

Interconnecting Distributed Generation

Thank you for requesting information about interconnecting distributed generation to Pella Cooperative Electric's system. To assist our members, we have developed a streamlined process for the safe, reliable, efficient, and cost-effective interconnection of small renewable energy systems.

Our objective is to protect the safety of cooperative personnel and members, maintain the integrity and reliability of the grid, and to ensure rate equity for all members. Because distributed generation can affect the safety and reliability of the distribution system, we have developed technical interconnection rules that address those impacts. These rules ensure that we can continue to provide you and all other members with safe and reliable electric service.

We are ready to help you by providing information and answering questions. We want to give you the tools you need to make an informed decision about distributed generation.

In this packet, you will find the following documents:

- An Overview of the Interconnection Process
- Frequently Asked Questions
- Interconnection Resources
- PCEA's Distributed Generation Interconnection Tariff
- PCEA's Level 1 Interconnection Application and Agreement
- PCEA's Certificate of Completion

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An Overview of the Interconnection Process

Guiding Principles

First and foremost, the Pella Cooperative Electric emphasizes:

1. **Safety.** Taking all necessary precautions to ensure the safety of the cooperative's employees and members.
2. **Reliability.** Performing necessary tasks to protect and maintain the reliability and integrity of the power grid.
3. **Cost Fairness.** Operating with fairness to other cooperative members by recovering costs from those members who cause the costs to be incurred.

Member & Cooperative Responsibilities

The cooperative and the member must work together in connecting distributed generation to the grid, following any applicable federal and state laws or regulations. A written agreement between the cooperative and the member is required to facilitate a safe, reliable, and fair connection. This agreement must be executed prior to connecting to the facility to the grid.

Members are responsible for paying all costs associated with interconnection and any additional system protection which may be required to protect the qualifying facility, the cooperative's distribution system, or CIPCO's transmission system.

Issue	Required	Responsibility
Initial Contact with Cooperative	Yes	Member
Insurance	Yes	Member
Written Agreement	Yes	Cooperative & Member
Interconnection	Yes	Cooperative & Member
Interconnection Costs	Yes	Member
Inspection	Yes	Cooperative & Member
Service, Maintenance	Yes	Member

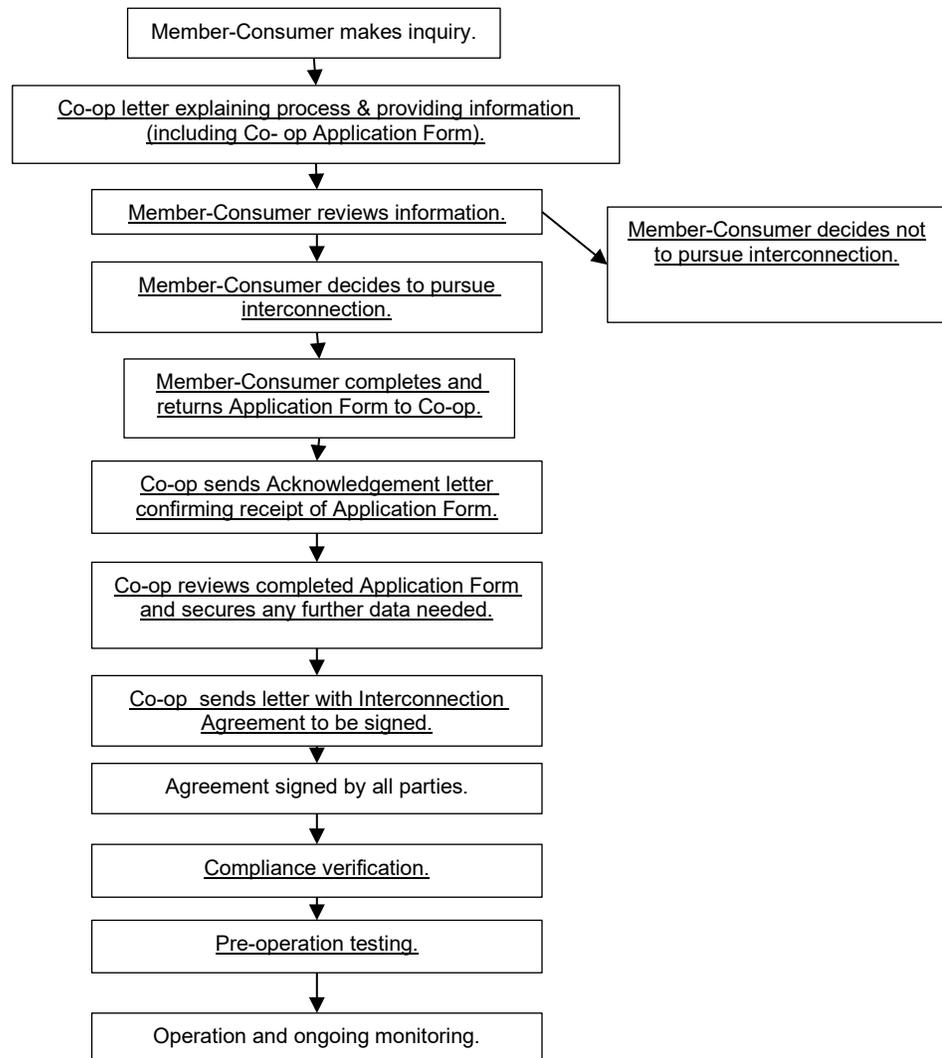
Written Agreement

The written agreement shall address the following items:

- Cooperative representatives must be allowed access to the facilities for purposes of inspecting or testing member's equipment, facilities, or apparatus and the accuracy of the cooperative's metering equipment.
- The member and the cooperative will have access to the interconnection switch at all times and the interconnection will be provided with a switch that provides a visible break or opening. The switch must be capable of being padlocked in the open position.
- Communication indicating that the member is responsible for the costs of installation and maintenance of power factor correction capacitors required to maintain the equivalent of an average power factor of 90 percent (lagging) at the interconnection.
- A requirement that the member's electric generating equipment be designed, operated, and maintained in a manner which does not adversely affective the cooperative's voltage wave form.
- Acknowledgment that the member is responsible for costs incurred by the

- cooperative for connection of the facility.
- Acknowledgment that the member agrees to insure and indemnify the cooperative and its representatives against liability for any injuries or damages caused by the operation of the facility. This requires the member to maintain liability insurance or other proof of financial responsibility.
- Acknowledgment that the member will regularly inspect, maintain, and service the facility for safe and reliable operation and maintain a record or log.
- Acknowledgment that the member's facility will be subject to disconnection without notice by the cooperative in the event the facility causes unacceptable safety, voltage, or frequency conditions, service interruptions, or communications interference.
- Acknowledgment that the member will furnish and install an over-current device on the facility to automatically disconnect the facility at all currents that exceed the full-load current rating of the facility.
- Acknowledgment that the member's facility will be equipped with automatic disconnection upon loss of electric voltage supplied by the cooperative.
- Certain other technical requirements as outlined in the cooperative's tariff.

Interconnection Process



Frequently Asked Questions: Interconnecting Distributed Generation

1. **What is distributed generation?** Distributed generation is any form of electricity generating technology installed by a customer or independent energy producers that is connected to the grid at the distribution level.
2. **What is required by the cooperative if I install distributed generation?** Cooperatives must adhere to all applicable federal and state laws when working with a member to connect generation to the grid. The cooperative has outlined the interconnection process in its Tariff, filed with the Iowa Utilities Board and included in this packet, specifically, Section 25: Co-generation and Small Power Production.

