asserts AES Indiana's proposal "is not based on the Company's cost to serve DG customers." IndianaDG Exhibit 1 at p. 55. The Commission, however, finds recording the aggregate of each instant of EDG in a 15-minute interval, 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 and better align with system costs than Mr. Inskeep's monthly netting proposal. In so finding, we are persuaded the Distributed Generation Statutes are intended to be a transition from the net metering construct for new DG customers, with a primary value of DG prospectively being its offsetting of the DG customer's demand behind the meter, a value overlooked or unreasonably discounted by IndianaDG's focus upon payback periods and bill differences. We further find the evidence demonstrates that while netting the two elements set forth in Section 5 on a monthly basis would substantially reduce a DG customer's bill for the energy Petitioner provides, this reduction would improperly be shifted to AES Indiana's customers that do not have a generation resource.

Petitioner's witness Fields, on rebuttal, testified, "The EDG statutes require utilities to procure EDG pursuant to the formula in the EDG statute, which is lower than retail rates. Accordingly, the change from net metering to EDG will necessarily increase a solar customer's payback period." Petitioner's Exhibit No. 3 at p. 17, lines 3-6. Mr. Inskeep acknowledged this when testifying, "The DG Statutes implements [sic] a new EDG credit rate to apply to EDG for customers served under a utility's EDG tariff and made other changes to DG policy in Indiana. This is a significant reduction in the value of a DG system and a significant change from the past net metering policy." IndianaDG Exhibit No. 1 at p. 68. As Mr. Cutshaw explained, the Distributed Generation Statutes end the net metering paradigm and replace it with a construct that compensates customers for electricity they deliver to the grid at an average rate similar to a wholesale power rate, plus 25%. We note a credit mechanism is created under Section 18 for purposes of such compensation. The Commission concurs with Mr. Cutshaw that this proceeding is not convened to challenge the policy decisions behind the Indiana General Assembly's enactment of the Distributed Generation Statutes. Any such attack on public policy and IndianaDG's arguments regarding the impact of this policy on the solar industry are misplaced in this proceeding.

Petitioner's witness Cutshaw discussed his understanding of the underlying cost of service for residential retail rates. He explained that because AES Indiana's cost of service is based on fixed and variable costs, when a residential customer elects to self-supply, that customer uses its own generator to meet all or part of the customer's load and acquires less electricity, stating:

Because the majority of [Ppetitioner's] fixed cost of providing service is recovered through the volumetric residential retail service energy charge, [AES Indiana] does not completely recover its cost of providing service when a residential customer does not use as much electricity. Because a DG customer is allowed to maintain full access to and use [Ppetitioner's] retail service at any time, it is reasonable and

consistent with cost causation principles for the DG customer to pay cost based rates for retail service and not use the [Distributed Generation Statutes] to gain a windfall at the expense of other retail service customers.

Petitioner's Exhibit No. 4 at pp. 12-13, lines 17-5.

In addition to IndianaDG's cost of service concerns, IndianaDG presents arguments in support of monthly netting focused on the investment payback period for DG customers. Mr. Inskeep presents calculations and tables supporting his position that AES Indiana's proposals will nearly double the payback period for a typical residential customer to the point where it will no longer save a customer money over an assumed 25-year life of a rooftop solar facility. Mr. Ludwig also projects a customer's payback period will increase to 20-30 years under Petitioner's proposal. The Commission, however, must consider the interests of both DG customers and non-DG customers. We find the evidence demonstrates that, ultimately, DG customers' faster payback periods translate to Petitioner's other customers paying costs associated with the excess electricity DG customers put on AES Indiana's system – whether needed or not – through the FAC. Section 15. Under a monthly netting paradigm, Petitioner's non-DG customers will pay for the electricity the DG customers consume when they take electricity from Petitioner at no cost later in the month at a different time than their outflow. Based on the evidence, the Commission is not persuaded it is just and reasonable for Petitioner's other customers to subsidize DG customers by continuing monthly netting nor do we find statutory support for doing so. Monthly netting is prescribed for net metering customers. The General Assembly created a specific EDG rate that differs from the net metering retail rate, and the statute is silent regarding the frequency with which a utility must calculate EDG, leaving it to the Commission to exercise its expertise and discretion.

