

Indiana Utility Regulatory Commission's Meeting with Vectren/CenterPoint

December 19, 2019; 1:00-2:00 p.m.

IURC Boardroom

Attendees

Vectren

- Jason Stephenson – Vice President and Associate General Counsel – Regulatory Legal
- Heather Watts – Director, Regulatory Legal IN/OH
- Cas Swiz – Director, Regulatory and Rates IN/OH
- Ryan Abshier – Manager, Indiana Planning and Protection
- Katie Tieken – Manager, Regulatory and Rates IN/OH
- Justin Hage – Counsel, Regulatory Legal IN/OH

IURC

- Sarah Freeman - Commissioner
- Beth Heline – General Counsel
- Ryan Heater – Chief of Staff
- Ryan Hadley – Executive Director, External Affairs Division
- Jane Steinhauer – Director, Energy Division
- Brad Borum – Director; Research, Policy, and Planning Division
- Graham Gray – Senior Utility Analyst, Energy Division

Agenda

- I. Net Metering, Excess Distributed Generation, Solar

Vectren's pending, docketed cases before the IURC

37366	GCA 145 (Vectren South-Gas)
38708	FAC 125 (Vectren South-Electric)
43354	MCRA 21 (Vectren South-Electric) Motion to Establish Sub-Docket and for Extension of time
43354	MCRA 23 (Vectren South-Electric)
43405	DSMA 17 (Vectren South-Electric)
44429	TDSIC-11 (Vectren South-Gas)
44430	TDSIC-11 (Vectren North)
45086-S1	Clean Energy Project Sub-docket (Vectren South-Electric)
45094-S1	Pipeline Safety Sub-docket (Vectren North, Vectren South-Gas)
45280	Certificate of Need – AB Brown Ash Pond (Vectren South-Electric)

Indiana Utility Regulatory Commission's Meeting with Vectren/CenterPoint

December 19, 2019; 2:00-3:00 p.m.

IURC Boardroom

Attendees

Vectren

- Jason Stephenson – Vice President and Associate General Counsel – Regulatory Legal
- Heather Watts – Director, Regulatory Legal IN/OH
- Cas Swiz – Director, Regulatory and Rates IN/OH
- Ryan Abshier – Manager, Indiana Planning and Protection
- Katie Tieken – Manager, Regulatory and Rates IN/OH
- Justin Hage – Counsel, Regulatory Legal IN/OH

IURC

- David Ziegner – Commissioner
- David Ober – Commissioner
- Beth Heline – General Counsel
- Stephanie Hodgin – Deputy Director, Communications & Media
- Dale Thomas – Chief Technical Advisor; Research, Policy, and Planning Division

Agenda

- I. Net Metering, Excess Distributed Generation, Solar

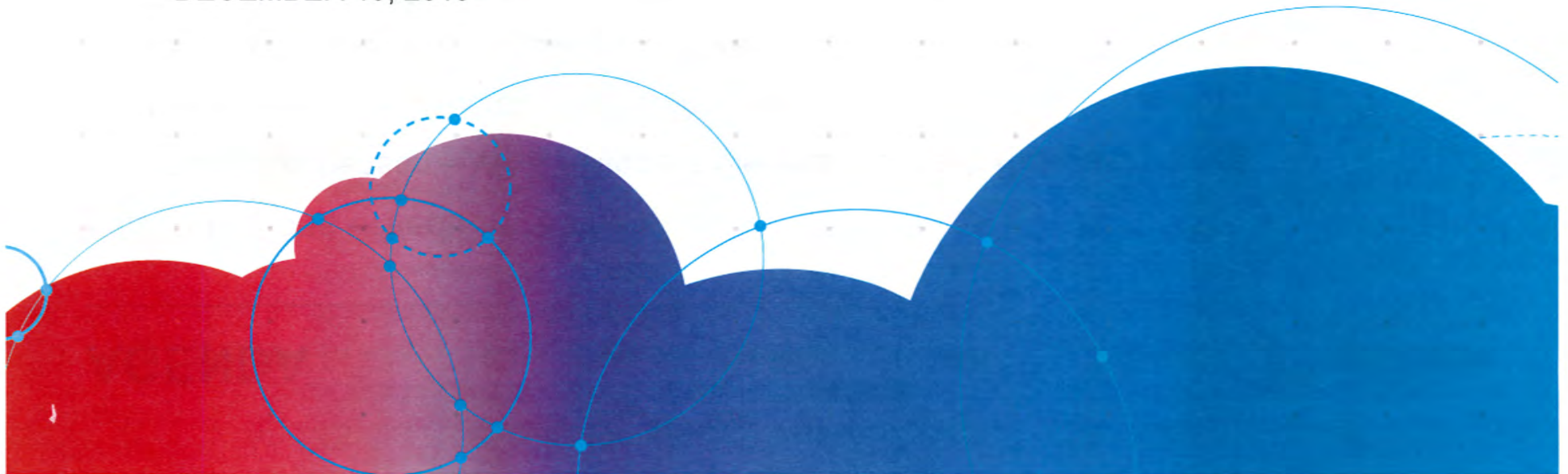
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NET METERING & EXCESS DISTRIBUTED GENERATION