When considering the installation, a strong emphasis must be placed on safety considerations for the cooperative's employees and members; protection of the cooperatives and members' delivery system; and cost-fairness to other members of the cooperative. A written agreement between the cooperative and the member is developed to ensure proper communication and protections are in place, prior to connection of the facility to the grid. Consideration must also be given to established requirements for installation, maintenance, metering, switching and liability insurance.

3. **What is required of me, as a member, if I decide to install distributed generation?** The general requirements include paying for any interconnection devices that are necessary to protect the safety of the cooperative representatives and to maintain the integrity of the delivery system. The member is also required to carry liability insurance and to list the cooperative as an additional interest on the policy. Individuals must pay for the necessary metering equipment used to measure energy delivered back to the grid by the member. The member will also be responsible for all engineering costs or additional equipment associated with the interconnection.
4. **Why do I have to carry liability insurance?** It is very common for businesses and individual homeowners to carry liability policies to insure against various types of losses or claims. Conceptually and generally, customers should not view carrying liability insurance on distributed generation any differently than the liability insurance that is carried to drive an automobile. Insurance on automobiles is carried to provide coverage for damages to others and their property. This basic business principle applies to carrying liability insurance for distributed generation. Just as it is true for other personal property, it is up to the owner of a system to assume responsibility for insurance coverage. For systems qualifying under Level 1, this requirement may be fulfilled using proper homeowners' insurance.
5. **What if I disagree with some of the requirements of the cooperative — what is the process for challenging this?** Members are encouraged to discuss any concerns with Pella Cooperative Electric representatives to resolve questions or issues associated with connecting distributed generation to the grid. As your rural electric cooperative, it is our goal to work with our members to address questions and concerns. However, many of the requirements are based on federal or state statutes and regulations. Pella Cooperative Electric cannot modify these requirements.
6. **What is the process for installing distributed generation?** Before investing in any form of distributed generation or before connecting it to the grid, the member-consumer should meet with the appropriate Pella Cooperative Electric representatives to gain an understanding of the expectations for both the cooperative and the member. The member and the cooperative will work together toward a written agreement, which will address

these expectations as well as each party's responsibilities. The agreement will also cover the terms and conditions associated with the interconnection, including rates that the cooperative will pay the member for the power they deliver to the grid, insurance requirements, and metering requirements, to name a few. This agreement must be in place before the facility can be connected to the grid.

7. **How much does distributed generation cost?** It depends greatly on the type and size of generation installed. There are several aspects of cost: the cost of the generator, the cost of the balance of the plant (the power electronics, structure, installation), the cost of interconnection (including any required engineering studies to ensure that the system can be integrated with the grid without impacting the quality or reliability of service to neighboring cooperative consumers, and any upgrades needed to the distribution system), and the cost of maintenance from a reliable service provider.
8. **Which vendors should I work with to purchase a generator?** Pella Cooperative Electric does not endorse any particular vendor. There are several resources, the Iowa Energy Center for example, which may give you some additional background information on a particular vendor. Members should fully research a company before purchasing generating equipment. Pella Cooperative Electric suggests you ask these questions of your vendor:
 1. **How reliable is the rated energy output? How did you calculate the output?** Experts advise ignoring peak output and power curved provided by vendors. Rather, look for the monthly or annual energy numbers – in kilowatt-hours – for the generator. For example, if you are considering solar panels, ask the manufacturer or installer to calculate the output for the average sun exposure that you expect or have measured at your site. If the vendor does not provide energy production estimates, find another manufacturer.
 2. **Is the inverter UL listed?** If the inverter is not UL listed, find another vendor. Most utilities require that an inverter have a UL 1741 certification for interconnection with the grid. As part of the certification, the inverter is required to fail open in the absence of power on the grid.
 3. **What is the estimated total installed cost?** It's important to know the total installed cost of a system to ensure sufficient budgeting. For a solar system, you would need to budget not only for the panels, but also inverters, installation labor expenses, as well as the cost of equipment rental, materials, shipping, and sales tax.
 4. **How long is the warranty? What does it cover? Parts? Labor? Can it be extended? If so, what will it cost?** Warranties generally range from one to five years. The longer the warranty, the better. Make sure the warranty covers labor as well as parts. Cooperative members should ask owners of systems purchased from the same vendor about performance and reliability before making a decision on an extended warranty, if available. (Special Note: If you live in an area prone to lightning strikes and are considering a wind system, you should consider the option of lightning protection. If not available through the vendor, third-party vendors can design and install adequate protection systems.)
What are your credentials? How long have you been in business? How many systems have you sold? Have your systems been certified? Look for vendors that have been in business for at least five years or have acquired the product line of another vendor. In addition, cooperative members should ask the vendor for the names of at least two people who have installed a system that is the same as or similar to the model the cooperative member is interested in.
9. **How long will it take before I am able to generate electricity?** This will depend on several variables including design and engineering studies, installation of required interconnection equipment, construction time, availability of necessary equipment, weather, etc. By working with Pella Cooperative Electric, a timeline can be established considering the variables related to connecting to the grid.
10. **How much electricity can be generated?** You should first determine how much

electricity you want to generate. Based on your current electricity usage, decide how many kilowatt-hours you would like to produce. Once you know how much energy you want, you can select the right system to meet your needs.

The vendor should be able to give you an idea of the output capacity of the system, but it's also necessary to look at local conditions. For example, the solar exposure at your site may be impacted by shading from trees, other vegetation, or your home. Any shading on your solar panels is likely to detrimentally impact the system performance.

11. **Do I have to have two meters if I install distributed generation?** Cooperatives require metering capability to measure electrons being drawn from the grid by the member and metering capability to measure electrons being delivered to the grid by the member. Some situations may necessitate two meters.
12. **Does the cooperative offer “net metering?”** Pella Cooperative Electric does not offer net metering as it violates the cost-causer principle and negates cost-fairness among cooperative members. Net metering policies require utilities to pay consumers the retail price for wholesale power. The retail rate utilities charge includes not only the marginal cost of power, but also recovers costs incurred by utilities for transmission, distribution, generating capacity, and other utility services not provided by the consumer-generator. The policies also require utilities to pay high costs for what may be low-value power. Power from wind and photovoltaic (PV) systems is intermittent, cannot be scheduled or dispatched reliably to meet system requirements. Further, net metering allows customers to underpay the fixed costs they impose on the system. A utility must install sufficient facilities to meet the peak requirements of the consumer and recover the costs of those facilities through a kilowatt-hour charge. When the net meter rolls backwards, it understates the total energy used by the consumer, and thus understates the consumer's impact on the fixed costs of the systems. It also understates the consumer's total share of other fixed charges borne by all consumers such as taxes.
13. **What rate will the cooperative pay me for electricity generated?** Pella Cooperative Electric will pay rates based on avoided cost for energy that the member generates and delivers to the grid to ensure other members on the system do not bear an undue cost for their electricity. This avoided cost standard is pursuant to federal regulations. Please contact the cooperative for this information.
14. **How does the cooperative determine what rate it will pay a member for energy?** This is based on the avoided cost principle and may vary depending on the size of the particular generating facility. Federal regulations require a standard rate for qualifying facilities with a design capacity of 100 kilowatts or less and the regulations allow for an individually negotiated rate for units over 100 kilowatts. Currently, our standard rate for qualifying facilities varies. Please contact the cooperative for this information.
15. **Does the cooperative charge a different rate to generators versus customers that do not generate their own electricity?** No, Pella Cooperative Electric does not currently have a separate price or rate schedule for generators but reserves the right to create a separate price or rate based upon the unique characteristics of such member-consumers.
16. **What is the cooperative's backup rate when my generator is not generating?** The rate customers pay during this time is the normal cost-based rate for the rate class applicable to the customer. However, under federal regulations, the cooperative can charge a different rate for backup, supporting, and maintaining power.
17. **What rebates or other incentives do entities such as the state or federal government have for distributed generation?** Incentives can come in the form of tax

credits, low interest loans or other delivery mechanisms. Your tax accountant or tax attorney can advise you on the availability of various tax credits or other tax incentives relating specifically to your installation of a generator.