Mr. Inskeep contends monthly netting is preferable to Petitioner's proposed method for determining EDG because AES Indiana's method will cause prospective DG customers to invest in “[s]maller systems (e.g., those designed to only offset a customer's minimum usage and never export electricity) [that] typically have higher per-kW costs that can substantially erode the solar value proposition.” IndianaDG Exhibit No. 1 at p. 62, lines 22-24. In the Distributed Generation Statutes, the General Assembly manifested an intent to encourage DG customers to size their systems to meet their needs, not to build systems sending substantial energy to the grid to improve payback periods. To that end, Section 3 provides that DG facilities to which the statute applies are those with 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.” Section 3.

It is also important to remember that under the Distributed Generation Statutes, the rate for EDG is based on wholesale power prices. Thus, the prescribed EDG rate is a market based rate and not a cost based rate, with the Distributed Generation Statutes, effectively, obviating the need for a cost-of-service study to justify the EDG rate. In addition, by basing the EDG rate on wholesale power prices, the Distributed Generation Statutes help ensure non-DG customers do not pay significantly more for power DG customers provide than they would pay for other power options available to Petitioner on the wholesale market.

The Commission finds the evidence demonstrates that, “ultimately, DG customers' faster payback periods translate to the utility's [non-DG] customers paying costs associated with the excess electricity DG customers put on [Petitioner's] system – whether needed or not – including

through the FAC.” 45378 Order at p. 38. EDG is not, literally, stored for Petitioner’s DG customers’ future use. Accordingly, we find it is not just and reasonable for Petitioner’s other customers to subsidize the payback periods of DG customers by continuing monthly netting, as IndianaDG proposes. Monthly netting is prescribed for net metering customers, whereas the General Assembly created a specific EDG rate that differs from net metering’s retail rate. As the Commission has previously found, Sections 15 and 17 are “silent regarding 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.” 45378 Order at p. 38.

IndianaDG witness Ludwig asserts that DG customers create a benefit to Petitioner’s system that supports monthly netting. The Commission finds, however, that the record does not demonstrate such alleged benefit justifies non-DG customers subsidizing DG customers’ payback periods. As Mr. Fields testified, a DG customer that interconnects to AES Indiana’s distribution system still requires service and generating resources from Petitioner and for AES Indiana to supply their electricity needs when the DG customer’s resource generates insufficient electricity to meet that customer’s load. Mr. Fields further testified that generation from DG customers does not reduce AES Indiana’s power plant operations.

If a DG customer wants to continue the monthly netting paradigm and use the electricity the customer’s facility produces over the course of the month to offset the customer’s consumption, the DG customer may do so by installing behind the meter equipment, such as a battery. Batteries for home solar systems are now readily available, though IndianaDG witness Inskeep opined that “they are typically too expensive for individual customers to install.” IndianaDG Exhibit No. 1 at p. 76, lines 11-12. The Commission is not persuaded that IndianaDG demonstrated that cost or that a lengthened payback period requires AES Indiana to allow its DG customers to, effectively, use Petitioner’s electric system as their battery by using EDG credited during prior periods to offset inflows occurring any time during the month. As Mr. Fields testified, although Mr. Inskeep’s proposed methodology does not require AES Indiana to literally store the DG customer’s generation, his proposed monthly netting provides the DG customer the same financial benefit, as if AES Indiana stored the DG customer’s electricity. We also note that Section 19 provides support that legislative intent was otherwise by providing a means to eliminate a subsidy if the EDG tariff does not do so. We find Petitioner’s proposed netting methodology reasonably limits using the grid as DG customer storage and appropriately does so.

Based on the evidence, the Commission finds Petitioner’s netting methodology will reasonably result in Rider 16 customers paying for the energy they are supplied by AES Indiana, no more and no less. Likewise, AES Indiana’s proposal to aggregate every instant of EDG into 15-minute increments will compensate the DG customer for the energy they produce in excess of the amount AES Indiana supplied at that time at the prescribed EDG rate. Accordingly, the Commission finds Petitioner’s proposed recording of each instant in 15-minute increments yields rates that are just and reasonable for Petitioner’s DG and non-DG customers, consistent with applicable statutes. The fact that DG customers generate behind the meter and, consequently, buy less from Petitioner, will generate value and return on their private investment.

