

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

**PETITION OF SOUTHERN INDIANA GAS)
AND ELECTRIC COMPANY D/B/A)
VECTREN ENERGY DELIVERY OF)
INDIANA, INC. FOR APPROVAL OF A) CAUSE NO. 45378
TARIFF RATE FOR THE PROCUREMENT)
OF EXCESS DISTRIBUTED GENERATION)
PURSUANT TO IND. CODE § 8-1-40 ET SEQ.)**

DIRECT TESTIMONY OF EDWARD T. RUTTER

ON BEHALF OF

INDIANA DISTRIBUTED ENERGY ALLIANCE

AUGUST 20, 2020

**DIRECT TESTIMONY
OF
EDWARD T. RUTTER
CAUSE NO. 45378**

1 **Q1. Can you please state your name and business address?**

2 A1. My name is Edward T. Rutter. My business address is 1776 North Meridian St., Suite
3 500, Indianapolis, Indiana.

4 **Q2. By whom are you employed and in what capacity?**

5 A2. I am employed with the firm of LWG CPAs and Advisors (“LWG”) as a Manager.

6 **Q3. Please briefly describe your educational and professional background, which you
7 believe is relevant to your testimony here.**

8 A3. I hold a Bachelor of Science degree in Business Administration from Drexel
9 University. I joined LWG in May 2019. Prior to joining LWG, I was employed for
10 more than six (6) years in the Resource Planning and Communications (“RPC”) Division
11 and the Natural Gas Division of the Indiana Office of Utility Consumer Counselor
12 (“OUCC”), where I was promoted mid-employment to Chief Technical Advisor. Prior to
13 my time at the OUCC, from 1980 to 2012, I was an independent consultant primarily
14 working with utilities, investors, and regulators. From 1973 until 1980, I was a
15 consultant for Associated Utility Services (“AUS”), primarily providing consulting
16 services to utility regulatory commissions and various utilities generally in Delaware and
17 Maryland. Prior to joining AUS, I was an accountant for South Jersey Industries and its
18 subsidiaries, including South Jersey Gas Company.

1 **Q4. Have you previously testified in any regulatory proceedings?**

2 A4. Yes. I testified frequently before the Indiana Utility Regulatory Commission
3 (“Commission”) in my prior role with the OUCC. I have also provided testimony before
4 utility regulatory commissions in Connecticut, Delaware, Florida, Georgia, Maryland,
5 Michigan, New Jersey, New York, North Carolina, Ohio, Oklahoma, Virginia and
6 Wisconsin. The subject of my testimony in these matters varied, including but not
7 limited to: return on common equity; appropriate capital structure for ratemaking
8 purposes; purchased gas adjustment clauses; rate base; operating expenses for
9 ratemaking; tax allowance for ratemaking purposes; valuation of assets and equity;
10 transmission, distribution and storage system improvement charge (“TDSIC”) plans;
11 demand side management (“DSM”) plans and trackers; and revenue requirement
12 development. I also represented the Internal Revenue Service (“IRS”) on the subject of
13 economic viability in the U.S. Tax Court.

14 **Q5. What have you done to prepare to give testimony in this Cause?**

15 A5. I reviewed Vectren’s Petition, Vectren’s pre-filed direct testimony, Vectren responses to
16 data requests, Ind. Code § 8-1-40, Vectren’s recently filed 2019/2020 Integrated
17 Resource Plan (“IRP”), recent Commission orders in TDSIC and DSM filings of Vectren
18 and other investor owned utilities and other pertinent information like the National
19 Association of Regulatory Utility Commissioners’ (“NARUC”) “Distributed Energy
20 Resources Rate Design and Compensation Manual” and the “California Standard Practice
21 Manual” (SPM) related to DSM cost-effectiveness. My document review is ongoing as
22 additional information from Vectren is still being received.

1 **Q6. What is the purpose of your testimony?**

2 A6. On behalf of the Indiana Distributed Energy Alliance (“Indiana DG”), I describe my
3 evaluation of Vectren’s EDG proposal and why it should be denied. Specifically, I
4 address:

- 5 • Vectren’s EDG violates reasonable ratemaking principals and is an unjust
6 unreasonable rate.
- 7 • Vectren’s EDG rate is too low compared to Vectren’s own IRP avoided costs,
8 system marginal costs, and purchased power costs.
- 9 • Vectren’s oppressive instantaneous netting and EDG calculation does not
10 conform to the statute, I.C. § 8-1-40.
- 11 • Middleground options.
- 12 • Vectren’s approximate 2019 tiny net metering banked credits vs. the
13 economic stimulus DG solar installers provide to the Vectren Service
14 territory.
- 15 • The EDG proposal’s shocking customer rate impacts.

16 **VECTREN’S PROPOSED EDG RATE IS UNJUST AND UNREASONABLE.**

17 **Q7. What is the importance and benefit of viewing Vectren’s EDG rate proposal from**
18 **the context of just and reasonable rates?**

19 A7. At the core of government regulation of monopoly utility rates is the regulatory balancing
20 of consumer and shareholder interests required to ensure rates are just and reasonable to
21 both. If unjust and unreasonable rates are approved, then the process of utility monopoly
22 price regulation has failed. In my opinion, no rate proposal can be reasonably reviewed
23 without attention to that regulatory critical purpose of balancing competing owner /

1 consumer interests to ensure the rate's result is fair to both. With rate proposals that have
2 multiple facets, the level of one can be adjusted to counter balance another to ensure the
3 end rate result is just and reasonable. If utility rate regulation were to become separated
4 from that core social and economic balancing purpose, then there would not be
5 regulation. Utilities could just download their data into a central government formulaic
6 software system and out would come their approved rates, with no human review or
7 consideration of the impact on consumers or fairness. I am grateful that we have utility
8 regulators who apply that unique human ability to consider all factors and impacts in
9 context and to judge what reasonable balance will be fair to both consumers and owners.
10 To me just and reasonableness of rates are the core purpose, the mandate umbrella that
11 covers regulatory rate review. That is why I consider it here.

12 **Q8. Is distributed generation (“DG”) similar to any other activities that help offset**
13 **electric load and provide other operation benefits?**

14 A8. Yes, DG is just one of the Distributed Energy Resources (“DER”).

15 **Q9. What is a DER?**

16 A9. I reviewed the definition of DERs as adopted by the National Association of Regulatory
17 Utility Commissioners (“NARUC”), several regulatory jurisdictions, California,
18 Massachusetts, New York, and respected groups including Lawrence Berkeley National
19 Laboratory (“LBNL”). A consensus of those definitions is best captured by NARUC in
20 its “Distributed Energy Resources Rate Design and Compensation Manual”. The
21 NARUC definition is as follows:

22 A DER is a resource sited close to customers that can provide all or some of their
23 immediate electric and power needs and can also be used by the system to either reduce
24 demand (such as energy efficiency) or provide supply to satisfy the energy, capacity or
25 ancillary service needs of the distribution grid. The resources, if providing electricity or
26 thermal energy, are small in scale, connected to the distribution system and close to load.

1 Examples of different types of DER include solar photovoltaic (PV), wind, combined
2 heat and power (CHP), energy storage, demand response (DR), electric vehicles (EV's),
3 microgrids and energy efficiency (EE).”

4 **Q10. Are DSM and Energy Efficiency considered as DERs?**

5 A10. Yes, they are. Respected utility regulatory third parties including LBNL and NARUC all
6 have adopted similar definitions and recognize that Distributed Generation and Energy
7 Efficiency/DSM are prime examples of DERS, and all provide significant benefits to the
8 distribution grid. EE and DSM are capable of providing both energy and demand savings.
9 “EE can be used by a utility to displace generation from other sources, such as coal,
10 nuclear power, natural gas, or any other supply-side resource. The decision to invest
11 in EE is generally made when the utility is considering whether to invest in other new
12 generation resources. EE/DSM can provide a transmission and distribution benefit by
13 allowing the utility to reduce or eliminate the need for upgrades or new equipment on
14 the transmission or distribution system.”¹ The DSM/EE benefits include avoided direct
15 costs inclusive of capacity, transmission and distribution and fuel costs, and also indirect
16 benefits like environmental through the inclusion on the distribution grid of clean and
17 renewable distributed generation (DG). Vectren has included DSM/EE in developing its
18 IRP / planning compass.

19 **Q11. Should the Commission be mindful that DSM / EE and DG are all DERs?**

20 A11. Yes, because they both serve the same public purpose, reducing load, improving utility
21 operations and improving the environment, a mixture of “direct” and “indirect” benefits.

22 **Q12. What are examples of direct and indirect benefits DG resources provide to the**
23 **grid?**

¹ NARUC’s Distributed Energy Resources Rate Design and Compensation, pages 49-50.

1 A12. Examples of direct and indirect benefits are as follows:

2 • Direct Benefits:

- 3 ▪ Offset need for new generation
- 4 ▪ Reduction in peak power requirements
- 5 ▪ Savings in T&D losses, Line loss
- 6 ▪ Deferred or avoided Generation Capacity
- 7 ▪ Deferred or avoided transmission and distribution capacity
- 8 ▪ Improved System reliability
- 9 ▪ Power Quality
- 10 ▪ Cyber security for DG output

11 • Indirect Benefits:

- 12 ▪ Environmental, no carbon footprint
- 13 ▪ Health issues, no carbon footprint
- 14 ▪ Reduced reliance on right-of-way acquisition costs
- 15 ▪ Reductions in vulnerability to cyber attacks
- 16 ▪ Improvements in infrastructure resilience
- 17 ▪ Avoidance of carbon capture costs

18 **Q13. Does the EDG rate proposed by Vectren provide recognition of these direct and**
19 **indirect DER benefits?**

20 A13. No, it does not. DER value to a utility system under the current NARUC regulatory
21 methodology involve determining compensation for the direct and indirect benefits DER
22 provides. The utility cost of service study is useful for this, but Vectren explicitly stated it
23 did not rely at all on the cost of service study filed with its last base rate case. The lack of

1 that benefit consideration contributes to the unjust and unreasonableness of Vectren's
2 proposed EDG.

3 **Q14. How has Vectren set its proposed EDG rate, and what type of rate is it?**

4 A14. Vectren has latitude in the way it could craft its EDG proposal. But it took a bare-bones
5 EDG rate minimization approach. Vectren developed the DG compensation rate at 1.25
6 times the Locational Marginal Price ("LMP") at Vectren South's SIGE.SIGW load node.
7 This attempt at a balancing rate to compensate DG customers for the net inflows and
8 outflows into the grid is a **Retail** net metering rate or billing rate and does not in any way
9 attempt to consider the direct and indirect benefits the DG resources contribute to the
10 grid.

11 **Q15. Why do you emphasize that the Vectren Proposed EDG rate is a retail rate?**

12 A15. Because in my view, it is important to initially be mindful of the incongruity that this
13 retail net metering rate would collect the consumed EDG credits as if they were a
14 wholesale power purchase in the Fuel Adjustment Clause ("FAC"). Vectren's proposed
15 EDG rate combines both retail and wholesale determinants. On one side, it is premised
16 on a retail Net Metering designation, i.e. a revenue mechanism that allows retail
17 customers to be credited for their excess electricity generated through their DG
18 systems. But then on the other side, Vectren would treat excess retail DG as if it is a
19 wholesale power purchase, with wholesale power purchase cost recovery through the
20 FAC. But EDG is not a wholesale power purchase; it is a retail rate offset for a
21 customer's DG. The FAC is designed to recover the cost of utility generation, fuel and
22 the cost of competitively priced purchased power. Again, the incongruity of treating a
23 retail EDG rate credit as if it is a wholesale power purchase in the FAC is noteworthy.

1 Vectren's own IRP indicates it pays more for purchased power owned by out of state
2 companies than it proposes to pay to its own Indiana jurisdictional customers for their
3 homegrown solar generation energy. To me, that is not intellectually defensible nor fair
4 ratemaking. Rather it results in an unjust, unreasonable and capricious rate intended to
5 suppress customer-owned solar generation. It fails to recognize the true benefits DG
6 resources provide to the grid. The inclusion of both retail rate inflow/outflow crediting to
7 customers and wholesale purchased power FAC cost recovery in one formula is
8 inconsistent with balancing the interests of consumer and investor and contrary to
9 developing just and reasonable rates.

10 **Q16. Is there a standard practice that can be used to capture both the direct and indirect**
11 **benefits attributable to DG customers' contribution to the distribution grid?**

12 A16. Insofar as DSM/EE and DG are both recognized as DERs, they both result in the need for
13 less energy and result in avoided costs across the utility's system. NARUC suggests that
14 a starting point for determining the DER benefits, which include EE/DSM and DG, is the
15 Standard Practice Manual (SPM) developed by the California Public Utilities
16 Commission. The SPM provides five unique tests to determine the cost-effectiveness of a
17 demand side resource. The five tests can provide alternate methods of determining costs
18 effectiveness of a variety of resources. The most applicable test for developing the
19 benefits and cost effectiveness is a variant of the Total Resource Cost ("TRC") Test,
20 called the Societal Test. The Societal Test differs from the TRC Test in that it includes
21 the effects of externalities (e.g., environmental, national security), excludes Tax credit
22 benefits, and uses a different (societal) discount rate.

1 **Q17. In reviewing Vectren’s proposed EDG rate, do you believe it meets common fair**
2 **basic rate tenets?**

3 A17. No. There are several rate design goals and principles established by certain well
4 recognized ratemaking authors describing the regulatory compact that is commonly
5 referred to by regulators and regulated utilities alike. James Bonbright in his “Principles
6 of Public Utility Rates” goes into great detail as to what makes a fair and reasonable rate.
7 He refines his criteria for a desirable rate structure down to three (3) primary objectives
8 of rate design: (1) Revenue requirement objective; (2) Fair cost apportionment; and (3)
9 Optimum use objective where rates are designed to discourage wasteful use of utility
10 services and promoting economically justified use considering costs incurred and benefits
11 received. Vectren’s EDG rate and netting rate results are not economically justified and
12 do not consider costs incurred and benefits received. The EDG rate development
13 employed by Vectren is arbitrary and capricious and fails to reflect the true direct and
14 indirect benefits attributable to the excess energy generated by the DG customers of
15 Vectren. In fact, as Mr. Brad Morton’s testimony shows, it is so tilted against DG
16 customers that the combined effect of the proposed 3.1 cents per kWh and instantaneous
17 netting would not allow a retail customer to recover their solar installation cost for 25 or
18 more years. That is at or after the projected 25 year life of the solar equipment. That is
19 severely tilted against DG customers. Vectren’s EDG rate is grossly undervalued and will
20 result in stifling out residential and commercial solar DG investment and growth to the
21 detriment of Vectren and all its customers.

22 **Q18. Have you reviewed the recent final Lawrence Berkeley National Laboratory**
23 **(“LBNL”) Report to the Indiana Energy Policy Task force?**

1 A18. Yes I have.

2 **Q19. Is the LBNL Report germane to this case?**

3 A19. Yes it is. In 2019, through HEA 1278 the Indiana General Assembly created the
4 21st Century Energy Policy Development Task Force, whose work will be informed by a
5 comprehensive study to be conducted by the IURC. The IURC divided the technical
6 aspects into two components: (1) technology and fuel changes in generation-transmission
7 and (2) emerging technologies in distribution systems. The LBNL report/study addresses
8 the latter.

9 The high points of the LBNL Report that I consider germane to this case include:

10 ILBNL modeled solar DG at high levels of penetration in Vectren's service area over the
11 next 20 years. This suggests that SEA 309, (Ind. Code § 8-1-40) was premature in not
12 having this comprehensive study to understand the benefits and costs associated with
13 DER deployment, particularly rooftop solar.

14 The report states that systems with a high adoption of rooftop solar results in system-wide
15 savings.

16 It points out many of the DER benefits that I and other DG witnesses describe. DER can
17 benefit the distribution and transmission systems by reducing line and transformer losses
18 and by deferring capacity investments.

19 Scenarios where there are relatively high adoption of PV have 8% lower costs relative to
20 their Base cost, largely driven by reduced capital and fixed costs.

21 DER can also impose technical costs to the distribution system due to items like their
22 impact on voltage levels and line loading.

1 The report suggests that one must assess the benefits of DR on a particular system,
2 review, analyze and develop a cost benefit analysis. This is consistent with our testimony
3 in this proceeding.

4 **Q20. What do you conclude from the LBNL report regarding solar DG in Vectren's area?**

5 A20. I conclude several things:

- 6 1. LBNL echoes much of the same benefits and basis for solar DG support I
7 have previously described.
- 8 2. All the stakeholders in this case need to cooperatively work to contour a
9 Vectren customer owned solar Vectren DG program that generates broad
10 benefits and fairly prices excess distributed generation.
- 11 3. Vectren's proposals are unfair to its customers and detrimental to achieving
12 the benefits customer owned solar DG can create.
- 13 4. The findings of the Report offer further reason to deny Vectren's proposal and
14 take a longer more detailed look at maximizing customer owned solar DG
15 benefits and fairly addressing benefits and costs
- 16 5. Vectren's SEA 309 based request should to the extent possible be put aside
17 since it conflicts with guiding goals of HEA 1278 by prematurely adopting a
18 formula for an EDG rate contrary to the statutorily required LBNL study
19 results being known and reviewed.

20 **VECTREN'S EDG RATE IS PRICED BELOW ITS OWN IRP AVOIDED COSTS AND**
21 **SYSTEM MARGINAL COSTS INCLUDED IN ITS IRP COMPASS FOR THE NEXT**
22 **TWENTY (20) YEARS.**

23 **Q21. Is Vectren's proposed EDG rate consistent with its own Avoided Cost numbers and**
24 **System marginal Cost per kWh customers used by Vectren in its IRP?**

1 A21. No. The proposed EDG rate is materially lower than Vectren’s critical calculation of
2 avoided and marginal cost calculations in its own 2019/2020 Integrated Resource Plan
3 (“IRP”). At Vectren IRP Figure 11.34 – Avoided Costs on page 313 of the IRP, the
4 system marginal cost for 2020 is \$28.63. Vectren shows that figure escalating through the
5 full 20 year planning compass included in their 2019/2020 IRP. These figures are
6 materially higher than the system marginal cost Vectren used to calculate its proposed
7 EDG. That is fundamentally unfair. If its avoided costs and system marginal costs are
8 accurate enough to give foundation to Vectren’s IRP energy pricing, generation planning,
9 purchased power and DSM needs, they should be the bare bones floor starting point for
10 fairly compensating Vectren’s DG customers. But the EDG rate calculation starts at less
11 than Vectren’s admitted avoided costs and system marginal costs. Vectren in its
12 Executive Summary to the 2019/2020 IRP, states:

13 The IRP describes the best mix of generation and energy efficiency
14 resources (resource portfolio) to meet customer needs for reliable, low-
15 cost, environmentally sustainable over the next 20 years. The IRP can be
16 thought of as a compass setting the direction for future generation and
17 energy efficiency options.²

18 The Executive Summary also states:

19 As part of its 2019/2020 IRP process, Vectren’s evaluation process has
20 focused on exploring all new and existing supply-side and demand side
21 resource options to reliably serve Vectren’s customers over the next 20
22 years.³

23 DG customers should at a minimum be able to rely upon Vectren’s own calculation of
24 avoided cost as the bare bones first step in reviewing the EDG rate and as system
25 marginal cost compass for evaluating the future. Finally, existing and potential DG

² Vectren’s Executive Summary to the Vectren 2019/2020 IRP, page 38.

³ Vectren’s Executive Summary to the Vectren 2019/2020 IRP, pages 33-34.

1 customers have no understanding of the compensation they could expect given that the
2 EDG rate is established annually. This makes it difficult for DG customers to know and
3 plan upon the compensation they are likely to receive insofar as they do not even have the
4 three-year IRP nominal avoided cost compass to consider in making their decision to
5 invest in a solar DG resource. Instead, they are left with an EDG rate that has no
6 relationship to the benefits they provide to the grid and which will change every year.

7 **VECTREN'S OPPRESSIVE PROPOSED INFLOW/OUTFLOW INSTANTANEOUS**
8 **NETTING:**

9 **Q22. Please describe Vectren's proposed netting methodology.**

10 A22. Vectren is proposing to radically change the current manner in which DG customer
11 monthly use is offset with DG customer generation. Vectren recommends a new
12 "instantaneous" measure of energy flow via its Advanced Metering Infrastructure
13 ("AMI") metering equipment. The electricity supplied by Vectren to the customer is
14 defined as "inflow", and the electricity supplied by the customer to Vectren is defined as
15 "outflow". I do see where the plain language of I.C. § 8-1-40 says what netting method
16 should be used. I do not believe Vectren has followed the statute. It is my understanding
17 that, of the available methods, Vectren has chosen the one that gives DG customers the
18 very least compensation; the one that would most stifle future customer owned solar DG.
19 Other solar party witnesses further detail the severe adverse monetary impact of Vectren's
20 "instantaneous netting" on DG customers. Monthly netting has been the norm under
21 current net metering practice and should remain the norm and applied in Vectren's EDG
22 proposal.

1 **CONSIDERATION OF MIDDLE GROUND YARDSTICK OPTIONS TO DEVELOPING**
2 **A JUST AND REASONABLE EDG RATE:**

3 **Q23. What rate alternatives could be considered as an alternative middle ground**
4 **comparative yardsticks to the proposed EDG rate?**

5 A23. In the art of utility ratemaking, there are many compensation rates that can be considered
6 to reasonably measure the benefits DG customers provide to the distribution grid. I will
7 discuss and suggest two possible alternatives. As discussed previously in my testimony,
8 DG provides both direct and indirect benefits to the grid and can be compensated under
9 various rate calculations. One rate consideration is pricing the compensation to DG
10 customers at the avoided cost of kWh sold for a specific retail rate class. The second
11 methodology is to determine the true cost and benefits attributable to the DG contribution
12 that recognizes the direct benefits, societal benefits, and other indirect costs. I discuss
13 alternatives under each comparative scenario.

14 **Q24. What are you suggesting under the avoided kWh scenario where the compensation**
15 **paid would be equivalent to the average kWh cost per kWh sold to customers?**

16 A24. Compensation would be at the average cost per kWh billed to all customers in a
17 particular rate class. While this may be most logical, it does not recognize that even
18 though the cost of the power delivered to a customer is avoided, it was not historically
19 contemplated that customers would have the ability to deliver self-generated power to the
20 grid. A compensation rate based on the average cost per kWh by rate class is intriguing
21 but one could argue it contains no offset for the DG customers' periodic nominal use of
22 the grid paid for by all customers.

23 According to the IURC's "2020 Residential Bill Survey, Rate Jurisdictional Electric
24 Utilities, July 1, 2020 billing", the average cost per a residential kWh billed by Vectren is

1 \$0.15675. In order to balance the DG grid use with the energy DG customers' provide
2 for Vectren's sale to other customers, a sharing of the class retail rate could be applied. I
3 suggest that, for purposes of this exercise, we use a 50/50 sharing mechanism for DG
4 customers. The Commission could adopt separate EDG rates by customer class. Then the
5 Residential DG customer rate would remain with a 50/50 split as suggested above. For
6 commercial customers the share percentage split would be 60/40 and would start at the
7 commercial rate of \$0.09402, ($\$0.15675 \times .60 = \0.09402) and could be on a sliding scale
8 to reflect the economy of scale installation cost vs. energy output for larger installations.

9 **Q25. What is your suggestion relative to developing a compensation rate that includes**
10 **both direct and indirect benefits provided to all customers and Vectren across the**
11 **grid?**

12 A25. As pointed out earlier in my testimony, DG resources provide both direct benefits, such
13 as avoided costs, and indirect benefits or societal benefits, such as emissions reductions,
14 health benefits, and system security improvements. Quantifying the societal issues is
15 difficult and subject to criticism but a necessary undertaking in recognizing the full
16 benefits of DG to the grid. One way of identifying the societal benefits provided by DG is
17 to recognize that DG customers through generating renewable, carbon free electricity, is
18 the avoidance of any carbon costs potentially incurred by Vectren. A starting point for
19 that analysis would be consideration of any of the carbon costs either estimated on a
20 national level or modeled by Vectren in developing the 2019/2020 Vectren IRP. My
21 50/50 split for residential DG customers and 60/40 split for commercial customer would
22 give DG customer some recognition of the benefits they create for all customers.

1 **Q26. Do the alternative EDG rate methodologies discussed above meet the criteria you set**
2 **out early in your testimony as to how energy outflows can be compensated?**

3 A26. Yes. As I stated earlier in my testimony, energy outflows should be credited to DG
4 customers at the equivalent inflow rate, or at a rate that recognizes all the benefits DG
5 provides to the grid to the benefit to both Vectren and all ratepayers. Both of the
6 alternatives discussed above meet the criteria for just and reasonable energy outflow rate
7 compensation.

8 **VECTREN'S APPROXIMATE 2019 NET METERING BANKED CREDITS VS. THE**
9 **THREATENED ECONOMIC STIMULUS OF DG SOLAR INSTALLERS**

10 **Q27. Are you generally aware of the solar installation 2019 economic stimulus that**
11 **Indiana DG witnesses Kurt Schneider and Brad Morton testify their companies**
12 **created in the Vectren service area?**

13 A27. Yes, I am. Mr. Schneider's total is \$6.453 million, and Mr. Morton's is \$2.5 million for a
14 2019 total of about \$9.0 million. Please note there are other solar companies doing work
15 in the Vectren service territory whose 2019 economic stimulus we have not quantified.

16 **Q28. Have you calculated at the net metering rate the dollar value of Vectren's 2019 full**
17 **net metering banked customer credits without use of an offset?**

18 A28. Yes, I have. I took Vectren's Response to Joint Intervenor's Data Request 1.4(h) and
19 totaled all of Vectren's 2019 banked DG customer credits. The credits were primarily
20 residential customer credits but some commercial were also in the Vectren 2019 data. To
21 approximate the dollar value of the DG outflow credits, I took Vectren's response to JI
22 DR 1.4(h) and captured the 2019 total kWh banked and the net for 2019. I then multiplied
23 the total number of kWh banked and net kWh banked by the average Vectren residential
24 cost per kWh of \$0.15675 from the IURC "2020 Residential Bill Survey, Rate

1 Jurisdictional Electric Utilities, July 1, 2020 billing” to approximate the full impact to
2 Vectren from all those credits being used in one year, hypothetically in 2019. I recognize
3 that commercial customers were included in Vectren’s JI DR 1.4(h) data for 2019, but the
4 average commercial rate was in the lower \$0.12 to \$0.13 range, making the total
5 estimated conservative. There was a balance of unused DG credits of \$53,369 for 2019
6 that was carried over to subsequent years. Vectren’s total gross 2019 banked credits was
7 approximately \$170,506. Vectren was unable to provide us the dollar value of the 2019
8 credits so this approximation was necessary. I believe it is a reasonable approximation
9 for our purposes here. Because it is the net metering credit costs that Vectren seeks to
10 recover in this Cause through its 3.1 cent EDG rate and its devastating netting proposal,
11 it makes common sense that we should compare the cost that Vectren seeks to recover to
12 the economic stimulus that annual cost typically promotes.

13 **Q29. How does the annual 2019 estimated DG credit costs compare with the annual 2019**
14 **economic stimulus developed by Mr. Schneider and Mr. Morton in their direct**
15 **testimony for Vectren’s service area, from just these two solar installers in 2019?**

16 A29. The 2019 Vectren net DG credit costs are very small compared to the total stimulus from
17 just the two solar installation customers, \$53,369 of Vectren cost vs. 2019 \$9.0 million
18 of solar economic benefit. Even its gross total 2019 banked credits of \$170,506 pales
19 in comparison to just those two DG installation customers. My understanding is there
20 are several DG installation companies in addition to Mr. Schneider’s and Mr. Morton’s.

21 **Q30. In terms of maintaining and growing economic well-being and development,**
22 **would a reasonable person accept \$53,369 of annual utility cost for** —
23 **continuation of \$9.0 million of annual economic stimulus?**

1 A30. Yes, they would. The jobs created and the tax dollars generated are more beneficial to
2 Vectren's service area economy. That small cost eventually being born by all Vectren
3 customers is well worth the direct economic stimulus benefits, and the direct Vectren
4 benefits and broad social benefits previously discussed by myself and discussed by other
5 non-Vectren witnesses.

6 **Q31. For context, how does the approximately \$53,369 net DG credit value in 2019 and**
7 **the 2019 total banked DG \$170,506 credit value for net metering compare to**
8 **Vectren's authorized annual revenue and authorized return granted by this**
9 **Commission?**

10 A31. The \$170,506 gross banked kWh cost and \$53,369 net banked kWh is tiny compared to
11 annual authorized return of \$94,450,297 as approved in Vectren's last retail rate case,
12 Cause No. 43839.

13 **VECTREN'S RESPONSE RE: EDG BILL IMPACT ON FIVE ACTUAL VECTREN**
14 **CUSTOMERS**

15 **Q32. Did Indiana DG ask Vectren for the EDG rate impact on some actual current**
16 **Vectren customers?**

17 A32. Yes. In Indiana DG's Data Request 4.1 we, Indiana DG and five Vectren net metering
18 customers requested an analysis of their electric bills under the proposed EDG tariff.

19 Three of the Vectren net metering customers asked the company to calculate what their
20 electric bill would be under the proposed EDG tariff. Based on a recent 12 month period
21 of July 19, 2019 – June 20, 2020 the resulting annual rate increase impacts exclusive
22 of any banked credits are:

23 Customer 1

24 [REDACTED]

25 [REDACTED]

1 Customer 3

2 [REDACTED]

3 [REDACTED]

4 Customer 4

5 [REDACTED]

6 [REDACTED]

7 Two customers, Customer 2 and Customer 5 requested that Vectren perform two
8 different tasks:

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 Customer 2 Scenario (a)

16 [REDACTED]

17 [REDACTED]

18 Customer2 Scenario (b)

19 [REDACTED]

20 [REDACTED]

21 Customer 5 Scenario (a)

22 [REDACTED]

23 [REDACTED]

1 Customer 5 Scenario (b)

2 [REDACTED]

3 [REDACTED]

4 **Q33. What does Vectren’s data response indicate to you?**

5 A33. While each individual DG customers bill impact will vary somewhat based on their
6 individual usage, solar unit size and the Vectren rate they are under, the take away for
7 me is EDG and instantaneous netting represent a brutal massive increase in customer
8 bills. A rate cost increase so great as to further bolster my belief the EDG proposal
9 is unjust, unreasonable and should not be approved. I note I have not had enough time to
10 fully confirm Vectren’s very recently received response.

11 **RECOMMENDATIONS**

12 **Q34. Do you have any conclusions and recommendations to the Commission in this**
13 **proceeding?**

14 A34. Yes. I recommend that Vectren’s EDG rate requests in this proceeding be denied.

15 If is not flatly denied I recommend the Commission order EDG’s calculation of excess
16 distributed generation be based on monthly billing-period netting, not instantaneous also
17 order Vectren to prepare cost of service analysis for DG customers with rate design that
18 accurately reflects of the cost of service for DG customers prior to final approval of an
19 EDG rate.

20 Vectren’s proposal is not consistent with the statute. Vectren’s overall EDG proposal and
21 rate is unjust and unreasonable. Vectren proposes credits for excess generation through a
22 starting price lower than what is shown in their own IRP avoided cost, system marginal
23 costs and purchased power costs. Vectren’s EDG ignores the direct and indirect benefits

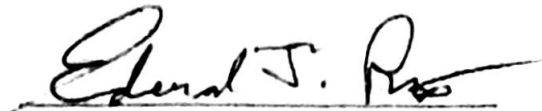
1 of DG. The lack of consistency with their own IRP shows just how arbitrary and
2 inadequate their proposed rate is in this proceeding. Vectren's intentionally adverse
3 "instantaneous" netting is oppressive to customers. Consistent with my calculations and
4 the testimony of Indiana DG's other witnesses, Vectren's EDG proposal is harmful to the
5 southern Indiana economy.

6 **Q35. Does this conclude your direct testimony?**

7 A35. At this time. However, our analysis is continuing and addition information has been
8 requested from Vectren that may give rise to the need to revise or supplement
9 testimony.

VERIFICATION

I affirm, under the penalties for perjury, that the foregoing representations are true and correct to the best of my knowledge and belief.

A handwritten signature in black ink, appearing to read "Edward T. Rutter", written over a horizontal line.

Edward T. Rutter

Manager

LWG CPAs & Advisors

Dated: August 20, 2019

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing was served upon the following by electronic delivery this 20th day of August 2020, to:

CenterPoint Energy, Inc.

Heather Watts

Justin Hage

Steven W. Krohne

heather.watts@centerpointenergy.com

Justin.hage@centerpointenergy.com

steven.krohne@icemiller.com

CAC, ELPC, SUN, Vote Solar

Jennifer Washburn

jwashburn@citact.org

Performance Services

Nikki G. Shoultz

Kristina Kern Wheeler

nshoultz@boselaw.com

kwheeler@boselaw.com

Indiana Office of Utility Consumer Counselor

Randy Helmen

Jason Haas

rhelmen@oucc.IN.gov

thaas@oucc.IN.gov

infomgt@oucc.IN.gov

Solarize Indiana

Russell L. Ellis

russell_ellis@sbcglobal.net

Michael A. Mullett

MullettGEN@aol.com

ELPC, Vote Solar

Bradley Klein

Environmental Law & Policy Center

bklein@elpc.org

/s/ R. M. Glennon

Robert M. Glennon

Attorney at Law, #8321-49