DECEMBER 19, 2019



AGENDA



- Introductions – Vectren team:
 - Jason Stephenson – VP & Associate General Counsel, Regulatory Legal
 - Heather Watts – Director, Regulatory Legal
 - Cas Swiz – Director, Regulatory & Rates
 - Ryan Abshier – Manager, Indiana Planning & Protection
 - Katie Tieken – Manager, Regulatory & Rates
 - Justin Hage – Associate Counsel, Regulatory Legal
- Overview of Indiana Electric status
 - As of November 30, 2019
- Posted Queue Data
 - GAO 2019-2
- Excess Distributed Generation (DG) Tariff
 - Impacts to Management of the NM Queue
- Customer Requests – Distributed Generation



VECTREN NET METERING STATUS



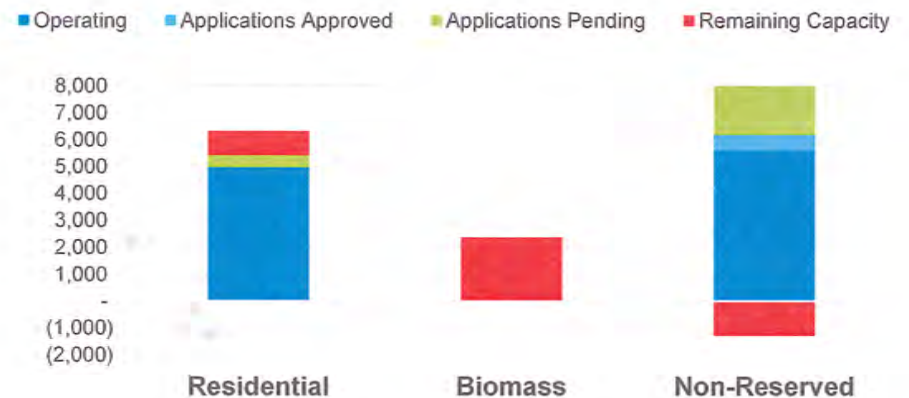
INDIANA ELECTRIC NET METERING STATUS AS OF NOVEMBER 30, 2019



- In aggregate, approximately 5,300kW of Net Metering capacity remaining.
- Of the 10,550kW operating today –
 - 10,534kW – Solar
 - 16kW – Wind
- Residential – received an additional 452kW of applications now pending.
- Biomass – no applications.
- Non-Reserved – applications currently exceed reserved capacity as defined under IC 8-1-40-12.
- General Administrative Order (GAO) 2019-2 – C(2):
 - Discrete queue required when the available under the reservation threshold is within:
 - 1MW for Residential (not yet reached)
 - 1MW for Biomass (not yet reached)
 - 3MW for Non-Reserved (required)

Indiana Electric	Total (kW)	Residential (kW)	Biomass (kW)	Non-Reserved (kW)
Summer Peak Load (2019)	1,054,400.00			
Net Metering Capacity	15,816.00	6,326.40	2,372.40	7,117.20
Operating Capacity	10,548.76	4,964.50	-	5,584.26
Remaining Capacity	5,267.25	1,361.91	2,372.40	1,532.94
Approved Participants		-	-	598.20
Non-Approved Participants		-	-	2,127.80
Remaining		1,361.91	2,372.40	(1,193.06)

Net Metering Capacity (kW)



NET METERING QUEUE NON-RESERVED



Southern Indiana Gas and Electric Company d/b/a Vectren Energy Delivery of Indiana, Inc. - a CenterPoint Energy Company
 Status of Applications for Net Metering Projects Submitted by Non-Residential Customers (as of November 30, 2019)
 in accordance with General Administrative Order (GAO) 2019-2