C. Data Availability and Other Concerns.

1. Data availability. Mr. Inskeep shared his experience attempting to access electricity consumption data as an AES Indiana customer and concluded Petitioner's customers are not able to easily determine their instantaneous electricity consumption or obtain the granular (e.g., 15-minute) historical usage data from AES Indiana needed to determine financial feasibility.

In Mr. Fields' supplemental direct testimony and rebuttal, he clarified that Petitioner intends to make Channel 1 and Channel 2 hourly information available to Rider 16 customers by the time its EDG procurement rate takes effect in 2022. Mr. Fields stated, "Customers can access both the Channel 1 and Channel 2 data for at least each one-hour interval through Power View once the Excess DG procurement rate is implemented." Petitioner's Exhibit No. 3 at p. 18. He also testified the technology for the information Mr. Inskeep criticizes AES Indiana for not providing is also in the marketplace and available to consumers. Per Mr. Fields, manufacturers of residential solar equipment market technology that provides consumers with the ability to access granular information about their usage and generation.

Notwithstanding Mr. Inskeep's anecdotal example of his experience, the Commission finds AES Indiana has shown Petitioner is committed to make hourly data available to DG customers once they sign an interconnection agreement and receive the bidirectional AMI meter; consequently, the Commission finds AES Indiana's plans for data availability are reasonable. Petitioner is directed to assure these are timely implemented consistent with Mr. Fields' testimony.

2. Other Issues. Mr. Inskeep recommends that if the Commission approves AES Indiana's Rider 16, we "direct AES Indiana to provide additional consumer information and education regarding its Cogeneration & Small Power Production tariff to ensure all eligible DG customers have access to and are fully informed of this rate option." IndianaDG Exhibit No. 1 at p. 6. In response, Mr. Cutshaw testified:

AES Indiana generally works to respond to inquiries from all customers regarding rates and program opportunities available to them. AES Indiana agrees to make ourselves available to inform and educate customers regarding the Cogeneration & Small Power Production tariff and rate option. [Petitioner] will continue to work with customers who contact us and aid them in sorting out and determining the best rate options for that specific customer.

Petitioner's Exhibit No. 4 at p. 19, lines 3-8.

While the Commission encourages good customer service, what is before us in this proceeding is Rider 16 and whether it complies with the Distributed Generation Statutes, including the rate calculation set forth in these statutes. AES Indiana's complete electric tariff is available on its public website. The Commission, therefore, declines to require Petitioner, as part of this proceeding, to take additional steps to market or otherwise inform potential DG customers about its Cogeneration & Small Power Production tariff. This proceeding is mandated under Section 10 and does not encompass Petitioner's other tariff offerings.

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

1. AES Indiana's rate for the procurement of EDG is approved in accordance with Ind. Code §§ 8-1-40-16 and -17.

2. AES Indiana's Rider 16 and proposed Sheet No. 16 of Tariff for Electric Service to implement Rider 16 are approved except a compliance filing shall be made within 10 days of the date of this Order, consistent with Finding No. 9.B. above, revising Original No. 172.2 to clarify EDG is the difference between the electricity Petitioner supplies the DG customer and the amount of electricity the DG customer supplies back to AES Indiana.

3. Prior to implementing the approved rate, Applicant shall file the tariff and applicable rate schedules under this Cause, revised per Order Paragraph No. 2 above, for approval by the Commission's Energy Division. Such rate shall be effective on or after the Order date subject to Division review and agreement with the amounts reflected, with its implementation to begin consistent with the Distributed Generation Statutes.

4. AES Indiana is authorized to recover credits provided to Rider 16 customers through its FAC proceedings.

5. Until otherwise ordered, AES Indiana shall annually update its approved EDG rate via a compliance filing by March 1 under this Cause based on updated LMP data for the prior calendar year.

6. AES Indiana shall make hourly data available to Rider 16 customers that sign an interconnection agreement and receive a bidirectional meter consistent with Finding No. 9.C. above.

7. This Order shall be effective on and after the date of its approval.

HUSTON, FREEMAN, KREVDA, OBER, AND ZIEGNER CONCUR:

APPROVED: JAN 26 2022

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

Dana Kosco
Secretary of the Commission