- 18. What kind of payback can I expect in terms of breaking even?** The payback period can range from several years to several decades, depending on the cost of the system and its output. You can estimate a simple payback by the following formula, assuming the system is properly sized not to exceed your demand:

(Installed cost including interconnection costs, \$)

(kwh/year x retail price of electricity, \$/year) – (annual operation and maintenance cost, \$/year)

The annual operation and maintenance costs include insurance premiums, maintenance calls, service contracts, and the net present worth of long-term repairs.

- 19. Do I have to pay any taxes, such as property taxes, if I install distributed generation?** Depending on the situation, the generator may be subject to some replacement taxes. This question should be directed to your tax accountant and/or tax lawyer.

- 20. Is distributed generation worthwhile to put up?** Installing your own generation is an individual decision for each member. A cooperative's role in this process is to help educate the member regarding the co-op's expectations in this process. First and foremost, Pella Cooperative Electric must protect the safety of cooperative members and employees as well as maintain the integrity and reliability of the grid and establish mechanisms to ensure cost fairness. The greatest payback to the member occurs when you consume all the energy produced by the generator.

The cooperative will try to help you obtain information you deem relevant to your decision-making process. However, the decision is one you must make on your own or with the assistance of consultants hired to provide you with advice.

Interconnection Resources

U.S. Department of Energy – Energy Efficiency and Renewable Energy

Office of the Assistant Secretary

Energy Efficiency and Renewable Energy

Mail Stop EE-1

Department of Energy

Washington, D.C. 20585

P: (877) 337-3463

W: <http://www.eere.energy.gov>

Section 25 COGENERATION AND SMALL POWER PRODUCTION

Cooperative is a member of Central Iowa Power Cooperative (CIPCO), a generation and transmission cooperative ("G&T") and obtains all its wholesale power from G&T. Accordingly, any qualifying facility seeking services pursuant to this tariff should coordinate their efforts with the Cooperative, which will then coordinate with G&T if necessary.

25.1 Availability

This section shall apply to any member-consumer within the Cooperative's assigned service area owning or leasing a qualifying facility who meets the definitions under the rules of the Public Utility Regulatory Policies Act of 1978, as a qualifying alternate energy production facility, or a qualifying small hydro facility ("QF" or "qualifying Facility"). A member-consumer owning or leasing electric generating equipment shall not connect it in parallel with the Cooperative or G&T's system without the prior written consent of the Cooperative or G&T. Any third-party wishing to locate a qualifying facility on the member-consumer's premises who wishes to sell the output of said facility to the member-consumer, shall not operate the facility in parallel with the Cooperative or G&T's system without the prior written consent of the Cooperative or G&T. Failure of the member-consumer or third-party to comply with the Cooperative or G&T's requirements for parallel generation shall be justification for discontinuance of such parallel operation in such a manner as to least inconvenience the member-consumer until such time as full compliance has been accomplished. Each of these types of facilities shall comply with all the Cooperative or G&T requirements and general rules for electric service, as well as the specific provisions of this section. For purposes of interconnecting a qualifying facility owned by a third-party to the Cooperative or G&T's system, the third-party shall be responsible for complying with the interconnection requirements and shall submit an application to the Cooperative on the applicable forms. Said third-party shall be deemed the interconnection member-consumer for the purpose of this tariff.

25.2 Definitions

Unless otherwise defined herein, terms used shall have the same meaning as defined in 199 IAC 45.1.

"Avoided Costs" means the incremental costs to the Cooperative/G&T of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, the Cooperative/G&T would generate itself or purchase from another source. The Cooperative purchases all its power requirements from its wholesale power supplier, G&T. Cooperative's avoided costs will equal those of G&T and G&T will be responsible for calculating the Cooperative's Avoided Costs.

25.3 Requirements for Interconnection

All facilities shall meet certain requirements to be eligible for interconnection pursuant to the terms and conditions of this section. The Cooperative shall assist the applicant in determining the appropriate level of review process required for the interconnection. The Cooperative has developed 4 levels of review process. The appropriate level generally depends upon the size and type of generator and the type of interconnection requested. The levels of review are described in Section 25.5 of this tariff.

25.3.1 Application for Interconnection

The applicant shall submit an application and any associated fees to the Cooperative, using the application form provided by the Cooperative. (Level 1 or Level 2-4) The applicant shall contact the Cooperative with any questions regarding interconnection.

25.3.2 Acceptable Interconnection Standards

Permission to interconnect with the Cooperative or G&T electric system is contingent upon the following conditions:

- A. The member-consumer shall comply with acceptable standards for interconnection, safety, and operating reliability. Acceptable standards include the most current revisions of the following, as adopted in the Iowa Administrative Code section 199-15.10(1) in order to be eligible for interconnection to the Cooperative or G&T electric system:
 1. Standards for Interconnecting Distributed Resources with Electric Power Systems, IEEE Standard 1547. For guidance in applying IEEE Standard 1547, the Cooperative may refer to:
 - 1) IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems - IEEE Standard 519-2014; and,
 - 2) IEC/TR3 61000-3-7 Assessment of emission limits for fluctuating loads in MV and HV power systems.
 2. Iowa Electrical Safety Code, as defined in 199—Chapter 25.
 3. National Electrical Code, ANSI/NFPA 70-2014.
- B. The member-consumer facility shall meet the standards for interconnection as set forth in the Cooperative's Interconnection Agreements and the

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- attachments thereto. Said Agreements are available by contacting the Cooperative.
- C. The member-consumer shall agree to indemnify and defend the Cooperative and G&T and their representatives against liability for any injuries or damages caused by the operation of the member-consumer's equipment or by any failure of the member-consumer to maintain such equipment in satisfactory or safe operating condition. The member-consumer will arrange for and maintain liability insurance with limits of not less than those set forth in the Interconnection Agreements, with the insurance requirements varying depending upon the size of the interconnecting generator. Failure to maintain required insurance or proof of financial responsibility shall be cause for disconnection. The Cooperative and G&T shall be named as additional insureds, to the extent specified in the Interconnection Agreements.
- D. The member-consumer shall reimburse the Cooperative or G&T for costs incurred by the Cooperative or G&T for all costs of connection, switching, metering, transmission, distribution, safety provisions and administrative costs incurred by the Cooperative or G&T directly related to the installation and maintenance of the physical facilities necessary to permit interconnected operations with a qualifying facility (or qualifying alternate energy production facilities, or qualifying small hydro facilities), to the extent the costs are in excess of the corresponding costs which the Cooperative or G&T would have incurred if it had not engaged in interconnected operations, but instead generated an equivalent amount of electric energy itself or purchased an equivalent amount of electric energy or capacity from other sources. Interconnection costs do not include any costs included in the calculation of avoided costs.
- E. The member-consumer shall agree to discontinue sales to Cooperative/G&T when, due to operational circumstances, purchases from the member-consumer will result in G&T costs greater than those which G&T would incur if it did not make such purchases, but instead generated an equivalent amount of energy, provided, however, that G&T shall notify the member-consumer within a reasonable amount of time to allow the member-consumer to cease the delivery of energy.
- F. The applicant and the Cooperative shall execute the applicable Interconnection Agreement prior to interconnection. In the event the applicant desires to sell any excess output from its facility to the Cooperative and/or G&T, a separate power purchase agreement shall be required for all interconnections except Level 1. For Level 1 interconnections, the terms of purchase are set out on Attachment 2 to the Level 1 Application Form and Interconnection Agreement.

- G. The member-consumer shall permit Cooperative or G&T representatives to enter upon member-consumer's property at any reasonable time for the purpose of inspecting or testing member-consumer's equipment, facilities or apparatus and the accuracy of the Cooperative or G&T's metering equipment, but such inspections shall not relieve the member-consumer of the obligation to maintain the member-consumer's facilities in satisfactory operating conditions. The Cooperative or G&T may charge the direct expense of such inspecting or testing of the member-consumer's equipment, facilities, or apparatus to the member-consumer, unless the member-consumer can demonstrate the inspecting and testing was not necessary. The member-consumer shall adopt a program of inspection of the generator and its appurtenances and the interconnection equipment in order to determine necessity for replacement and repair.
- H. The member-consumer shall be responsible for the costs of installation and maintenance of any necessary power factor correction capacitors. Member-consumers with a distributed generation facility larger than or equal to 1 MVA shall design their distributed generation facilities to maintain a power factor at the point of interconnection between .95 lagging and .95 leading at all times. Member-consumers with a distributed generation facility smaller than 1 MVA shall design their distributed generation facility to maintain a power factor at the point of interconnection between .90 lagging and .90 leading at all times.
- I. The member-consumer's electric generating equipment shall be designed; operated and maintained in such a manner that it does not adversely affect the Cooperative's or G&T's system or their service to their other members.
- J. A distributed generation facility placed in service after July 1, 2015, is required to have installed a disconnection device. The disconnection device shall be installed, owned, and maintained by the owner of the distributed generation facility and shall be easily visible and adjacent to an interconnection member-consumer's electric meter at the facility. Disconnection devices are considered easily visible and adjacent: for a home or business, up to ten feet away from the meter and within the line of sight of the meter, at a height of 30 inches to 72 inches above final grade; or for large areas with multiple buildings that require electric service, up to 30 feet away from the meter and within the line of sight of the meter, at a height of 30 inches to 72 inches above final grade. The disconnection device shall be labeled with a permanently attached sign with clearly visible letters that give procedures/directions for disconnecting the distributed generation facility. The disconnection device shall be capable of being padlocked in the open position.

1. If an interconnection member-consumer with distributed generation facilities installed prior to July 1, 2015, adds generation capacity to its existing system that does not require upgrades to the electric meter or electrical service, a disconnection device is required. The member-consumer must notify the Cooperative before the generation capacity is added to the existing system, which may require a new/amended application form and interconnection agreement.
 2. If an interconnection member-consumer with distributed generation facilities installed prior to July 1, 2015, upgrades or changes its electric service, the new or modified electric service must meet all current Cooperative service rule requirements.
- K. For all distributed generation installations, the member-consumer shall be required to provide and place a permanent placard no more than ten feet away from the electric meter. The placard must be visible from the electric meter. The placard must clearly identify the presence and location of the disconnection device for the distributed generation facilities on the property. The placard must be made of material that is suitable for the environment and must be designed to last for the duration of the anticipated operating life of the distributed generation facility. If no disconnection device is present, the placard shall state "no disconnection device". If the distributed generation facility is not installed near the electric meter, an additional placard must be placed at the electric meter to provide specific information regarding the distributed generation facility and the disconnection device.
- L. The interconnection shall include overcurrent devices on the facility to automatically disconnect the facility at all currents that exceed the full-load current rating of the facility. A fuse shall not be used to satisfy this requirement because its condition and performance cannot be determined through testing without destroying the fuse.
- M. Distributed generation facilities with a design capacity of 100 kVA or less must be equipped with automatic disconnection upon loss of Cooperative-supplied voltage.
- N. Distributed generation facilities that produce a terminal voltage prior to the closure of the interconnection shall be provided with synchronism-check devices to prevent closure of the interconnection under conditions other than a reasonable degree of synchronization between the voltages on each side of the interconnection switch.
- O. The operator of the distributed generation facility shall adopt a program of inspection and testing of the generator and its appurtenances and the interconnection facilities in order to determine necessity for replacement and

- repair. Such a program shall include all periodic tests and maintenance prescribed by the manufacturer. If the periodic testing of interconnection-related protective functions is not specified by the manufacturer, periodic testing shall occur at least once every five years. All interconnection-related protective functions shall be periodically tested, and a system that depends upon a battery for trip power shall be checked and logged. The operator shall maintain test reports and shall make them available upon request by the Cooperative. Representatives of the Cooperative shall have access at all reasonable hours to the interconnection equipment specified in 199 IAC 45.3(2) for inspection and testing with reasonable prior notice to the applicant.
- P. When the distributed generation facility is placed in service, owners of interconnected distributed generation facilities are required to notify local fire departments via U.S. mail of the location of distributed generation facilities and the associated disconnection device(s). The owner is required to provide any information related to the distributed generation facility as reasonably required by that local fire department including but not limited to:
1. A site map showing property address; service point from the Cooperative; distributed generation facility and disconnect location(s); location of rapid shutdown and battery disconnect(s), if applicable; property owner's or owner's representative's emergency contact information; Cooperative's emergency telephone number; and size of the distributed generation facility.
 2. Information to access the disconnection device.
 3. A statement from the owner verifying that the distributed generation facility was installed in accordance with the current state-adopted National Electrical Code.
- Q. The operator of the distributed generation facility, the Cooperative, and emergency personnel shall have access to the disconnection device at all times. The member-consumer shall permit the Cooperative to affix a placard in a location of the Cooperative's choosing that provides instructions to the Cooperative operating personnel for accessing the disconnection device. If the Cooperative needs to isolate the distributed generation facility, the Cooperative shall not be held liable for any damages resulting from the actions necessary to isolate the generation facility.
- R. In the event the Cooperative or its member-consumers experience problems of a type that could be caused by the presence of alternating currents or voltages with a frequency higher than 60 hertz, the Cooperative shall be permitted to open and lock the interconnection switch pending a complete investigation of the problem. Where the Cooperative believes the condition creates a hazard to the public or to property, the disconnection may be made without prior notice. However, the Cooperative shall notify the operator of the

distributed generation facility by written notice and, where possible, verbal notice as soon as practicable after the disconnection.

- S. If member-consumer fails to comply with the foregoing requirements of this rule, the Cooperative may require disconnection of the member-consumer's distributed generation facility until the facility complies with the foregoing requirements. The disconnection process shall be in accordance with the provisions of this tariff or the member-consumer's separate interconnection agreement. If separate disconnection of only the distributed generation facility is not feasible or safe, the member-consumer's electric service may be disconnected as provided in the Cooperative's tariff consistent with the provisions of 199 IAC Chapter 20.
- T. If member's distributed generation facility or electric service is disconnected due to noncompliance with the foregoing requirements, the member shall be responsible for payment of any costs associated with reconnection once the facility is in compliance.

25.4 Rates for Purchased Power

25.4.1 Rates for purchases by the member-consumer from the Cooperative

The member-consumer shall purchase electric power and energy from the Cooperative at the Cooperative's applicable price or rate, depending upon the member-consumer's operations and requirements. The Cooperative does not currently have a separate price or rate schedule for co-generators and small power producers but reserves the right to create a separate price or rate based upon the unique characteristics of such member-consumers.

25.4.2 Rates for purchases from member-consumer

QFs with design capacity of 100 kW or less

Payment for purchases from the member-consumer pursuant to this tariff provision will be as follows:

The rate(s) for purchases from qualifying facility (as defined above) and with a design capacity of 100 kilowatts or less are available by contacting the Cooperative. These rates will be consistent with 18 CFR 292.304.

QFs greater than 100 kW

The rate(s) for purchases from qualifying facilities (as defined above) and with a design capacity above 100 kilowatts are available on a negotiated case-by-case basis with the Cooperative/G&T.

25.4.3 Wheeling Charges

Cooperative/G&T may provide a wheeling service to a facility interconnected to its electric delivery system. Any charges for the wheeling of power will be determined by the Cooperative/G&T and in accordance with any applicable regulations. In addition, Cooperative/G&T reserve(s) the right to refuse to wheel power where its existing facilities do not have adequate capacity and the member-consumer refuses to pay the costs to upgrade those facilities. If a qualifying facility agrees, the Cooperative/G&T which would otherwise be obligated to purchase electricity from such facility may transmit the electricity to any other electric utility. Any electric utility to which such electricity is transmitted will purchase such electricity as if the facility were supplying electricity directly to such electric utility. The rate for purchase by the electric utility to which such electricity is transmitted will be adjusted downward according to the mutual agreement of the transmitting and receiving utilities, to reflect any wheeling line losses and will not include any charges for transmission.

25.5 Levels of Review

Level 1

Level 1 Application and Agreement shall be used for all interconnection requests to connect a distributed generation facility when:

- a. The applicant has filed a Level 1 application; and
- b. The distributed generation facility has a nameplate capacity rating of 25 kVA or less; and
- c. The distributed generation facility is inverter-based; and
- d. The member-consumer interconnection equipment proposed for the distributed generation facility is lab-certified; and
- e. No construction of facilities by the cooperative or G&T shall be required to accommodate the distributed generation facility.

To remain in Level 1, the following screens must be met:

- For interconnection to a radial distribution circuit, the total of all DG connected may not exceed 15% of the maximum load normally supplied by the circuit.
- For interconnection on a single-phase shared secondary line, the aggregate generation capacity on the line will not exceed 20 kVA.
- When the DG facility is single-phase and proposes to interconnect on a center tap neutral of a 240-volt service, its addition may not create an imbalance between the 2 sides of the 240-volt service of more than 20% of nameplate rating of the service transformer.

- Utility shall not be required to construct any facilities on its own system to accommodate the DG facility's interconnection.
- For interconnection to a spot network, DG will use protective equipment to ensure power imported from utility to the network will remain above 1% of the network's maximum load over the last year.

Level 2

Level 2 Application and Agreement shall be used for evaluating interconnection requests when:

- a. The applicant has filed a Level 2 application; and
- b. The nameplate capacity rating is 150 kVA or less; and
- c. The interconnection equipment proposed for the distributed generation facility is lab-certified; and
- d. The proposed interconnection is to a radial distribution circuit or a spot network limited to serving one member-consumer; and
- e. No construction of facilities by the cooperative or G&T shall be required to accommodate the distributed generation facility, other than minor modifications permitted by the Cooperative.

To remain in Level 2, the following screens must be met:

- For interconnection to a radial distribution circuit, the total of all DG connected may not exceed 15% of the maximum load normally supplied by the circuit.
- The proposed DG, in aggregation with other DG on the distribution circuit, may not contribute more than 10% to the circuit's maximum fault current at the point on the primary line nearest the point of interconnection.
- The proposed DG, in aggregation with other DG on the circuit, shall not cause any electric utility distribution devices to be exposed to fault currents exceeding 90% of their short-circuit interrupting capability.
- When a DG facility is to be connected to a 3-phase, 3 wire primary line, a 3-phase or single-phase generator shall be connected phase-to-phase.
- When a DG facility is to be connected to a 3-phase, 4 wire primary line, a 3-phase or single-phase generator shall be connected line-to-neutral and shall be grounded.
- For interconnection on a single-phase shared secondary line, the aggregate generation capacity on the line will not exceed 20 kVA.
- When the DG facility is single-phase and proposes to interconnect on a center tap neutral of a 240-volt service, its addition may not create an imbalance between the 2 sides of the 240-volt service of more than 20% of nameplate rating of the service transformer.
- A DG facility, in aggregate with other DG facilities interconnected to the distribution side of a substation transformer feeding the circuit where the facility

proposed to interconnect, may not exceed 10 MVA in an area where there are transient stability limitations.

- Utility shall not be required to construct any facilities on its own system to accommodate the DG facility's interconnection, except minor modifications following agreed upon additional review.
- For interconnection to a spot network, DG will use protective equipment to ensure power imported from utility to the network will remain above 1% of the network's maximum load over the last year.

Level 3

Level 3 Application and Agreement shall be used for evaluating interconnection requests to area networks and radial distribution circuits where power will not be exported based on the following criteria.

- a. For interconnection requests to the load side of an area network, the following criteria shall be satisfied to qualify for a Level 3 expedited review:
 - 1) The applicant has filed a Level 3 application; and
 - 2) The nameplate capacity rating of the distributed generation facility is 50 kVA or less; and
 - 3) The proposed distributed generation facility uses a lab-certified inverter-based equipment package; and
 - 4) The distributed generation facility will use reverse power relays or other protection functions that prevent the export of power into the area network; and
 - 5) The aggregate of all generation on the area network does not exceed the lower of 5 percent of an area network's maximum load or 50 kVA; and
 - 6) No construction of facilities by the cooperative or G&T shall be required to accommodate the distributed generation facility.
- b. For interconnection requests to a radial distribution circuit, the following criteria shall be satisfied to qualify for a Level 3 expedited review:
 - 1) The applicant has filed a Level 3 application; and
 - 2) The aggregated total of the nameplate capacity ratings of all of the generators on the circuit, including the proposed distributed generation facility, is less than 150 kVA; and
 - 3) The distributed generation facility will use reverse power relays or other protection functions that prevent power flow onto the electric distribution system; and
 - 4) The distributed generation facility is not served by a shared transformer; and
 - 5) No construction of facilities by the cooperative or G&T on their own systems shall be required to accommodate the distributed generation facility.

To remain in Level 3, the following screens must be met:

- Utilize the same screens as are applicable for level 2 interconnections; except for the one prohibiting the total DG connected to a radial distribution circuit from exceeding 15% of the maximum load normally supplied by the circuit.

Level 4

Level 4 Application and Agreement shall be used for evaluating interconnection requests when:

- a. The applicant has filed a Level 4 application; and
- b. The nameplate capacity rating of the small generation facility is 10 MVA or less; and
- c. Not all of the interconnection equipment or distributed generation facilities being used for the application are lab-certified, or Applicant is unable to comply with level 1 through 3 screens.

LEVEL 1
INTERCONNECTION REQUEST APPLICATION FORM AND DISTRIBUTED GENERATION
INTERCONNECTION AGREEMENT
(For Lab-Certified Inverter-Based Distributed Generation Facilities 25 kVA or less)

INSTRUCTIONS:

1. *Indicates required information.
2. Mail completed form with \$125 application fee to Pella Cooperative Electric Association. If Pella Cooperative Electric Association performs a witness test the cooperative will charge the interconnected Member-Consumer an additional fee of \$125.

INTERCONNECTION MEMBER-CONSUMER CONTACT INFORMATION <i>(Applicant must be owner or lessee of the facility)</i>				
*Owner / Company (Legal Entity Name)			* Contact Name	
* Mailing Address		* City		*State
* Phone No. (Daytime)	Phone No. (Evening)	Facsimile No.	* Email Address	
ALTERNATE CONTACT INFORMATION (If different from Member-Consumer Contact Information)				
Owner / Company (Legal Entity Name)			Contact Name	
Mailing Address		City		*State
Phone No. (Daytime)	Phone No. (Evening)	Facsimile No.	Email Address	
EQUIPMENT CONTRACTOR				
*Owner / Company Name			* Contact Name	
* Mailing Address		* City		*State
* Phone No. (Daytime)	Phone No. (Evening)	Facsimile No.	* Email Address	
ELECTRICAL CONTRACTOR (If different from Equipment Contractor)				
*Owner / Company Name			* Contact Name	
* Mailing Address		* City		*State
* Phone No. (Daytime)	Phone No. (Evening)	Facsimile No.	* Email Address	
License No. (If applicable)			Active License? (If applicable)	
			<input type="checkbox"/> Yes <input type="checkbox"/> No	
APPLICANT OWNERSHIP INTEREST (check one)				
<input type="checkbox"/> Owner <input type="checkbox"/> Lease <input type="checkbox"/> 3 rd Party PPA <input type="checkbox"/> Other (Please Explain) _____				
THIRD PARTY INFORMATION <i>(Only complete this section if the facility is to be located on the premise of someone other than the applicant)</i>				
Location of Proposed Facility			Name of Member-Consumer at said location	
* Mailing Address			* City	
* Phone No. (Daytime)		Phone No. (Evening)		*State
				*Zip

* INTENT OF GENERATION (<i>check one</i>)	
<input type="checkbox"/>	Offset Load (Unit will operate in parallel, but will not export power to Cooperative) (If this option is selected, the Cooperative will not purchase any portion of the generation facility output and Attachment 2 is not applicable)
<input type="checkbox"/>	Self-Use and Sales to the Cooperative (Unit will operate in parallel and may export and sell excess power to Cooperative pursuant to the Cooperative's tariff and the terms set forth in Attachment 2)
<input type="checkbox"/>	Back-up Generation (Units that temporarily operate in parallel with the electric distribution system for more than 100 milliseconds) (Note: Back-up units that do not operate in parallel for more than 100 milliseconds do not need an interconnection agreement.) (Under this option, the Cooperative will not purchase any portion of the generation facility output and Attachment 2 is not applicable)
<input type="checkbox"/>	Sale of generation output to member-consumer upon whose premise the facility is located and export and sell any excess power to the Cooperative, which sales may require a separate point of interconnection, metering, and power purchase agreement.
<input type="checkbox"/>	Other: (Please Explain):

DISTRIBUTED GENERATION FACILITY INFORMATION			
* Facility Address or Latitude and Longitude		* City	* State
* Cooperative Serving Facility Site		Account No. of Facility Site (<i>existing member-consumers</i>)	* Meter No. (<i>existing member-consumers</i>)
<input type="checkbox"/> Yes <input type="checkbox"/> No	* Is the inverter lab-certified as that term is defined in Iowa Utilities Board Chapter 45 rules on Electric Interconnection of Distributed Generation (199 IAC 45.1)? (If yes, attach manufacturer's technical specifications and label information from a nationally recognized testing laboratory, e.g., UL.)		
* Generation Facility Nameplate Rating (AC): _____ (kW) _____ (kVA) _____ (AC Volts)			
* Energy Source <input type="checkbox"/> Wind <input type="checkbox"/> Solar <input type="checkbox"/> Biomass <input type="checkbox"/> Hydro <input type="checkbox"/> Diesel <input type="checkbox"/> Natural Gas <input type="checkbox"/> Fuel Oil <input type="checkbox"/> Other _____			
If Solar: Number of Inverters _____ Number of Panels _____ Tilt (degrees) _____ Azimuth (180° is South facing) _____ Array Type: <input type="checkbox"/> Fixed <input type="checkbox"/> Single Axis <input type="checkbox"/> Dual Axis			
* Energy Converter Type <input type="checkbox"/> Wind Turbine <input type="checkbox"/> Photovoltaic Cell <input type="checkbox"/> Fuel Cell <input type="checkbox"/> Reciprocating Engine <input type="checkbox"/> Other _____			
Commissioning Test Date: _____ (<i>If the Commissioning Test Date changes, the interconnection member-consumer must inform the Cooperative as soon as it is aware of the changed date.</i>)			
Disconnection Device: Identify type and location of disconnection device:			
Is the generation facility a qualifying facility as defined under Public Utilities Regulatory Policy Act (18 CFR Part 292, Subpart B)? <input type="checkbox"/> Yes <input type="checkbox"/> No			

* INFORMATION FOR INVERTER-BASED FACILITIES			
Inverter Information			
* Manufacturer		* Model	
* Type <input type="checkbox"/> Forced Commutated <input type="checkbox"/> Line Commutated		* Rated Output _____ Watts _____ Volts	
* Efficiency	* Power Factor	* Inverter UL1741 Listed <input type="checkbox"/> Yes <input type="checkbox"/> No	
DC Source/Prime Mover			
Rating (kW)	Rating (kVA)	Rated Voltage	Open Circuit Voltage (<i>if applicable</i>)
Rated Current (Amps)		Short Circuit Current (Amps) (<i>if applicable</i>)	

*INSURANCE DISCLOSURE

The attached terms and conditions contain provisions related to liability and indemnification and should be carefully considered by the interconnection member-consumer. **The interconnection member-consumer shall carry general liability insurance coverage, such as, but not limited to, homeowner's insurance.** The interconnection customer shall provide the utility with proof that it has a current homeowner's insurance policy or other general liability policy. The Cooperative shall be named as an additional interest on the insurance policy.

Proof of Insurance attached: Yes

*OTHER FACILITY INFORMATION

One-Line Diagram - A basic drawing of an electric circuit in which one or more conductors are represented by a single line and each electrical device and major component of the installation, from the generator to the point of interconnection, are noted by symbols.

One-Line Diagram attached: Yes

Plot Plan - A map or sketch showing the distributed generation facility's location in relation to streets, alleys, or other geographic markers (i.e. section pin, corner pin, buildings, permanent structures, etc.).

Plot Plan attached: Yes

*MEMBER-CONSUMER SIGNATURE

I hereby certify that: (1) I have read and understand the terms and conditions, which are attached hereto by reference; (2) I hereby agree to comply with the attached terms and conditions; and (3) to the best of my knowledge, all of the information provided in this application request form is complete and true.

Applicant Signature (*signature must reflect Contact Name under section Interconnection Applicant Contact Information*)

Date:

Printed Name:

Title:

This Application Form and Interconnection Agreement is comprised of: 1) the Level 1 Standard Application Form and Interconnection Agreement; 2) the Attachment 1 setting forth the Terms and Conditions for Interconnection; 3) the Attachment 2 setting forth the terms for purchases by the Cooperative from the distributed generation facility, when applicable; and 4) the Certificate of Completion, which shall be completed and returned to the utility when installation is complete and final electric inspector approval has been obtained.

NOTE: If the Certificate of Completion is not completed and returned to the Cooperative within 12 months following the Cooperative's dated conditional agreement to interconnect below, this Application Form and Interconnection Agreement will automatically terminate and be of no further force and effect.

FOR COOPERATIVE USE ONLY

Date Received:

Project ID:

*CONDITIONAL AGREEMENT TO INTERCONNECT DISTRIBUTED GENERATION FACILITY

Receipt of the application fee, if any, is acknowledged and, by its signature below, the Cooperative has determined the interconnection request is complete. Interconnection of the distributed generation facility is conditionally approved contingent upon the attached terms and conditions of this Agreement, the return of the attached Certificate of Completion, duly executed verification of electrical inspection and successful witness test. Note that to the extent the Interconnection Member-Consumer wishes the Cooperative to purchase any output from the interconnected generation facility, a separate power purchase agreement shall be required.

Cooperative Representative's Signature

Date

Printed Name:

Title:

ATTACHMENT 1
Level 1: Distributed Generation Interconnection Agreement

Terms and Conditions for Interconnection

1. Construction of the Distributed Generation Facility. The interconnection member-consumer may proceed to construct (including operational testing not to exceed 2 hours) the distributed generation facility, once the conditional Agreement to interconnect a distributed generation facility has been signed by the Cooperative.
2. Final Interconnection and Operation. The interconnection member-consumer may operate the distributed generation facility and interconnect with the Cooperative's electric distribution system after all of the following have occurred:
 - a. Electrical Inspection: Upon completing construction, the interconnection member-consumer shall cause the distributed generation facility to be inspected by the local electrical inspection authority who shall establish that the distributed generation facility meets local code requirements.
 - b. Certificate of Completion: The interconnection member-consumer shall provide the Cooperative with a copy of the Certificate of Completion with all relevant and necessary information fully completed by the interconnection member-consumer, as well as an inspection form from the local electrical inspection authority demonstrating that the distributed generation facility passed inspection.
 - c. The Cooperative has completed its witness test as per the following:
 - i. The interconnection member-consumer shall provide the Cooperative at least 15 business days' notice of the planned commissioning test for the distributed generation facility. Within 10 business days after the commissioning test, the Cooperative may, upon reasonable notice and at a mutually convenient time, conduct a witness test of the distributed generation facility to ensure that all equipment has been appropriately installed and operating as designed and in accordance with the requirements of IEEE 1547.
 - ii. If the Cooperative does not perform the witness test within the 10 business days after the commissioning test or such other time as is mutually agreed to by the Parties, the witness test is deemed waived, unless the Cooperative cannot do so for good cause. In these cases, upon Cooperative request, the interconnection member-consumer shall agree to another date for the test within 10 business days after the original scheduled date.
 - d. Executed Certificate of Completion: The utility has signed, executed and transmitted to the interconnection member-consumer the Certificate of Completion provided by the interconnection member-consumer in 2 b
3. IEEE 1547. The distributed generation facility shall be installed, operated and tested in accordance with the requirements of The Institute of Electrical and Electronics Engineers, Inc. (IEEE), 3 Park Avenue New York, NY 10016-5997, Standard 1547 (2003) "Standard for Interconnecting Distributed Resources with Electric Power Systems," as well as any applicable federal, state, or local laws, regulations, codes, ordinances, orders, or similar directives of any government or other authority having jurisdiction.
4. Access. The Cooperative must have access to the disconnection device and metering equipment of the distributed generation facility at all times. When practical, the Cooperative shall provide notice to the member-consumer prior to using its right of access.
5. Inspections and testing. The operator of the distributed generation facility shall adopt a program of inspection and testing of the generator and its appurtenances and the interconnection facilities in order to determine necessity for replacement and repair. Such a program shall include all periodic tests and maintenance prescribed by the manufacturer. If the periodic testing of interconnection-related protective functions is not specified by the manufacturer, periodic testing shall occur at least once every five years. All interconnection-related protective functions shall be periodically tested, and a system that depends upon a battery for trip power shall be checked and logged. The operator shall maintain test reports and shall make them available upon request by the electric Cooperative. Representatives of the Cooperative shall have access at all reasonable hours to the interconnection equipment specified in 199 IAC 45.3(2) for inspection and testing with reasonable prior notice to the applicant.
6. Metering. Any required metering shall be installed pursuant to the Cooperative's metering rules filed with the Iowa Utilities Board under subrule 199 IAC 20.2(5).
7. Disconnection. The Cooperative may disconnect the distributed generation facility upon any of the following conditions, but must reconnect the distributed generation facility once the condition is cured:
 - a. For scheduled outages, provided that the distributed generation facility is treated in the same manner as Cooperative's load member-consumers;
 - b. For unscheduled outages or emergency conditions;
 - c. If the distributed generation facility does not operate in the manner consistent with this Agreement or the applicable requirements of 199 IAC Chapters 15 or the Cooperative's tariff;
 - d. Improper installation or failure to pass the witness test;
 - e. If the distributed generation facility is creating a safety, reliability, or a power quality problem;

- f. The interconnection equipment used by the distributed generation facility is de-listed by the Nationally Recognized Testing Laboratory that provided the listing at the time the interconnection was approved;
 - g. Unauthorized modification of the interconnection facilities or the distributed generation facility; or
 - h. Unauthorized connection to the Cooperative's electric system.
8. Indemnification. The interconnection member-consumer shall indemnify and defend the Cooperative and the Cooperative's directors, officers, employees, and agents from all claims, damages and expenses, including reasonable attorney's fees, to the extent resulting from the interconnection member-consumer's negligent installation, operation, modification, maintenance, or removal of its distributed generation facility or interconnection facilities, or the interconnection member-consumer's willful misconduct or breach of this Agreement. The Cooperative shall indemnify and defend the interconnection member-consumer and the interconnection member-consumer's directors, officers, employees, and agents from all claims, damages, and expenses, including reasonable attorney's fees, to the extent resulting from the Cooperative's negligent installation, operation, modification, maintenance, or removal of its interconnection facilities or electric distribution system, or the Cooperative's willful misconduct or breach of this Agreement.
9. Insurance. The interconnection member-consumer shall provide the Cooperative with proof that it has a current homeowner's insurance policy or other general liability policy. The interconnection member-consumer agrees to provide the Cooperative with at least 30 calendar days' advance written notice of cancellation, reduction in limits, or non-renewal of any insurance policy required by this Agreement and may be required to show proof of insurance on an annual basis. The Cooperative shall be listed as an additional interest on the insurance policy.
10. Limitation of Liability. Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, provided that in no event shall death, bodily injury or third-party claims be construed as indirect or consequential damages.
11. Termination. This Agreement will remain in effect until terminated and may be terminated under the following conditions:
 - a. By interconnection member-consumer - The interconnection member-consumer may terminate this interconnection agreement by providing written notice to the Cooperative. If the interconnection member-consumer ceases operation of the distributed generation facility, the interconnection member-consumer must notify the Cooperative.
 - b. By the Cooperative - The Cooperative may terminate this Agreement without liability to the interconnection member-consumer if the interconnection member-consumer fails to remedy a violation of terms of this Agreement within 30 calendar days after notice, or such other date as may be mutually agreed to in writing prior to the expiration of the 30-calendar day remedy period. The termination date may be no less than 30 calendar days after the interconnection member-consumer receives notice of its violation from the Cooperative.
12. Modification of Distributed Generation Facility. The interconnection member-consumer must receive written authorization from the Cooperative before making any changes to the distributed generation facility that could affect the Cooperative's distribution system. If the interconnection member-consumer makes such modifications without the Cooperative's prior written authorization, the Cooperative shall have the right to disconnect the distributed generation facility.
13. Permanent Disconnection. In the event the Agreement is terminated; the Cooperative shall have the right to disconnect its facilities or direct the interconnection member-consumer to disconnect its distributed generation facility.
14. Disputes. Each Party agrees to attempt to resolve all disputes regarding the provisions of this Agreement that cannot be resolved between the two Parties pursuant to the dispute resolution provisions found in Iowa Utilities Board Chapter 45 rules on Electric Interconnection of Distributed Generation Facilities (199 IAC 45.12) and/or dispute resolution provisions adopted by the Cooperative. However, Cooperative's agreement to utilize the dispute resolution provisions of the Chapter 45 rules shall not be construed as an agreement concerning the applicability of the balance of said Chapter.
15. Governing Law, Regulatory Authority, and Rules. The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the State of Iowa. Nothing in this Agreement is intended to affect any other agreement between the Cooperative and the interconnection member-consumer.
16. Survival Rights. This Agreement shall remain in effect after termination to the extent necessary to allow or require either Party to fulfill rights or obligations that arose under the Agreement.
17. Assignment/Transfer of Ownership of the Distributed Generation Facility. This Agreement shall terminate upon the transfer of ownership of the distributed generation facility to a new owner unless the transferring owner assigns the Agreement to the new owner, the new owner agrees in writing to the terms of this Agreement, and the transferring owner so notifies the Cooperative in writing prior to the transfer of ownership.

18. Definitions. Any term used herein and not defined shall have the same meaning as the defined terms used in Iowa Utilities Board Chapter 45 rules on Electric Interconnection of Distributed Generation Facilities (199 IAC 45.1). However, Cooperative's agreement to utilize the definitions found in the Chapter 45 rules shall not be construed as an agreement concerning the applicability of the balance of said Chapter.
19. Notice. The Parties may mutually agree to provide notices, demands, comments, or requests by electronic means such as e-mail. Absent agreement to electronic communication, or unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement shall be deemed properly given when receipt is confirmed after notices are delivered in person, delivered by recognized national courier service, or sent by first-class mail, postage prepaid, return receipt requested to the person specified below:
- a. If Notice is to Interconnection Member-Consumer: Use the contact information provided in the interconnection member-consumer's application. The interconnection member-consumer is responsible for notifying the Cooperative of any change in the contact party information, including change of ownership.
 - b. If Notice is to Cooperative: Use the contact information provided below. The Cooperative is responsible for notifying the interconnection member-consumer of any change in the contact party information.

PELLA COOPERATIVE ELECTRIC ASSOCIATION CONTACT INFORMATION			
Name			
* Mailing Address		* City	*State
* Phone No. (<i>Daytime</i>)		Phone No. (<i>Evening</i>)	Facsimile No.
* Email Address			

20. Interruptions. The Cooperative is not responsible for any lost opportunity or other costs incurred by the interconnection member-consumer as a result of an interruption of service.
21. Operator. The interconnection member-consumer shall designate an operator who will be responsible for day-to-day operations of the distributed generation facility and available for communication on a 24 hour per day/7 day per week basis with Cooperative, G&T, the Local Balancing Authority, Midcontinent Independent System Operator (MISO), Southwest Power Pool (SPP), and other applicable entities with jurisdiction over the operation of the Facility and Cooperative's System.
22. Notification. When the distributed generation facility is placed in service, owners of interconnected distributed generation facilities are required to notify local fire departments via U.S. mail of the location of distributed generation facilities and the associated disconnection device(s). The owner is required to provide any information related to the distributed generation facility as reasonably required by that local fire department including but not limited to:
- a. A site map showing property address; service point from Cooperative; distributed generation facility and disconnect location(s); location of rapid shutdown and battery disconnect(s), if applicable; property owner's or owner's representative's emergency contact information; Cooperative's emergency telephone number; and size of the distributed generation facility.
 - b. Information to access the disconnection device.
 - c. A statement from the owner verifying that the distributed generation facility was installed in accordance with the current state-adopted National Electrical Code

ATTACHMENT 2
Level 1: Standard Interconnection Agreement

Terms of Cooperative Purchases from Distribution Facility

1. Agreement to Purchase. In the event the Interconnecting Member-Consumers selects the option of Self-Use and Sales to the Cooperative on the Application Form or sale of generation output to member-consumer upon whose premise the facility is located, then the Cooperative agrees to purchase from the Interconnection Member-Consumer such excess energy and capacity as may be available for purchase by the Interconnection Member-Consumer's facility and which Interconnection Member-Consumer desires to sell to Cooperative. Cooperative acknowledges that Interconnection Member-Consumer may utilize some of the energy Interconnection Member-Consumer generates as it is being generated and the Cooperative understands that it will only purchase such excess as Interconnection Member-Consumer delivers to Cooperative.

2. Rates

Payment for purchases from the member-consumer pursuant to this contract shall be as follows:

The rate(s) for purchases from qualifying facility (as defined above) and with a design capacity of 100 kilowatts or less will be the Cooperative's avoided cost. Since the Cooperative purchases all its electric power requirements from _____ Power Cooperative (G&T), the Cooperative's avoided cost is similar to that of G&T. Said rate is currently \$_____ per kilowatt hour. This rate will be consistent with 18 CFR 292.304, and may be subject to change as the Cooperative's avoided cost changes.

3. Metering. The Cooperative will install metering equipment at the point of service to the QF Facility of one of the following types:
- a. Metering capable of measuring and recording energy flows, on a kWh basis, from the Cooperative to the QF and from the QF to the Cooperative, with each directional energy flow recorded independently.
 - b. Metering capable of measuring power flows in each direction on an hourly or other real-time basis.

The Cooperative shall have the opportunity to collect all reasonable costs of metering necessary to allow for sales to the Cooperative from the Member-Consumer.

CERTIFICATE OF COMPLETION

To be completed and returned to the Cooperative when installation is complete and final electric inspector approval has been obtained. Upon completion of this form please mail, email, or fax a copy to the Cooperative at Pella Cooperative Electric, P.O. Box 106, Pella, IA 50219-0106; or service@pella-cea.org; or 641-628-2600.

INTERCONNECTION MEMBER-CONSUMER INFORMATION				
*Owner / Company (<i>Legal Entity Name</i>)			* Contact Name	
* Mailing Address		* City		*State
* Phone No. (<i>Daytime</i>)	Phone No. (<i>Evening</i>)	Facsimile No.	* Email Address	
INSTALLER CONTACT INFORMATION (<i>If not owner installed</i>)				
*Owner / Company (<i>Legal Entity Name</i>)			* Contact Name	
* Mailing Address		* City		*State
* Phone No. (<i>Daytime</i>)	Phone No. (<i>Evening</i>)	Facsimile No.	* Email Address	

FINAL ELECTRIC INSPECTION AND INTERCONNECTION MEMBER-CONSUMER SIGNATURE	
<p>The distributed generation facility is complete and has been approved by the local electric inspector having jurisdiction. A signed copy of the electric inspector's form indicating final approval is attached. The interconnection member-consumer acknowledges that it shall not operate the distributed generation facility until receipt of the final acceptance and approval by the cooperative as provided below.</p>	
Interconnection Member-Consumer Signature:	Date:
Printed Name	
<input type="checkbox"/> Check if copy of signed electric inspection form is attached:	
<input type="checkbox"/> Check if copy of as built documents is attached (projects larger than 20 kVA only):	

ACCEPTANCE AND FINAL APPROVAL FOR INTERCONNECTION (<i>For cooperative use only</i>)	
<p>The interconnection agreement is approved and the distributed generation facility is approved for interconnected operation upon the signing and return of this Certificate of Completion by Cooperative.</p>	
Electric Distribution Cooperative waives Witness Test? <input type="checkbox"/> Yes <input type="checkbox"/> No Cooperative Representative Initials: _____	
If the Cooperative performs a Witness Test a fee of \$125 (or insert your cooperative's cost based fee) will be charged. Witness Test fee has been paid: <input type="checkbox"/> Yes <input type="checkbox"/> No	
If not waived, date of successful Witness Test: _____ <input type="checkbox"/> Passed Cooperative Representative Initials: _____	
Cooperative Representative's Signature	Date:
Printed Name:	Title: