

HENRY COUNTY REMC
POLICY MANUAL

DISTRIBUTED GENERATION

POLICY 309

OBJECTIVES

- A. To define how members of the cooperative can interconnect electrical generation facilities with those of Henry County REMC.
- B. To establish procedures and guidelines for establish such an interconnection.
- C. To ensure that distributed generation facilities are not subsidized by the general membership.

POLICY

- A. It is the intent of the Henry County REMC (REMC) to allow its members to install Distributed Generation (DG) provided that member's DG facility does not adversely affect the REMC, Hoosier Energy or other electric grid connected entities.
- B. The Member must conduct, or have consultants conduct, his/her own analysis to determine the economic benefit, if any, of the DG operation. REMC is not responsible for assisting the member in making these determinations nor is the REMC responsible if the DG installation does not prove to be economical or does not prove to operate satisfactorily.
- C. Throughout this policy, a member who has installed or is planning to install a DG facility is referred to as "Member."
- D. A DG facility that is not connected to the REMC lines in any way is known as "**stand-alone**" or "**isolated**" DG system. The Member may operate a DG facility in stand-alone or isolated fashion as long as such DG facility does not adversely affect the REMC's electric system or impose any undue hazards or risks to the REMC electric system or personnel.
- E. A DG facility connected in any way to the REMC's electric system shall be considered as being operated in "**parallel**." For purposes of this DG policy, a DG facility is considered operating in "**parallel**" anytime it is connected to the REMC's system in any way, even if the Member does not intend to export or import power. All provisions of this DG Manual shall apply to parallel

operation of DG facilities as so defined. Members shall fully comply with the provisions of this DG Manual as a condition of receiving electric service. Some provisions may be amended from time to time at the sole discretion of the REMC.

- F. The Member is responsible for researching and following any and all laws, ordinances, rules and regulations. This policy and any material published by REMC is not intended to be an installation or safety manual.
- G. The Member requesting to interconnect a DG facility to the REMC's electric system is responsible for and must follow, in addition to all provisions of this DG Manual: the REMC's Bylaws, Service Rules and Regulations, policies, tariffs for electric service, the policies and procedures of the REMC's power supplier, Hoosier Energy, Inc. (hereinafter referred to as "Power Supplier"), where applicable; National Electrical Code (NEC) the current *IEEE 1547 Standard Guide for Distributed Generation Interconnection*; applicable ANSI standards, including ANSI C84.1 Range A, Midwest Independent System Operator (MISO) directives; and industry standard, prudent engineering practices. All standards or requirements of any controlling legal authority must also be complied with. All requirements in the following sections of this DG policy must be met prior to interconnection of the DG facility to the REMC's system.
- H. Inverter-based systems listed by Underwriters Laboratories (UL) to UL Standard 1741, published May 7, 1999, as revised January 17, 2001 (UL 1741), are accepted by the REMC as meeting the technical requirements of IEEE1547 tested by UL 1741.
- I. A Member may serve all loads beyond the meter at the location serving the DG facility but will not be allowed to serve multiple meters, multiple consuming facilities or multiple Members with a single DG facility or under a single DG application. The Member shall not resell electricity under any circumstances except as provided by this agreement.
- J. DG facilities larger than 50 kilowatts in nameplate rating are not covered by this DG Manual and will be considered by the REMC and the REMC's Power Supplier on a case-by-case basis.
- K. The first step is to determine the category of distributed generation facility.
 - 1. Connection Level Category:
 - a. Connected to the REMC's system: The Member requests and/or the Member's DG facility requires connection to the REMC's system. All provisions of this DG policy cover this category.

- b. Connected to the REMC's Power Supplier's system: This DG policy does not cover this category.
2. Power Export Category-
- a. Isolated No power export: The Member operates a DG facility connected in any way to the REMC system but with no intention to export power.
 - b. Parallel Power generated to be both consumed and exported: The Member operates a DG facility connected in any way to the REMC's system designed primarily to serve the Member's own load but with the intention to export excess power.
 - c. Power Export Power generated to be exported only: The Member operates a DG facility connected in any way to the REMC's system designed primarily with the sole intention to export power.
3. Size Category:
- a. Facilities 50 kW and smaller: Facilities ≤ 50 kW of connected generation will be placed in this size category.

L. The Member's initial submission requirements include:

1. Notification:
- a. The Member must meet all the REMC's membership and service requirements in addition to the requirements in the DG policy and other guides.
 - b. Anyone requesting to own or operate a DG facility in parallel with the REMC's electric system must notify the REMC in writing utilizing the REMC's application package of the proposed location, use and size category of the proposed DG facility.
2. Service Request:
- a. In advance of request for an interconnection, the Member must contact the REMC and complete the "Henry County REMC Agreement for Interconnection and Parallel Operation of Distributed Generation."
 - b. DG facilities 50 kW and under in size and of standard manufacture and design (as so determined by the REMC) may submit the attached application.
 - c. A separate form must be submitted for each facility.

3. Submit a DG Plan:

- a. As a part of the application, the Member shall submit a plan detailing the electrical design, interconnection requirements, size, and operational plans for the DG facility (the “DG plan”). At the time of submission, the REMC requires the DG plan to be prepared by a professional engineer registered in the state of Indiana.
- b. Prior to review of the application and DG plan by the REMC, the Member shall pay an application fee as indicated below. A separate fee must be submitted for each DG facility.

Application fees and submission requirements:

- a. All installations must have a Professional Engineer (PE) certification.

DG Size	Operating Characteristics	Application	Application Fee
50 kW or less	Parallel operation, either power export or no power export	Project has PE Certification	\$250
50 kW or less	Parallel operation, either power export or no power export	Does not have PE Certification Member requires assistance	\$2500

The REMC can assist members in obtaining PE certification at the members own expense. If administrative and engineering fees exceed the application fee, the REMC reserves the right to bill the member. This bill must be paid before bi-directional meter installation and permission to operate (PTO) are granted. PE certification must be completed and submitted before the application can be fully processed.

N. REMC and Power Supplier review process:

- 1. The REMC, and its Power Supplier if requested by the REMC, will review the application and accompanying documents, plans, specifications, and other information provided and will respond to the Member within 60 days of receipt of final plans and specifications and additional information, if any, requested by the REMC.
- 2. Technical review will be consistent with guidelines established by the most recent *IEEE Standard 1547 Guide for Distributed Generation Interconnection*. The Member may be required by the REMC to provide proof that the proposed DG Facilities have been tested and certified to

applicable IEEE guidelines.

3. If corrections or changes to the plans, specifications and other information are to be made by the Member, the 60-day period may be reinitialized when such changes or corrections are provided to the REMC. In addition, any changes to the site or project requiring new analysis by the REMC may result in additional costs being incurred and a new DG plan may be required. The cost will be determined by the REMC and shall be paid in advance by the Member.
4. The Member acknowledges and agrees that any review or acceptance of such plans, specifications and other information by the REMC and/or its Power Supplier shall not impose any liability on the REMC and/or its Power Supplier and does not guarantee the adequacy of the Member's equipment or DG facility to perform its intended function. The REMC and its Power Supplier disclaim any expertise or special knowledge relating to the design or performance of DG installations and does not warrant the efficiency, cost-effectiveness, safety, durability, or reliability of such DG installations. Installation and operation of the DG facility shall at all times be at the Member's risk and expense.
5. In the event it is necessary at the time of initial interconnection or at some future time for the REMC and/or its Power Supplier to modify electric delivery systems in order to serve the Member's DG facilities and/or purchase or continue to purchase the output of the Member's DG facilities, or because the quality of the power provided by the Member's DG adversely affects the REMC's and/or its Power Supplier's delivery system, the Member will be responsible to pay the REMC and/or its Power Supplier in advance for all costs of modifications required for the interconnection of the Member's DG facilities. Failure to comply with this provision may result in the REMC disconnecting/isolating Member's parallel DG facility or electrical service, with or without notice, from the REMC's electrical system.

O. Members responsibility prior to operation

1. Line Extension and Modifications to REMC Facilities:
 - a. As a part of the interconnection analysis performed by the REMC, the Member will be provided with an estimate of any line extension or other cost to be incurred in providing electric delivery service to the Member's DG facility.
 - b. Notwithstanding the REMC's line extension policy, the Member shall pay in advance the full cost of the construction of any transmission,

substation, distribution, transformation, appropriate metering, protective, or other facilities or equipment which, at the sole discretion of the REMC and/or its Power Supplier, is required to serve the Member's proposed DG facility.

- c. In the event it is necessary at the time of initial interconnection or at some future time for the REMC and/or its Power Supplier to modify electric delivery systems in order to serve the Member's DG facilities and/or purchase or continue to purchase the Member's output, or because the quality of the power provided by the Member's DG adversely affects the REMC and/or its Power Supplier's delivery system, the Member will reimburse the REMC and/or its Power Supplier for all costs of modifications required for the interconnection of the Member's DG facilities. Failure to comply with this provision may result in the REMC disconnecting/isolating Member's parallel DG facility or electrical service, with or without notice, from the REMC's electrical system.
- d. In the event the REMC at any time in the future changes primary voltage of facilities serving the DG facility such that metering equipment, transformers and/or any other Member-owned equipment must be changed to continue receiving service at the new primary voltage level, the full cost of the change will be borne by the Member. Failure to comply with this provision may result in the REMC disconnecting/isolating Member's parallel DG facility or electrical service, with or without notice, from the REMC's electrical system.
- e. The Member shall pay the full cost of the installation of a visible load break disconnect switch by and to the sole specification of the REMC. The switch will be readily accessible to REMC personnel and of a type that can be secured in an open position by an REMC lock. Failure to comply with this provision may result in the REMC disconnecting/isolating Member's parallel DG facility or electrical service, with or without notice, from the REMC's electrical system.
- f. The Member shall obtain a valid county building permit for the installation of the DG facility prior to the REMC's installation of the bi-directional meter and granting of permission to operate. The Member shall provide a copy of the approved county building permit to the REMC before the final inspection and meter installation can be scheduled. Failure to obtain and provide proof of the required county building permit may result in delays in the interconnection process and may prevent the REMC from granting permission to operate the DG facility. The REMC reserves the right to refuse installation of the bi-directional meter and to withhold permission to operate if a valid county building permit is not provided. The Member is solely responsible for ensuring compliance with all local building codes and permit

requirements. The REMC's interconnection process and agreement do not supersede or replace any local permitting requirements.

2. Liability Insurance

- a. Prior to interconnection, the Member must provide (at Member's expense) a certificate of insurance showing satisfactory liability insurance including contractual liability insurance covering indemnity agreements which insures the Member against all claims for property damage and for personal injury or death arising out of, resulting from or in any manner connected with the installation, operation and maintenance of the Member's generating equipment.
- b. The amount of such insurance coverage required to be provided by the Member shall be not less than \$1,000,000 (one million dollars) per occurrence. The amount of such coverage and the type of insurance coverage required must be acceptable to the REMC and the insurance requirement may be amended from time to time by the REMC at the sole discretion of the REMC.
- c. The certificate of insurance shall provide that the insurance policy will not be changed or canceled during its term without thirty days written notice to the REMC. The term of the insurance shall be coincident with the term of the interconnection contract or shall be specified to renew throughout the length of the interconnection contract. Failure to comply with this provision may result in the REMC disconnecting/isolating Member's parallel DG facility or electrical service, with or without notice, from the REMC's electrical system.
- d. The Member shall provide proof of such insurance to the REMC at least annually or at the request of any authorized REMC representative.

3. Contracts:

- a. Interconnection Contract: The Member shall sign and deliver an Agreement for Interconnection to the REMC substantially in the form as shown in the REMC AGREEMENT FOR INTERCONNECTION AND PARALLEL OPERATION OF DISTRIBUTED GENERATION as provided to those making application for a DG facility.

4. Ownership of facilities:

- a. The Member shall own and be solely responsible for all expense, installation, maintenance and operation of all facilities, including all power generating facilities, at and beyond the point of delivery as

defined in the REMC's tariffs.

- b. At its sole discretion, the REMC may locate REMC-owned metering equipment and/or transformers past the point of delivery.

5. Name Consistency Requirement

- a. The name on the application, the REMC account, and the insurance policy, and any other supporting documentation must all match exactly. Any discrepancies in names across these documents may result in delays in processing or potential rejection of the application. It is the member's responsibility to ensure consistency in naming across all required documentation.

6. Self-Protection of DG Facilities:

- a. The Member will furnish, install, operate and maintain in good order and repair all equipment necessary for the safe operation of DG facilities operated in parallel with the REMC system.
- b. The Member's equipment will have capability to both establish and maintain synchronism with the REMC system and to automatically disconnect and isolate the DG facility from the REMC system pursuant to abnormal operation or unsafe conditions present on either system.
- c. The Member's DG facility will be designed, installed and maintained to be self-protected from normal and abnormal conditions on the REMC system including, but not limited to, overvoltage, undervoltage, overcurrent, frequency deviation, and faults. Self-protection will be compatible with all applicable REMC, Power Supplier or other controlling legal authority protection arrangements, requirements and/or operating policies.
- d. Additional protective devices and/or functions may be required by the REMC when, in the sole judgment of the REMC, the particular DG facility installation and/or the REMC system characteristics so warrant.

7. Transfer of ownership:

- a. Transfer of Ownership: In the event that the member who installs the distributed generation system sells or otherwise transfers ownership of the property, the new owner(s) shall be responsible for understanding and adhering to all terms and conditions of this interconnection agreement. The original member agrees to inform any potential buyers of the property about the existence of this agreement and its obligations. However, it is important to note that Henry County REMC reserves the right to update or modify this agreement at any time without notification to

the property owner. Upon transfer of the property, the new owner(s) automatically assume all rights and responsibilities outlined in the most current version of this agreement. It is the responsibility of the new owner(s) to obtain the most recent copy of the agreement from Henry County REMC. The REMC reserves the right to require the new owner(s) to execute a new agreement if deemed necessary.

8. Safety Disconnect:

- a. The REMC requires some means to visually disconnect the REMC's system from the Member's system. If service can be safely disconnected by REMC personnel pulling the meter, then this arrangement will not require a separate safety disconnect.
- b. A Member shall install a visible load break disconnect switch at the Member's expense and to the REMC's specifications in all other instances where pulling the REMC's meter will not safely and visibly disconnect the REMC's system from the Member's system.
- c. The switch will be located so as to be readily accessible to REMC personnel at all times and in a location acceptable to both the Member and the REMC.
- d. The switch shall be a type that can be secured in an open position by a lock owned by the REMC. If the REMC has locked the disconnect switch open, the Member shall not operate or close the disconnect switch.
- e. Signage shall be placed by the REMC at the Member's expense and located at the disconnect indicating the purpose of the switch along with contact names and numbers of both the Member and the REMC.

9. Initial Interconnection:

- a. Upon satisfactory completion of the review process and execution of required agreements as outlined in this DG Policy, the REMC will begin installation of the interconnection of the DG facilities. The interconnection will be completed as soon as practical after completion of the review process and execution of the necessary agreements/contracts. After completion of interconnection requirements and prior to initiation of service, the REMC will conduct a final inspection of the facilities and interconnection to the REMC's system. Upon final inspection satisfactory to the REMC and/or Power Supplier if applicable, or other controlling legal authority, the REMC will initiate service to the Member's DG facility.

- b. The REMC's review process and final inspection is intended as a means to help safeguard the REMC's facilities and personnel. The Member acknowledges and agrees that any review or acceptance of such plans, specifications and other information by the REMC and/or its Power Supplier shall not impose any liability on the REMC and/or its Power Supplier and does not guarantee the adequacy of the Member's equipment or DG facility to perform its intended function. The REMC and its Power Supplier disclaim any expertise or special knowledge relating to the design or performance of DG installations and does not warrant the efficiency, cost-effectiveness, safety, durability, or reliability of such DG installations.

P. Refusal to interconnect service or disconnection of interconnection service

1. The REMC may, at its sole discretion, prevent the interconnection or disconnect the interconnection of DG facilities, with or without notice, due to reasons such as safety concerns, reliability issues, power quality issues, breach of interconnection contract, or as ordered by any controlling legal authority, or any other issue which the REMC considers to be a reasonable basis for such action. Any disconnection may be without prior notice.

Q. Operation of a parallel facility

The purpose of this section is to outline the REMC's operational requirements (the fulfillment of which is the responsibility of the Member) for DG facilities operated in parallel with the REMC's system and is not intended to be a complete listing of all operational, regulatory, safety and other requirements.

1. Quality of Service:

- a. The Member's DG facility will generate power at the nominal voltage of the REMC's system at the Member's delivery point as defined by ANSI C84.1 Range A.
- b. Member's DG installation will generate sinusoidal power at a frequency of sixty (60) hertz within the tolerances as defined by IEEE 1547.
- c. Member's DG facility shall produce power at a minimum power factor of at least 97% peak and average or member shall provide and utilize power factor correction capacitors to ensure at least a 97% peak and average power factor. Failure to comply with this provision may result in billing power factor penalties being assessed.
- d. Member's DG facility shall operate in accordance with the power

quality limits specified in IEEE 519. This standard specifies generally acceptable harmonic distortion (both current and voltage) levels.

- e. The overall quality of the power provided by the Member's DG facility including, but not limited to, the effects of harmonic distortion, voltage regulation, voltage flicker, switching surges and power factor, will be such that the REMC system or other members are not adversely affected in any manner.
 - f. In the event that adverse effects are caused in whole or in part by the Member's DG facility, the Member will correct the cause of such effects within 14 days of the initial adverse effect and, if applicable, reimburse the REMC for required correction and reimburse other members or any other affected entities for documented and substantiated damages incurred due to Member's DG operation. However, the disconnection of the facilities by the REMC is permitted without notice if, in the sole judgment of the REMC, adverse effects may warrant immediate disconnection from the REMC's system.
2. Operation of safety disconnect:
- a. The REMC shall have the right to lock the disconnect switch open when, in the sole judgment of the REMC:
 - i. It is necessary to maintain safe electrical operating and/or maintenance conditions.
 - ii. The Member's DG system, in the sole judgment of the REMC, adversely affects the REMC's or other connected entities or member's system/service.
 - iii. There is a system emergency (a system emergency may occur on the REMC, Power Supplier, MISO system or control area) or other abnormal operating condition warranting disconnection with or without notice.
 - iv. If ordered to do so by any controlling legal authority.
 - b. The REMC reserves the right to operate the disconnect switch for the protection of the REMC system even if it adversely affects the Member's DG facility. In the event the REMC opens and/or closes the disconnect switch with or without notice:
 - i. The REMC shall not be responsible for energizing or restoring the parallel operation of the DG facility.

- c. The Member will not reset or re-energize the meter or bypass the disconnect switch at any time for any reason.
- d. Members with DG facilities as defined in this DG Manual that are solely for the purpose of emergency backup without intent to export power shall not operate their DG facilities at any time unless their electric system is visibly disconnected and locked out from the REMC system. At its sole discretion, the REMC may require the Member to install at his/her own expense an interlocking switch, approved by the REMC, for the purpose of insuring the Member's facilities do not operate in parallel with the REMC's facilities.

3. Access:

- a. Persons authorized by the REMC shall have the right to enter the Member's property for purposes of testing, operating the disconnect switch, reading or testing the metering equipment, maintaining right-of-way or other DG facility equipment and/or REMC service requirement. Such entry onto the Member's property may be at any time without notice.
- a. If the Member erects or maintains locked gates or other barriers, the Member will furnish the REMC with convenient means to circumvent the barrier for immediate full access for the above-mentioned reasons. The REMC shall not be responsible for any damage to gates, locks or other barriers incurred in carrying out the provisions of this section.

4. Liability for injury and damages:

- a. The Member assumes full responsibility for electric energy furnished by the Member and shall indemnify the REMC and/or its Power Supplier against and hold the REMC and/or its Power Supplier harmless from all claims, liability, damages, and expenses, including attorney's fees, based on any injury to any person, including loss of life or damage to any property, including loss of use thereof, arising out of, resulting from, or connected with, or that may be alleged to have arisen out of, resulted from, or connected with an act or omission by the Member, its employees, agents, representatives, successors, or assigns in the construction, ownership, operation, or maintenance of such party's facilities used in net billing.
- b. The REMC and/or its Power Supplier shall not be liable for either direct or consequential damages resulting from failures, interruptions, or voltage and waveform fluctuations occasioned by causes reasonably beyond the control of the REMC and/or its Power Supplier including, but not limited to, acts of God or public enemy, acts of terrorism,

sabotage and/or vandalism, accidents, fire, explosion, labor troubles, strikes, order of any court or judge granted in any bona fide adverse legal proceeding or action, or any order of any commission, tribunal or governmental authority having jurisdiction. ALL PROVISIONS NOTWITHSTANDING, IN NO EVENT SHALL THE REMC BE LIABLE TO THE MEMBER FOR ANY INTEREST, LOSS OF ANTICIPATED REVENUE, EARNINGS, PROFITS, OR INCREASED EXPENSE OF OPERATIONS, LOSS BY REASON OF SHUTDOWN OR NON-OPERATION OF MEMBER'S PREMISES OR FACILITIES, OR FOR ANY INDIRECT, INCIDENTAL, OR CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF OR RELATED, IN WHOLE OR PART, TO THIS AGREEMENT. THE REMC SHALL NOT BE LIABLE IN ANY EVENT FOR CONSEQUENTIAL DAMAGES.

- c. The Member is solely responsible for insuring that the Member's facility complies with all applicable regulations including, but not limited to, laws, regulations, ordinances, REMC and REMC Power Supplier tariffs, policies and directives, and MISO policies and directives.

5. Notice of change in installation:

- a. The Member will notify the REMC in writing thirty (30) days in advance of making any change affecting the characteristics, performance, or protection of the DG facility.
- b. If any modification undertaken by the Member will create or has created conditions which may be unsafe or adversely affect the REMC system, the Member shall immediately correct such conditions or be subject to immediate disconnection from the REMC system without notice.
- c. Any change in the operating characteristics of the DG facility including, but not limited to, size of generator, total facility capacity, nature of facility, fuel source, site change, hours of operation, or type used, may, at the sole discretion of the REMC, require a new application process, including, but not limited to, application form, application fee, DG plan and DG plan review by the REMC.

6. Testing and recordkeeping:

- a. The Member will annually test all aspects of the protection systems up to and including tripping of the generator. Testing will verify all protective set points and relay/breaker trip timing and shall include procedures to functionally test all protective elements of the system. The REMC may witness the testing and/or require copies of documentation of test results. The REMC, pursuant to its sole

judgment, may require that these tests be repeated at Member's expense.

- b. The Member will maintain records of all maintenance or testing activities, which the REMC may review at reasonable times.

7. Disconnection of Service:

- a. The REMC may, at its sole discretion, discontinue the interconnection of DG installations due to reasons such as safety concerns, reliability issues, power quality issues, breach of interconnection contract or any other issue, which the REMC considers to be a reasonable basis for such action.
- b. The REMC shall disconnect or discontinue interconnection of the DG facility, with or without notice, if ordered to do so by any controlling legal authority.

R. Compensation for Power Purchased

1. If a member wishes to install a parallel installation and only use the power generated as a kWh offset against his/her kWh use, appropriate metering will be required and will be installed at the member's expense as part of the application process. In this case, the member's bill will reflect a reduction in kWh used, but there will be no monetary credit. The member would receive no credit for any excess kWh produced at times when kWh produced by the DG unit exceeded use.
2. Henry County REMC will credit a monetary amount on the member's bill each month. The amount credited might reduce the bill or might result in a credit for the month. If the net bill is a credit, the credit will be applied to the next month's bill. No actual payment will be made even if the member ceases to produce power and is disconnected from the Henry County REMC system.
3. The rate per kilowatt-hour that will be credited to the member will be determined by Henry County REMC. The rate, method of calculation and rules will be published as a part of the REMC's tariffs.
4. If the annual production of a DG unit connected in parallel will exceed the power used annually by the member, Henry County REMC will not allow the unit to be connected to its system. If a DG unit has been interconnected, and it produces more power over a 12-month period than the member consumes, the REMC reserves the right to disconnect the unit.

RESPONSIBILITY

- A. It shall be the responsibility of the Chief Operating Officer and/or Line Superintendent to administer the policy and ensure that generators comply with the policy's provisions.
- B. It shall be the responsibility of the Chief Executive Officer to enforce this policy, calculate the average cost of wholesale power and provide information to the billing department so that the generator receives his/her credit.

Approved Sept. 10, 2008
Amended March 9, 2016
Amended October 15, 2024