I.C.6.(a)	I.C.6.(b)	I.C.6.(c)	I.C.6.(d)	Non-Reserved		I.C.6.(g)	I.C.6.(h)	I.C.6.(i)	
Project Identifier	Capacity (kW)	Generator Type	Customer Type	Interconnection Level	Application Date	Approved	Operational Date	Remaining Available Capacity Beyond that consumed by current Net Metering Approved Participants (kW)	Approved/Queue
NM03	34.2	Solar	COM	2	8/8/2019	8/15/2019	11/20/2019	1632.94	Operating
NM01	15.2	Solar	COM	2	3/7/2019	4/10/2019	N/A	1517.74	Approved
NM02	40	Solar	COM	2	4/4/2019	4/12/2019	N/A	1477.74	Approved
NM04	540	Solar	COM	2	8/27/2019	8/20/2019	N/A	937.74	Approved
NM05	3	Solar	COM	1	5/23/2019	8/30/2019	N/A	934.74	Approved
NM06	996	Solar	COM	2	8/9/2018	N/A	N/A	-81.26	Queue
NM07	1000	Solar	COM	2	5/6/2019	N/A	N/A	-1061.26	Queue
NM08	30	Solar	COM	2	8/16/2019	N/A	N/A	-1091.26	Queue
NM09	96	Solar	COM	2	10/29/2019	N/A	N/A	-1187.26	Queue
NM10	5.8	Solar	COM	1	11/18/2019	N/A	N/A	-1193.06	Queue

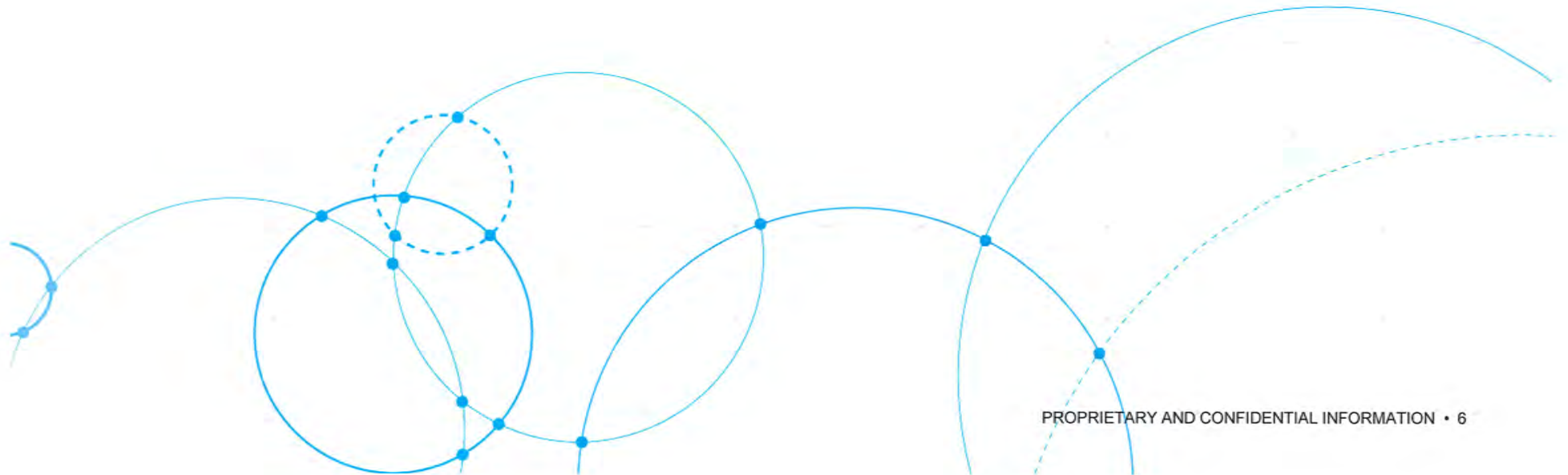
Non-Reserved Excess:

- Vectren has received no interest in Biomass resources.
 - Reserved capacity for Biomass (15% of the NM capacity) is unused.
- Vectren is utilizing the Biomass capacity to allow for additional customer resources under the non-reserved category.
- If or when Biomass applications come in, Vectren will ensure that capacity will be allocated consistent with the Statute.

Current queue status for non-reserved is requiring Vectren to proceed with an Excess Distributed Generation Tariff.



VECTREN EXCESS DISTRIBUTED GENERATION TARIFF



EXCESS DISTRIBUTED GENERATION TARIFF



- Statutory requirements dictate how to address the installation of distributed generation (not more than 1MW) once the Net Metering threshold is reached.
- IC 8-1-40-10:

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

“**Not 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. After an electricity supplier's initial rate for excess distributed generation is approved by the commission under section 17 of this chapter, the electricity supplier 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.”
- Vectren does not expect to equal the 1.5% level in 2019 or 2020.
 - However, the reserved share of the 1.5% results in the probability of current planned projects exceeding the non-reserved share in 2020.
- Vectren plans to file in late January/early February for its proposed Excess DG Tariff, in accordance with IC 8-1-40-16/17.
 - Docketed proceeding, with Direct Testimony.

Rider EDG Tariff Provisions:

- Measurement of Excess DG –
 - IC 8-1-40-5 – “Excess distributed generations means the difference between the **electricity that is supplied by an electricity supplier to a customer** that produces distributed generation, and the **electricity that is supplied back to the electricity supplier by the customer.**”
 - Instantaneous measurement of these components via current AMI meeting.
 - *Inflow* – electricity supplied by Vectren to customer.
 - *Outflow* – electric supplied by customer to Vectren.
- Pricing of Excess DG –
 - IC 8-1-40-17 – “(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).”
 - Marginal price of electricity – 2018 hourly Locational Marginal Price (LMP) at Vectren’s load node.
 - \$29.05 per MWh – EDG Rate of \$36.31 per MWh (\$0.03631 per kWh) for the initial period.
 - Rate will be updated annually by March 1 via a compliance filing, once the methodology for calculating the rate is established in the initial proceeding.
 - Customer will receive the EDG Billing Credit up to the point of reaching the *Minimum Monthly Charge* as defined in the Customer’s applicable Rate Schedule.
 - Any unused EDG Billing Credit will be held in a balance to be used in a subsequent period.
 - At the time of Customer discontinuing service with Vectren, any remaining EDG Billing Credit balance will revert to the Company.

*calendar year
average monthly rate
for all hours per
calendar year*

EXCESS DISTRIBUTED GENERATION TARIFF



- EDG Tariff is not “buy-all / sell-all” –
 - Customer is still able to utilize the distributed generation resource to offset load.
 - Inflow/Outflow – instantaneous measurement.
 - In periods when DG resource is producing electricity to fully offset load, no inflow will occur.
 - Outflow pricing differs from Rider NM in that Customer’s are not receiving the credit at Retail Rates.
 - Minimizes subsidy provided by other customers under Rider NM.
- EDG Billing Credits become a Cost of Fuel, recovered in the FAC, for volumes supplied to the system.

Residential – Rate RS	Rider NM	Rider EDG	Buy All / Sell All
kWh – Inflow	58	1,541	2,650
kWh – Outflow		(1,483)	(2,592)
Net kWh – Metered	58	58	58
Total Volumetric Charges – Rate RS	\$8.13	\$214.32	\$368.60
Total Fixed Charges – Rate RS	\$13.00	\$13.00	\$13.00
Total Generation Credit – EDG	\$0.00	\$(53.84)	\$(94.12)
Total Bill	\$21.13	\$173.48	\$287.48

Demand General Service – Rate DGS	Rider NM	Rider EDG	Buy All / Sell All
kWh – Inflow	107,023	123,093	175,927
kWh – Outflow		(16,070)	(68,904)
Net kWh – Metered	107,023	107,023	107,023
kW Demand – Metered	600	600	600
Total Volumetric Charges – Rate DGS	\$10,607.64	\$12,197.21	\$17,423.27
Total Demand Charges – Rate DGS	\$2,916.33	\$2,916.33	\$2,916.33
Total Fixed Charges – Rate DGS	\$75.00	\$75.00	\$75.00
Total Generation Credit – EDG	\$0.00	\$(583.50)	\$(2,501.90)
Total Bill	\$13,598.97	\$14,605.04	\$17,912.70

EXCESS DISTRIBUTED GENERATION TARIFF MANAGEMENT OF THE NET METERING QUEUE



Prioritization and Grandfathering:

- Any applications received and approved up to the cap will be eligible for Rider NM through July 1, 2032, in accordance with IC 8-1-40-13.
- Applications received and approved over the cap will initially be eligible for Rider NM, until the Excess DG tariff (IC 8-1-40-16) is approved –
 - At that point, these projects will transition to Excess DG.

Example:

- Excess DG (EDG) Tariff not yet approved – assume approved July 1, 2020.
- Remaining capacity (non-approved applications plus excess shortfall) for Non-reserved category sits at **25kW**.
- 2 applications for distributed generation are received –
 - **A** – 25kW solar (received December 1, 2019) ; **B** – 30kW solar (received December 20, 2019).
- Application **A** is approved and completed (March 1, 2020) –
 - Remains as Rider NM over ~~life of project~~ *remainder of grandfather period 2032*
- Application **B** is approved and completed at a later date (May 1, 2020) –
 - Starts as Rider NM once completed and installed.
 - Moves to Rider EDG once Tariff is approved (July 1, 2020).

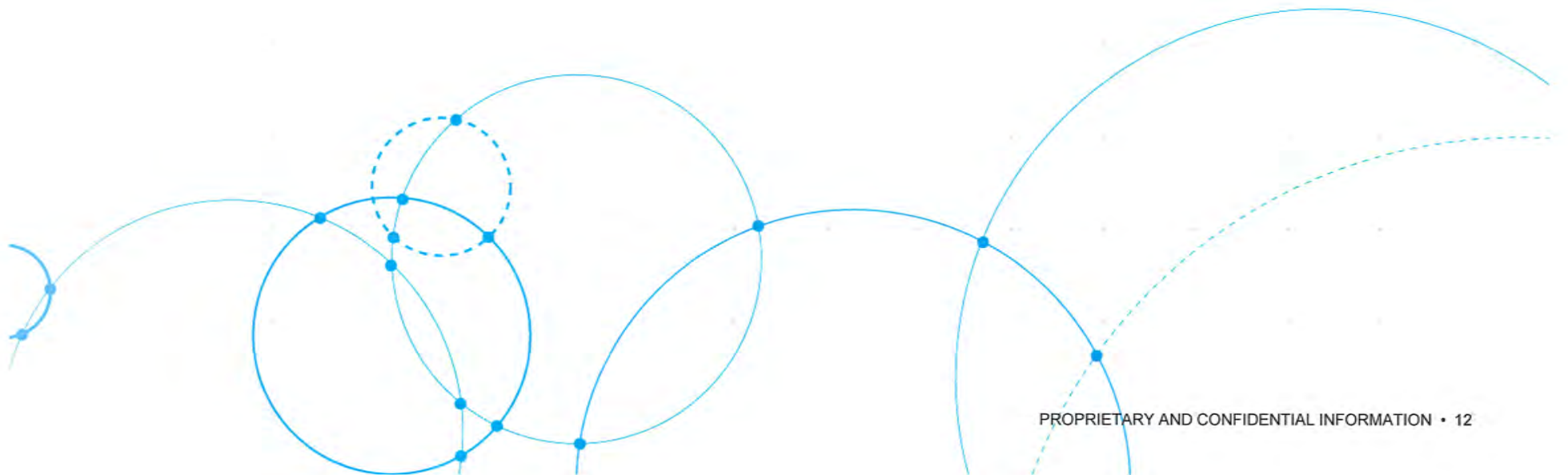
CUSTOMER REQUESTS DISTRIBUTED GENERATION



- Vectren has received inquiry from 2 customers on the installation of distributed generation resources in excess of the 1MW threshold established in IC 8-1-40 / 170 IAC 4-4.2.
 - Customers wish to use the energy produced by the DG resources to offset load, with any excess sold to Vectren.
 - Vectren has a current Qualifying Facilities Tariff in place (Rate CSP) to address the installation of distributed generation resources, with energy and capacity offered for purchase by Vectren.
 - Vectren is working on an agreement to purchase the excess energy at the Rate CSP rate –
 - Inflow/Outflow measurement would match the Excess DG Tariff proposed.
 - All terms would adhere to the Tariff – no special contract proceeding.
 - Will result in the creation of a new Rate CSP Contract Template, which will be filed with the Commission.
 - Vectren is evaluating the potential need to create an Excess DG-2 Tariff for installations greater than 1MW.



QUESTIONS?



RIDER EDG EXCESS DISTRIBUTED GENERATION

AVAILABILITY

This Rider shall be available throughout Company's Service Area subject to the terms of Indiana Code ("IC") 8-1-40 and subject to the availability of adequate facilities and power supplies, which determinations shall be within Company's reasonable discretion.

APPLICABILITY

This Rider is applicable to any Customer receiving Electric Service electing service hereunder who has installed on its Premises an eligible distributed generation energy resource, as defined in IC 8-1-37-4(a)(1) through IC 8-1-37-4(a)(8), or other renewable energy technologies determined appropriate by the Commission. Customer must meet the Metering, Generator System Requirements, and Interconnection Requirements specified below. Customer must not be eligible for Rider NM.

BILLING

The following definitions are applicable to Customers under Rider EDG:

Inflow – (kWh) the measurement of energy supplied by Company to Customer.

Outflow – (kWh) the measurement of energy delivered by Customer to Company.

Rider EDG Billing Credit – in accordance with IC 8-1-40-18, the credit determined by taking the Outflow multiplied by the Marginal DG Price.

Rider EDG Billing Credit Balance – in accordance with IC 8-1-40-18, the cumulative amount of Rider EDG Billing Credits not applied to a customer's bill due to Minimum Monthly Charge requirements.

During the Month, Company shall measure the total kWh amount of Inflow and the total kWh amount of Outflow.

The Inflow kWh for the Month shall be billed in accordance with the Customer's standard Rate Schedule, with all applicable rates and charges (heretofore defined as *Standard Charges*).

The Excess DG kWh (Outflow) for the Month shall be multiplied by the Marginal DG Price to determine the Rider EDG Billing Credit.

For each Month, the Customer will be billed the Minimum Monthly Charge as defined in the Customer's applicable Rate Schedule. If the portion of the Customer's bill for the Month attributed to the Rider EDG Billing Credit is in excess of the amount attributed to Standard Charges less the Minimum Monthly Charge, the amount in excess will be accumulated in a Rider EDG Billing Credit Balance for use in a subsequent period.

If the portion of the Customer's bill for the Month attributed to the Standard Charges is in excess of the Rider EDG Billing Credit, any remaining Rider EDG Billing Credit Balance will be applied until the bill becomes the Minimum Monthly Charge or until the Rider EDG Billing Credit Balance becomes zero.

Effective:

RIDER EDG
EXCESS DISTRIBUTED GENERATION

(Continued)

In accordance with IC 8-1-40-18, when Customer discontinues Rider EDG service and no longer receives retail electric service from the Company at the Premises, any unused and remaining Rider EDG Billing Credit Balance will revert to Company.

MARGINAL DG PRICE

Marginal DG Price is the average marginal price of energy paid by the Company during the most recent calendar year, multiplied by one and twenty-five hundredths (1.25), in accordance with IC 8-1-40-17.

Marginal DG Price:

\$0.03631 for all Outflow kWh

METERING

Customer's eligible for Rider EDG will be required to have a meter installed which can separately measure Inflow and Outflow. If Customer's standard meter is not capable of measuring Inflow and Outflow separately, Company will at its expense install a meter to meet the requirements of Rider EDG.

For Customers receiving three-phase service Company will install, at Customer's expense, a meter to meet the requirements of Rider EDG.

Company's General Terms and Conditions Applicable to Electric Service will govern meter testing procedures.

DISTRIBUTED GENERATOR SYSTEM REQUIREMENTS

Customer's distributed generator system must initially and continuously meet the following requirements. The Company retains the right to periodically verify adherence to these requirements. Lack of adherence to the requirements revokes the applicability of this Rider.

1. The nameplate rating of Customer's generator system must not exceed 1 megawatt ("MW");
2. The generator system must be owned and operated by Customer and must be located on Customer's Premises;
3. Customer's generator system installed kW nameplate rating shall not represent an intent to exceed a Customer's on-going twelve-month kWh usage;
4. The generator system must operate in parallel with Company's distribution facilities;
5. The generator system must satisfy the Interconnection Requirements specified below;
6. The generator system cannot be used primarily for emergency back-up purposes; and
7. The generator system must not be operating under the NM Net Metering Rider.

Effective:

RIDER DG
DISTRIBUTED GENERATION
(Continued)

INTERCONNECTION REQUIREMENTS

1. Customer shall comply and maintain compliance with Company's interconnection requirements and Interconnection Guidelines for Customer Owned Generation (VEC-006). A generator system shall be deemed in compliance with Company's interconnection requirements if such generator system conforms to the most current Indiana Electrical Code, IEEE Standard 1547, has UL or CSA certification that it has satisfied the testing requirements of UL 1741 dated January 28, 2010, or IEEE 1547.1, or any IEEE or UL Standards that supersede these. The distributed generation facility shall comply with the applicable requirements of 170 IAC 4-4.3.
2. Customer owning and operating a generator system shall provide proof of liability insurance providing coverage for claims resulting from Bodily Injury and/or Property Damage in the amount of at least one hundred thousand dollars (\$100,000) for the liability of the insured against loss arising out of the use of a distributed generation metering facility, as provided in 170 IAC 4-4.2-8. This coverage must be maintained as long as Customer is interconnected with Company's distribution system.
3. Conformance with these requirements does not convey any liability to Company for injuries or damages arising from the installation or operation of the generator system.
4. Customer shall execute Company's standard Distributed Generation Interconnection Application form and provide other information reasonably requested by Company for service under this Rider. Company shall require proof of qualified installation, including but not limited to proper configuration of service transformers and grounding requirements, prior to acceptance and completion of the interconnection agreement. Certification by a licensed electrician shall constitute one form of acceptable proof.

TERMS AND CONDITIONS OF SERVICE

1. Any characteristic of Customer's generator that degrades or otherwise compromises the quality of service provided to other Company Customers will not be permitted. In Company's determination, all generators shall be installed in compliance with corresponding service connection and IEEE Standard 519.
2. Customer shall agree that Company shall at all times have immediate access to Customer's metering, control, and protective equipment.
3. Customer shall install, operate and maintain the distributed generation facility in accordance with the manufacturer's suggested practices for safe, efficient and reliable operation in parallel with Company's system.
4. Company may, at its own discretion, isolate any distributed generation facility if Company has reason to believe that continued interconnection with the distributed generation facility creates or contributes to a system emergency. System emergencies causing discontinuance of interconnection shall be subject to verification at the Commission's discretion.

Effective:

RIDER DG
DISTRIBUTED GENERATION
(Continued)

5. A disconnecting device must be located at the point of common coupling for all Level 3 interconnections and applicable Level 2 interconnections as determined by Company. For three-phase interconnections, the disconnecting device must be gang operated. The disconnecting device must be accessible to Company personnel at all times and be suitable for use by Company as a protective tagging location. The disconnecting device shall have a visible open gap when in the open position and be capable of being locked in the open position. The cost and ownership of the main disconnect switch shall reside with Customer.
6. Customer is responsible for operating the proposed distributed generation facility such that voltage imbalance attributable to the distributed generation facility shall not exceed 1% at the point of common coupling. If voltage imbalance is more than 1% without the generator operating, the generator shall be installed and operated so as not contribute to a further imbalance. Voltage imbalance is the maximum phase deviation from average as specified in ANSI C84.1.
7. Company reserves the right to witness compliance testing at the time of installation and maintenance testing of the interconnection system for compliance with these conditions of service.
8. Customer is responsible for establishing a program for and performing periodic scheduled maintenance on the distributed generation facility's interconnection system (relays, interrupting devices, control schemes and batteries that involve the protection of Company's distribution system). A periodic maintenance program is to be established in accordance with the requirements of IEEE 1547. Company may examine copies of the periodic test reports or inspection logs associated with the periodic maintenance program. Upon Company's request, Company shall be informed of the next scheduled maintenance and be able to witness the maintenance performed and any associated testing.
9. The interconnection system hardware and software design requirements included in these terms and conditions of service are intended to ensure protection of Company's distribution system. Customer is solely responsible to determine, design and apply any additional hardware and software necessary to protect equipment at the distributed generation facility.
10. Customer agrees that Company shall not be liable for any damage to or breakdown of Customer's equipment operated in parallel with Company's electric system.
11. Customer shall agree to release, indemnify, and hold harmless Company from any and all claims for injury to persons or damage to property due to or in any way connected with the operation of Customer-owned equipment and/or generators.
12. The supplying of, and billing for service under this Rider shall be governed by Company's General Terms and Conditions Applicable to Electric Service under the jurisdiction of the Commission.

Effective: