Section 25 COGENERATION AND SMALL POWER PRODUCTION

Allamakee-Clayton Electric Cooperative is a member of Dairyland Power Cooperative, a generation and transmission cooperative ("G&T") and obtains all of 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 premise 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 of 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 of its power requirements from its wholesale power supplier, Dairyland Power Cooperative. Cooperative's avoided costs shall equal

those of Dairyland Power Cooperative and Dairyland Power Cooperative shall 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 the Attached Appendix A.

25.3.1 Application for Interconnection

The applicant shall submit an application to the Cooperative, using either the Application form attached as Appendix B (Level 1 Application) or the Application form attached as Appendix D (Application form for Levels 2, 3, and 4), depending upon the Level of review required.

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 lowa Administrative Code section 199-15.10(1) in order to be eligible for interconnection to the Cooperative or G&T electric system:
 - Standards for Interconnecting Distributed Resources with Electric Power Systems, ANSI/IEEE Standard 1547-2003. 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 519-1992; 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 70-2011.
- B. The member-consumer facility shall meet the standards for interconnection as set forth in the Model Interconnection Agreements and the attachments

thereto. Said Model Agreements are attached hereto as Appendices B and E.

- 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 attached appendices, 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 attached appendices.
- 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 Model 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 Standard 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.

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 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 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 shall 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 shall be adjusted downward according to the mutual agreement of the transmitting and receiving utilities, to reflect any wheeling line losses and shall not include any charges for transmission.

Appendix A - 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 less than 40 kVA; and
- c. Installation of distributed generation facilities shall be limited to one facility per location; and

- d. The distributed generation facility is inverter-based; and
- e. The member-consumer interconnection equipment proposed for the distributed generation facility is lab-certified; and
- f. 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 3phase 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 inverterbased 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
- d. Applicant is unable to comply with level 1 through 3 screens.

Appendix B – Level 1 standard application form and distributed generation interconnection agreement

LEVEL 1: STANDARD APPLICATION FORM AND INTERCONNECTION AGREEMENT

Interconnection Request Application Form and
Conditional Agreement to Interconnect
(For Lab-Certified Inverter-Based Distributed Generation Facilities Less than 40 kVA)

AN APPLICATION FEE OF \$250 MUST BE SUBMITTED WITH THE APPLICATION

Interconnection Applicant Contact Information (Applicant must be owner or Lessee of the facility)

Name:		
Mailing Address:		
City:		_ Zip Code:
Telephone (Daytime):		
Facsimile Number:	E-Mail Address:	
Alternate Contact Information (if differ	ent from Applicant)	
Name:		
Mailing Address:		
City:	State:	_ Zip Code:
Telephone (Daytime):	(Evening): _	
Facsimile Number:	E-Mail Address:	
Equipment Contractor		
Name:		
Mailing Address:		
City:	State:	_ Zip Code:
Telephone (Daytime):		
Facsimile Number:	E-Mail Address:	
License number (if applicable):		
Active License? (if applicable) Yes	No	

Section 25 COGENERATION AND SMALL POWER PRODUCTION

Effective Date: June 15, 2016

Name:		
Mailing Address:		
City:	State:	Zip Code:
Telephone (Daytime):	(Evening	g):
Facsimile Number:		
License number:		
Active License? Yes No		
premise of someone other than th	ne applicant):	e facility is to be located on the
. Location of proposed facility:		
Location of proposed facility: Name of Customer at said locatio	n:	
Location of proposed facility: Name of Customer at said locatio Mailing Address:	n:	
Location of proposed facility: Name of Customer at said locatio Mailing Address: City:	n: State:	Zip Code:
Location of proposed facility: Name of Customer at said locatio Mailing Address:	on: State: (Evening	Zip Code:
Location of proposed facility: Name of Customer at said locatio Mailing Address: City: Telephone (Daytime):	on: State: (Evening	Zip Code:

- 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)
- 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)
- 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)
- Sale of generation output to customer 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.

Section 25 COGENERATION AND SMALL POWER PRODUCTION

Effective Date: June 15, 2016

— Other: (Please Explain):			
Distributed Generation Facility ("Facility") Info	mation	
Facility Address: City: Cooperative serving Facility site: _ Account Number of Facility site (ex Inverter Manufacturer:	State: kisting cooperati	Zip Code ve member-consum	ners):
Is the inverter lab-certified as that trules on Electric Interconnection of Yes No			•
(If yes, attach manufacturer's techr nationally recognized testing labora	=	ns and label inform	ation from a
Generation Facility Nameplate Rat	ing:(kV	V)(kVA) _	(AC Volts)
Energy Source: Wind So Natural Gas _		ss Hydro Other:	
Energy Converter Type: Wind To Recipro		otovoltaic Cell Other:	
Commissioning Test Date:			
(If the Commissioning Test Date chinform the Cooperative as soon as	_		r-consumer must
Disconnect Switch: Identify type a	nd location of di	sconnect switch:	
Is the generation facility a qualifyin Policy Act (18 CFR Part 292, Subp		ned under Public Ut	ilities Regulatory
Yes No			
D: 1			

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.

Othe

One-Line Diagram – A basic drawing of an electric conductors are represented by a single line and eacomponent of the installation, from the generator to are noted by symbols.	ch electrical device and major
One-Line Diagram attached: Yes	
Plot Plan – A map showing the distributed generation to streets, alleys, or other geographic markers.	on facility's location in relation
Plot Plan attached: Yes	
Customer Signature	
I hereby certify that: (1) I have read and understand the te attached hereto by reference; (2) I hereby agree to comply conditions; and (3) to the best of my knowledge, all of the application request form is complete and true.	with the attached terms and
Applicant Signature:	
Title:	Date:
This Application Form and Interconnection Agreement is of Standard Application Form and Interconnection Agreement forth the Terms and Conditions for Interconnection; 3) the terms for purchases by the Cooperative from the distribute applicable; and 4) the Certificate of Completion	comprised of: 1) the Level 1 at; 2) the Attachment 1 setting Attachment 2 setting forth the
This Application Form and Interconnection Agreement is of Standard Application Form and Interconnection Agreement forth the Terms and Conditions for Interconnection; 3) the terms for purchases by the Cooperative from the distribute	comprised of: 1) the Level 1 ht; 2) the Attachment 1 setting Attachment 2 setting forth the ed generation facility, when hd returned to the dated conditional agreement hection Agreement will

Section 25 COGENERATION AND SMALL POWER PRODUCTION

Effective Date: June 15, 2016

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 Customer wishes the Cooperative to purchase any output from the interconnected generation facility, a separate power purchase agreement shall be required.

	_ Date:
Titlo∙	
	Title:

ATTACHMENT 1

Level 1: Standard Interconnection Agreement

Terms and Conditions for Interconnection

- Construction of the Distributed Generation Facility. The interconnection memberconsumer 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) <u>Final Interconnection and Operation.</u> 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.
- 3) <u>IEEE 1547.</u> 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 isolation device or disconnect switch 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) <u>Metering.</u> 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).
- 6) <u>Disconnection</u>. 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.
- 7) 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.

- 8) 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.
- 9) <u>Limitation of Liability.</u> 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.
- 10) <u>Termination</u>. 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.
- 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.

- 12) <u>Permanent Disconnection.</u> 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.
- 13) 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). 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.
- 14) 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 memberconsumer.
- 15) <u>Survival Rights.</u> 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.
- 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.
- 17) <u>Definitions.</u> 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.
- 18) 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:

If Notice is to Interconnection Customer:

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.

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.

Allamakee-Clayton Electric Cooperative 229 Highway 51 PO Box 715 Postville, IA 52162

Phone: 1-563-864-7611 Toll Free: 1-888-788-1551

Facsimile Number: 1-563-864-3095 Email Address: acree@acree.coop

- 19) <u>Interruptions.</u> 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.
- 20) 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, MISO and other applicable entities with jurisdiction over the operation of the Facility and Cooperative's System.

ATTACHMENT 2

Level 1: Standard Interconnection Agreement

Terms of Cooperative Purchases from Distribution Facility

1. Agreement to Purchase. In the event the Interconnecting Customers selects the option of Self-Use and Sales to the Cooperative on the Application Form or sale of generation output to customer upon whose premise the facility is located, then the Cooperative agrees to purchase from the Interconnection Customer such excess energy and capacity as may be available for purchase by the Interconnection Customer's facility and which Interconnection Customer desires to sell to Cooperative. Cooperative acknowledges that Interconnection Customer may utilize some of the energy Interconnection Customer generates as it is being generated and the Cooperative understands that it will only purchase such excess as Interconnection Customer 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 of its electric power requirements from Dairyland 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. <u>Metering.</u> 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.

4. Qualifying Facilities (as defined above) with a nameplate capacity of less than 40 kW may be eligible for Net Metering Billing. The Cooperative reserves the right to limit the total installed nameplate capacity eligible for Net Metering Billing to 1% of the annual average of the monthly residential substation coincident peak demands (not including dedicated Commercial substation demands). The QF shall be responsible for payment of any applicable service charge or other applicable charges approved by the Board of Directors that are not collected on the basis of metered registration.

For charges collected on the basis of metered registration, the Cooperative shall, for each monthly billing period, determine the net meter registration of the QF by comparing the directional energy flow in each direction.

For interconnection agreements on or after January 1, 2017: If the net meter registration shows that the deliveries of energy in kWh from the QF to the Cooperative exceed the deliveries of energy in kWh from the Cooperative to the QF, the net meter registration shall be converted to dollars at a rate equal to the Cooperative's avoided cost as defined in the PURPA regulations and carried forward to the next monthly billing period as a bill credit, expressed in kWh. If the QF has carried over a Net Metering Credit from one or more prior months, the net credit from the current month shall be added to the balance that exists from prior months.

If the net metering registration shows that deliveries of energy in kWh from the Cooperative to the QF exceed the deliveries of energy in kWh from the QF to the Cooperative, the QF shall pay the Cooperative for the net amount of energy delivered by the Cooperative after application of any bill credit carried forward from previous months at the rate applicable to its type or class of electric service.

The Cooperative shall not be required to convert the bill credit to cash at any time during the year; however, the total bill credit existing at the time a member-consumer terminates membership with the Cooperative shall be converted to cash by the Cooperative. See section 6 for interconnection agreements before January 1, 2017.

If a qualifying facility with an interconnection agreement before January 1, 2017 signs a new interconnection agreement on or after January 1, 2017 to add additional distributed generation for the same location, the tariff terms for the new interconnection agreement will apply to all qualifying facilities at the location.

5. The net metering arrangement provided to Member-Consumer herein is for the

Issued: November 28, 2016 Effective: January 1, 2017

Issued By: Paul D. Foxwell, Executive Vice President and General Manager

purposes of promoting small-scale renewable generation facilities, such as the facility owned by Member-Consumer. The parties agree that all kWh's delivered by the QF to the Cooperative shall be deemed to have been purchased by Cooperative at the point of delivery, even though the Cooperative shall have given the Member-Consumer Net Metering Credits rather than a cash payment for the same. In addition, such purchases shall include the purchase of any

6. Interconnection agreements before January 1, 2017: the net metering registration terms of the Cooperative's COGENERATION AND SMALL POWER PRODUCTION tariff, Attachment 2, Level 1 Standard Interconnect Agreement, section 4 filed on April 27, 2015 will apply for a period of 5 years from January 1, 2017 to January 1, 2022. These terms are as follows:

If the net meter registration shows that the deliveries of energy in kWh from the QF to the Cooperative exceed the deliveries of energy in kWh from the Cooperative to the QF, the net meter registration in kWh will be carried forward to the next monthly billing period as a Net Metering Credit, expressed in kWh. If the QF has carried over a Net Metering Credit from one or more prior months, the net meter registration from the current month shall be added to the Net Metering Credit that exists from prior months.

If the net metering registration shows that deliveries of energy in kWh from the Cooperative to the QF exceed the deliveries of energy in kWh from the QF to the Cooperative, the QF shall pay the Cooperative for the net amount of energy delivered by the Cooperative after application of any Net Metering Credit carried forward from previous months at the rate applicable to its type or class of electric service.

The Cooperative shall not be required to convert the Net Metering Credit to cash at any time during the year; however, if the Cooperative, at its sole discretion, should elect to convert any Net Metering Credits to cash at any time, the rate shall be at least equal to Cooperative's avoided cost as defined in the PURPA regulations. In no event shall any Net Metering Credits be carried forward from one twelve month period to the next. Any unused credits at the end of the twelve month period shall be forfeited.

On January 1, 2022, section 6 and references to section 6 of the Cooperative's COGENERATION AND SMALL POWER PRODUCTION tariff, Attachment 2, Level 1 Standard Interconnect Agreement will be removed from the tariff and at that time, net metering registration provisions of the Cooperative's tariff will apply the same without regard to interconnect agreement date.

Issued: November 28, 2016 Effective: January 1, 2017

Issued By: Paul D. Foxwell, Executive Vice President and General Manager

Interconnection Customer Information

Effective Date: June 15, 2016

Appendix C – Standard certificate of completion

CERTIFICATE OF COMPLETION

(To be completed and returned to the Cooperative when installation is complete and final electric inspector approval has been obtained – Use contact information provided on the Cooperative's web page for generator interconnection to obtain mailing address/fax number/e-mail address)

Name:		
Mailing Address:		
City:	State:	Zip Code:
Telephone (Daytime):	(Eve	ening):
Facsimile Number:	E-Mail Add	dress:
Installer:		Check if owner-installed:
Name:		
Mailing Address:		
City:	State:	Zip Code: ening):
Telephone (Daytime):	(Eve	ening):
Facsimile Number:	E-Mail Add	lress:
the final acceptance and approv	tion. A signed copy hed. The interconne perate the distribute val by the Cooperativ	of the electric inspector's form ection member-consumer of generation facility until receipt ove as provided below.
(Signature of inter-	connection member	Date: r-consumer)
Printed Name:		
• •	ents is attached (pro	ttached: ojects larger than 10 kVA only):
Acceptance and Final Approval	for Interconnection	(for cooperative use only)

Allamakee-Clayton Electric Cooperative, Inc. Electric Tariff - Filed with Iowa Utilities Board

Section 25 COGENERATION AND SMALL POWER PRODUCTION

Effective Date: June 15, 2016

The interconnection agreement is approved and the approved for interconnected operation upon the sign Completion by Cooperative:	,
Electric Distribution Company waives Witness Test?	(Initial) Yes () No ()
If not waived, date of successful Witness Test:	Passed: (Initial) ()
Cooperative Signature:	Date:
Printed Name:	_ Title:

Appendix D – Levels 2 to 4: standard application form

LEVELS 2 TO 4:

STANDARD INTERCONNECTION REQUEST APPLICATION FORM (For Distributed Generation Facilities 10 MVA or less)

Interconnection Customer Contact Information (Applicant must be owner or Lessee of

(FOI DISTIDUTED GENERATION FACILITIES TO MVA OF 1655)

the facility)		
Name:		
Mailing Address:		
City:		
Telephone (Daytime):	(Eveni	ing):
Facsimile Number:	E-Mail Addre	SS:
Alternative Contact Information (if	different from Custo	omer Contact Information)
Name:		
Mailing Address:		
City:	State:	Zip Code:
Telephone (Daytime):	(Eveni	ing):
Telephone (Daytime): Facsimile Number:	E-Mail Addre	SS:
Facility Address (if different from a	above):	
City:	State:	Zip Code:
Cooperative serving Facility site:		
Facility Address (if different from a City: Cooperative serving Facility site: Account Number of Facility site (e	existing cooperative r	nember-consumers):
Inverter Manufacturer:	Mc	odel:
Equipment Contractor		
Name:		
Mailing Address:		
City:		
Telephone (Daytime):	(Eveni	ing):
Facsimile Number:	E-Mail Addre	SS:
Electrical Contractor (if different fr	om Equipment Cont	ractor)
Name:		
Mailing Address:		
City:		Zip Code:
Telephone (Daytime):		
Facsimile Number:		

Section 25 COGENERATION AND SMALL POWER PRODUCTION Effective Date: June 15, 2016 License Number: _____ Third Party Information (only complete this section if the facility is to be located on the premise of someone other than the applicant): Location of proposed facility: Name of Customer at said location: Mailing Address: _____ _____ State: _____ Zip Code: _____ City: _____ Telephone (Daytime): _____ (Evening): _____ Facsimile Number: ____ E-Mail Address: _____ Electric Service Information for Customer Facility where Generator will be Interconnected Capacity: _____ (Amps) Voltage: ____ (Volts) Type of Service: ___ Single Phase ___ Three Phase If 3 Phase Transformer, Indicate Type: Primary Winding ____ Wye ____ Delta Secondary Winding ____ Wye ____ Delta Transformer Size: _____ Impedance: _____ Intent of Generation Offset Load (Unit will operate in parallel, but will not export power to Cooperative) 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 a separate power purchase agreement to be executed by the parties) — Wholesale Market Transaction (Unit will operate in parallel and participate in MISO or other wholesale power markets pursuant to separate requirements and agreements with MISO or other transmission providers, and applicable rules of the Federal Energy Regulatory Commission) — 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.)

	Sale of generation output to customer 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.
	Other: (Please Explain):
Genei	rator & Prime Mover Information
	Energy Source (Hydro, Wind, Solar, Process Byproduct, Biomass, Oil, Natural Gas, Coal, etc.):
	Energy Converter Type (Wind Turbine, Photovoltaic Cell, Fuel Cell, Steam Turbine, etc.):
	Generator Size: kW or kVA Number of Units:
	Total Capacity: kW or kVA and (AC Volts)
	Generator Type (Check one): Induction Inverter Synchronous Other:
Reque	ested Procedure Under Which to Evaluate Interconnection Request
	e indicate below which review procedure applies to the interconnection request. eview procedure used is subject to confirmation by the Cooperative.
_	Level 2 – Lab-certified interconnection equipment with an aggregate electric nameplate capacity less than or equal to 150 kVA. Lab-certified is defined in lowa Utilities Board Chapter 45 rules on Electric Interconnection of Distributed Generation Facilities (199 IAC 45.1). (Application fee is \$100 plus \$1.00 per kVA.)
_	Level 3 – Distributed generation facility does not export power. Nameplate capacity rating is less than or equal to 50 kVA if connecting to area network or less than 150 kVA if connecting to a radial distribution feeder. (Application fee amount is \$500 plus \$2.00 per kVA.)
_	Level 4 – Nameplate capacity rating is less than or equal to 10 MVA and the distributed generation facility does not qualify for a Level 1, Level 2, or Level 3 review, or the distributed generation facility has been reviewed but not approved under a Level 1, Level 2, or Level 3 review. (Application fee amount is \$1,000

plus \$2.00 per kVA, to be applied toward any subsequent studies related to this application.)

<u>Note</u>: Descriptions for interconnection review categories do not list all criteria that must be satisfied. For a complete list of criteria, please refer to Appendix A of the Cooperative's tariff.

Distributed Generation Facility Information:	
Commissioning Test Date:	
List interconnection components/systems to be us that are lab-certified.	sed in the distributed generation facility
Component/System 1	NRTL Providing Label & Listing
2	
4	
5	
Please provide copies of manufacturer broad	chures or technical specifications.
Energy Production Equipment/Inverter Information	<u>):</u>
Synchronous Induction Inverter Rating: kW Rating: Rated Voltage: Volts Rated Current: Amps System Type Tested (Total System): Yes	kVA
For Synchronous Machines:	
Note: Contact Cooperative to determine if all the i required for the proposed distributed generation fa	
Manufacturer: Version No.:	
Model No.: Version No.:	- Cum (c
Submit copies of the Saturation Curve and the Ve Salient Non-Salient	e Curve
Torque: lb-ft Rated RPM: Fiel	d Amperes: at rated
generator voltage and current and% PF	over-excited
Type of Exciter:	
Output Power of Exciter:	

Section 25 COGENERATION AND SMALL POWER PRODUCTION

Effective Date: June 15, 2016

Type of Voltage Regulator: Amps Synchronous Speed:RPM Winding Connection: Min. Operating Freq./Time: Generator Connection: Delta Wye Wye Grounded Direct-axis Synchronous Reactance: (Xd) ohms Direct-axis Transient Reactance: (X'd) ohms Direct-axis Sub-transient Reactance: (X"d) ohms Negative Sequence Reactance: ohms Zero Sequence Reactance: ohms Neutral Impedance or Grounding Resister (if any): ohms
For Induction Machines:
Note: Contact Cooperative to determine if all the information requested in this section is required for the proposed distributed generation facility.
Manufacturer:
Model No.: Version No.:
Locked Rotor Current: Amps
Rotor Resistance (Rr): ohms Exciting Current: Amps
Rotor Reactance (Xr): ohms Reactive Power Required:
Magnetizing Reactance (Xm): ohmsVARs (No Load)
Stator Resistance (Rs): ohmsVARs (Full Load)
Stator Reactance (Xs): ohms
Short Circuit Reactance (X"d): ohms
Phases: Single Three-Phase
Frame Size: Design Letter: Temp. Rise:°C.
1 Tame 6126 Boolgii 201.011 Tomp. 11.001 0.
Reverse Power Relay Information (Level 3 Review Only):
Manufacturer:
Relay Type: Model Number:
Reverse Power Setting:
Reverse Power Time Delay (if any):
Additional Information For Inverter-Based Facilities:
Inverter Information:
Manufacturer: Model: Type: Forced Commutated Line Commutated
Type: Forced Commutated Line Commutated
Rated Output: Watts Volts Efficiency:% Power Factor:%
Efficiency: % Power Factor: %
Inverter III 1741 Listed: Yes No

DC Source/Prime Mover:
Rating: kW Rating: kVA Rated Voltage: Volts Open Circuit Voltage (if applicable): Volts Rated Current: Amps Short Circuit Current (if applicable): Amps
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 showing the distributed generation facility's location in relation to streets, alleys, or other geographic markers.
Plot Plan attached: Yes
Disconnect Switch: Identify type and location of disconnect switch:
Is the generating facility a Qualifying Facility as defined under the Public Utilities Regulatory Policies Act (18 CFR Part 292, Subpart B)?
Yes No
Customer Signature:
I hereby certify that all of the information provided in this Interconnection Request Application Form is true.
Applicant Signature: Date:
An application fee is required before the application can be processed. Please verify that the appropriate fee is included with the application: Amount:

Allamakee-Clayton Electric Cooperative, Inc. Electric Tariff - Filed with Iowa Utilities Board

Effective Date: June 15, 2016

Cooperative Acknowledgement:

Receipt of the application fee is acknowledged and this interconnection request is complete.

Cooperative Signature:	Date:
Printed Name:	Title:

Appendix E – Levels 2 to 4: standard distributed generation interconnection agreement

LEVELS 2 TO 4: STANDARD INTERCONNECTION AGREEMENT

(For Distributed Generation Facilities with a capacity of 10 MVA or less)

This agreement ("Agreement") is made and entered	I into this day of .	
by and between	· · · · · · · · · · · · · · · · · · ·	
consumer"), as an individual person, or as a	organized and	
existing under the laws of the State of		
Electric Cooperative, Inc., ("Cooperative"), a cooperative corporation existing under the aws of the State of Iowa. Interconnection member-consumer and Cooperative each may be referred to as a "Party," or collectively as the "Parties."		
Recitals:		
Whereas, interconnection member-consumer is pro installation of a distributed generation facility, or is paddition to an existing distributed generation facility request application form completed by interconnecting; and	proposing a generating capacity, consistent with the interconnection	
Whereas, the interconnection member-consumer wethe operation and maintenance of, the distributed go	•	

Whereas, interconnection member-consumer desires to interconnect the distributed generation facility with Cooperative's electric distribution system.

Now, therefore, in consideration of the premises and mutual covenants set forth in this Agreement, the Parties covenant and agree as follows:

Article 1. **Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all approved interconnection requests for distributed generation facilities that fall under Levels 2, 3, and 4 according to the procedures set forth in the Cooperative's tariff.
- 1.2 This Agreement governs the terms and conditions under which the distributed generation facility will interconnect to, and operate in parallel with, the Cooperative's electric distribution system.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the interconnection member-consumer's power.

- 1.4 Nothing in this Agreement is intended to affect any other agreement between the Cooperative and the interconnection member-consumer.
- 1.5 Terms used in this Agreement are defined in Attachment 1 hereto or in Iowa Utilities Board Chapter 45 rules on Electric Interconnection of Distributed Generation Facilities (199 IAC 45.1) unless otherwise noted.
- 1.6 Responsibilities of the Parties
 - 1.6.1 The Parties shall perform all obligations of this Agreement in accordance with all applicable laws, regulations, codes, ordinances, orders, or similar directives of any government or other authority having jurisdiction.
 - 1.6.2 The Cooperative shall construct, own, operate, and maintain its interconnection facilities in accordance with this Agreement.
 - 1.6.3 The interconnection member-consumer shall construct, own, operate, and maintain its distributed generation facility and interconnection facilities in accordance with this Agreement.
 - 1.6.4 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for, the facilities that it now or subsequently may own unless otherwise specified in the attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair, and condition of its respective lines and appurtenances on its respective sides of the point of interconnection.
 - 1.6.5 The interconnection member-consumer agrees to design, install, maintain, and operate its distributed generation facility so as to minimize the likelihood of causing an adverse system impact on the electric distribution system or any other electric system that is not owned or operated by the Cooperative.
 - 1.6.6 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, MISO and other applicable entities with jurisdiction over the operation of the Facility and Cooperative's System.
- 1.7 Parallel Operation Obligations

Once the distributed generation facility has been authorized to commence

parallel operation, the interconnection member-consumer shall abide by all operating procedures established in IEEE Standard 1547 and any other applicable laws, statutes or guidelines, including those specified in Attachment 4 of this Agreement.

1.8 Metering

The interconnection member-consumer shall be responsible for the cost to purchase, install, operate, maintain, test, repair, and replace metering and data acquisition equipment specified in Attachments 5 and 6 of this Agreement.

1.9 Reactive Power

- 1.9.1 Interconnection 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. Interconnection 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.
- 1.9.2 Any Cooperative requirements for meeting a specific voltage or specific reactive power schedule as a condition for interconnection shall be clearly specified in Attachment 4. Under no circumstance shall the Cooperative's additional requirements for voltage or reactive power schedules be outside of the agreed-upon operating parameters defined in Attachment 4.
- 1.9.3 If the interconnection member-consumer does not operate the distributed generation facility within the power factor range specified in Attachment 4, or does not operate the distribute generation facility in accordance with a voltage or reactive power schedule specified in Attachment 4, the interconnection member-consumer is in default, and the terms of Article 6.5 apply.

1.10 Standards of Operations

The interconnection member-consumer must obtain all certifications, permits, licenses, and approvals necessary to construct, operate, and maintain the facility and to perform its obligations under this Agreement. The interconnection member-consumer is responsible for coordinating and synchronizing the distributed generation facility with the Cooperative's system. The interconnection member-consumer is responsible for any damage that is caused by the interconnection member-consumer's failure to coordinate or synchronize the distributed generation facility with the electric distribution system. The

interconnection member-consumer agrees to be primarily liable for any damages resulting from the continued operation of the distributed generation facility after the Cooperative ceases to energize the line section to which the distributed generation facility is connected. In Attachment 4, the Cooperative shall specify the shortest reclose time setting for its protection equipment that could affect the distributed generation facility. The Cooperative shall notify the interconnection member-consumer at least 10 business days prior to adopting a faster reclose time on any automatic protective equipment, such as a circuit breaker or line recloser, that might affect the distributed generation facility.

Article 2. Inspection, Testing, Authorization, and Right of Access

2.1 Equipment Testing and Inspection

The interconnection member-consumer shall test and inspect its distributed generation facility including the interconnection equipment prior to interconnection in accordance with IEEE Standard 1547 (2003) and IEEE Standard 1547.1 (2005). The interconnection member-consumer shall not operate its distributed generation facility in parallel with the Cooperative's electric distribution system without prior written authorization by the Cooperative as provided for in Articles 2.1.1-2.1.3.

2.1.1 The Cooperative shall perform a witness test after construction of the distributed generation facility is completed, but before parallel operation. unless the Cooperative specifically waives the witness test. The interconnection member-consumer shall provide the Cooperative at least 15 business days' notice of the planned commissioning test for the distributed generation facility. If the Cooperative performs a witness test at a time that is not concurrent with the commissioning test, it shall contact the interconnection member-consumer to schedule the witness test at a mutually agreeable time within 10 business days after the scheduled commissioning test designated on the application. If the Cooperative does not perform the witness test within 10 business days after the commissioning test, the witness test is deemed waived unless the Parties mutually agree to extend the date for scheduling the witness test, or unless the Cooperative cannot do so for good cause, in which case, the Parties shall agree to another date for scheduling the test within 10 business days after the original scheduled date. If the witness test is not acceptable to the Cooperative, the interconnection member-consumer has 30 business days to address and resolve any deficiencies. This time period may be extended upon agreement in writing between the Cooperative and the interconnection member-consumer. If the interconnection member-consumer fails to address and resolve the deficiencies to the satisfaction of the Cooperative, the applicable cure

provisions of Article 6.5 shall apply. The interconnection member-consumer shall, if requested by the Cooperative, provide a copy of all documentation in its possession regarding testing conducted pursuant to IEEE Standard 1547.1.

- 2.1.2 If the interconnection member-consumer conducts interim testing of the distributed generation facility prior to the witness test, the interconnection member-consumer shall obtain permission from the Cooperative before each occurrence of operating the distributed generation facility in parallel with the electric distribution system. The Cooperative may, at its own expense, send qualified personnel to the distributed generation facility to observe such interim testing, but it cannot mandate that these tests be considered in the final witness test. The Cooperative is not required to observe the interim testing or precluded from requiring the tests be repeated at the final witness test.
- 2.1.3 After the distributed generation facility passes the witness test, the Cooperative shall affix an authorized signature to the certificate of completion and return it to the interconnection member-consumer approving the interconnection and authorizing parallel operation. The authorization shall not be conditioned nor delayed.

2.2 Commercial Operation

The interconnection member-consumer shall not operate the distributed generation facility, except for interim testing as provided in Article 2.1, until such time as the certificate of completion is signed by all Parties.

2.3 Right of Access

The Cooperative must have access to the isolation device or disconnect switch 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.

Article 3. Effective Date, Term, Termination, and Disconnection

3.1 Effective Date

This Agreement shall become effective upon execution by all Parties.

3.2 Term of Agreement

This Agreement shall become effective on the effective date and shall remain in effect unless terminated in accordance with Article 3.3 of this Agreement.

3.3 Termination

- 3.3.1 The interconnection member-consumer may terminate this Agreement at any time by giving the Cooperative 30 calendar days' prior written notice.
- 3.3.2 Either Party may terminate this Agreement after default pursuant to Article 6.5.
- 3.3.3 The Cooperative may terminate, upon 60 calendar days' prior written notice, for failure of the interconnection member-consumer to complete construction of the distributed generation facility within 12 months after the in-service date as specified by the Parties in Attachment 2, which may be extended by mutual written agreement between the Parties prior to the expiration of the 12-month period.
- 3.3.4 The Cooperative may terminate this Agreement, upon 60 calendar days' prior written notice, if the interconnection member-consumer has abandoned, cancelled, permanently disconnected or stopped development, construction, or operation of the distributed generation facility, or if the interconnection member-consumer fails to operate the distributed generation facility in parallel with the Cooperative's electric system for three consecutive years.
- 3.3.5 Upon termination of this Agreement, the distributed generation facility will be disconnected from the Cooperative's electric distribution system. Terminating this Agreement does not relieve either Party of its liabilities and obligations that are owed or continuing when the Agreement is terminated.
- 3.3.6 If the Agreement is terminated, the interconnection member-consumer loses its position in the interconnection review order.

3.4 Temporary Disconnection

A Party may temporarily disconnect the distributed generation facility from the electric distribution system in the event one or more of the following conditions or events occurs:

3.4.1 Emergency conditions – shall mean any condition or situation: (1) that in the judgment of the Party making the claim is likely to endanger life or property; or (2) that the Cooperative determines is likely to cause an adverse system impact, or is likely to have a material adverse effect on the Cooperative's electric distribution system, interconnection facilities or

other facilities, or is likely to interrupt or materially interfere with the provision of electric utility service to other member-consumers; or (3) that is likely to cause a material adverse effect on the distributed generation facility or the interconnection equipment. Under emergency conditions, the Cooperative or the interconnection member-consumer may suspend interconnection service and temporarily disconnect the distributed generation facility from the electric distribution system without giving notice to the other Party, provided that it gives notice as soon as practicable thereafter. The Cooperative must notify the interconnection member-consumer when it becomes aware of any conditions that might affect the interconnection member-consumer's operation of the distributed generation facility. The interconnection member-consumer shall notify the Cooperative when it becomes aware of any condition that might affect the Cooperative's electric distribution system. To the extent information is known, the notification shall describe the condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

- 3.4.2 Scheduled maintenance, construction, or repair the Cooperative may interrupt interconnection service or curtail the output of the distributed generation facility and temporarily disconnect the distributed generation facility from the Cooperative's electric distribution system when necessary for scheduled maintenance, construction, or repairs on Cooperative's electric distribution system. To the extent possible, the Cooperative shall provide the interconnection member-consumer with notice five business days before an interruption. The Cooperative shall coordinate the reduction or temporary disconnection with the interconnection member-consumer; however, the interconnection member-consumer is responsible for out-of-pocket costs incurred by the Cooperative for deferring or rescheduling maintenance, construction, or repair at the interconnection member-consumer's request.
- 3.4.3 Forced outages The Cooperative may suspend interconnection service to repair the Cooperative's electric distribution system. The Cooperative shall provide the interconnection member-consumer with prior notice, if possible. If prior notice is not possible, the Cooperative shall, upon written request, provide the interconnection member-consumer with written documentation, after the fact, explaining the circumstances of the disconnection.
- 3.4.4 Adverse system impact the Cooperative must provide the interconnection member-consumer with written notice of its intention to disconnect the distributed generation facility, if the Cooperative determines that operation of the distributed generation facility creates an adverse system impact. The documentation that supports the

Cooperative's decision to disconnect must be provided to the interconnection member-consumer. The Cooperative may disconnect the distributed generation facility if, after receipt of the notice, the interconnection member-consumer fails to remedy the adverse system impact within 12 days, unless emergency conditions exist, in which case, the provisions of Article 3.4.1 apply. The Cooperative may continue to leave the generating facility disconnected until the adverse system impact is corrected to the satisfaction of both the Cooperative and the adversely-impacted member-consumer.

- 3.4.5 Modification of the distributed generation facility The interconnection member-consumer must receive written authorization from the Cooperative prior to making any change to the distributed generation facility, other than a minor equipment modification. If the interconnection member-consumer modifies its facility without the Cooperative's prior written authorization, the Cooperative has the right to disconnect the distributed generation facility until such time as the Cooperative concludes the modification poses no threat to the safety or reliability of its electric distribution system.
- 3.4.6 Unauthorized connection to the Cooperative's electric distribution system.
- 3.4.7 Failure of the distributed generation facility to operate in accordance with this Agreement or the applicable requirements of 199 IAC Chapter 15 or the Cooperative's tariff.
- 3.4.8 The Cooperative is not responsible for any lost opportunity or other costs incurred by interconnection member-consumer as a result of an interruption of service under Article 3.

Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades

4.1 Interconnection Facilities

- 4.1.1 The interconnection member-consumer shall pay for the cost of the interconnection facilities itemized in Attachment 3. The Cooperative shall identify the additional interconnection facilities necessary to interconnect the distributed generation facility with the Cooperative's electric distribution system, the cost of those facilities, and the time required to build and install those facilities, as well as an estimated date of completion of the building or installation of those facilities.
- 4.1.2 The interconnection member-consumer is responsible for its expenses, including overheads, associated with owning, operating, maintaining, repairing, and replacing its interconnection equipment.

4.2 Distribution Upgrades

The Cooperative shall design, procure, construct, install, and own any distribution upgrades. The actual cost of the distribution upgrades, including overheads, shall be directly assigned to the interconnection member-consumer whose distributed generation facility caused the need for the distribution upgrades.

Article 5. Billing, Payment, Milestones, and Financial Security

- 5.1 Billing and Payment Procedures and Final Accounting (Applies to additional reviews conducted under a Level 2 review and Level 4 reviews)
 - 5.1.1 The Cooperative shall bill the interconnection member-consumer for the design, engineering, construction, and procurement costs of Cooperative-provided interconnection facilities and distribution upgrades contemplated by this Agreement as set forth in Attachment 3. The billing shall occur on a monthly basis, or as otherwise agreed to between the Parties. The interconnection member-consumer shall pay each billing invoice within 30 calendar days after receipt, or as otherwise agreed to between the Parties, if a balance due is showing after any member-consumer deposit funds have been expended.
 - 5.1.2 Within 90 calendar days after completing the construction and installation of the Cooperative's interconnection facilities and distribution upgrades described in Attachments 2 and 3 to this Agreement, the Cooperative shall provide the interconnection member-consumer with a final accounting report of any difference between (1) the actual cost incurred to complete the construction and installation of the Cooperative's interconnection facilities and distribution upgrades; and (2) the interconnection memberconsumer's previous deposit and aggregate payments to the Cooperative for the interconnection facilities and distribution upgrades. If the interconnection member-consumer's cost responsibility exceeds its previous deposit and aggregate payments, the Cooperative shall invoice the interconnection member-consumer for the amount due and the interconnection member-consumer shall make payment to the Cooperative within 30 calendar days. If the interconnection memberconsumer's previous deposit and aggregate payments exceed its cost responsibility under this Agreement, the Cooperative shall refund to the interconnection member-consumer an amount equal to the difference within 30 calendar days after the final accounting report. Upon request from the interconnection member-consumer, if the difference between the budget estimate and the actual cost exceeds 20%, the Cooperative will provide a written explanation for the difference.

5.1.3 If a Party disputes any portion of its payment obligation pursuant to this Article 5, the Party shall pay in a timely manner all non-disputed portions of its invoice, and the disputed amount shall be resolved pursuant to the dispute resolution provisions contained in Article 8. A Party disputing a portion of an Article 5 payment shall not be considered to be in default of its obligations under this Article.

5.2 Interconnection Customer Deposit

At least 20 business days prior to the commencement of the design, procurement, installation, or construction of the Cooperative's interconnection facilities and distribution upgrades, the interconnection member-consumer shall provide the Cooperative with a deposit equal to 100% of the estimated, nonbinding cost to procure, install, or construct any such facilities. However, when the estimated date of completion of the building or installation of facilities exceeds three months from the date of payment of the deposit, pursuant to Article 4.1.1 of this Agreement, this deposit may be held by the Cooperative.

<u>Article 6.</u> Assignment, Limitation on Damages, Indemnity, Force Majeure, and Default

6.1 Assignment

This Agreement may be assigned by either Party with the prior consent of the other Party. If the interconnection member-consumer attempts to assign this Agreement, the assignee must agree to the terms of this Agreement in writing and such writing must be provided to the Cooperative. Any attempted assignment that violates this Article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason of the assignment. An assignee is responsible for meeting the same obligations as the assignor.

- 6.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate (including mergers, consolidations, or transfers or a sale of a substantial portion of the Party's assets, between the Party and another entity), of the assigning Party that has an equal or greater credit rating and the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement.
- 6.1.2 The interconnection member-consumer can assign this Agreement, without the consent of the Cooperative, for collateral security purposes to aid in providing financing for the distributed generation facility.

6.2 Limitation on Damages

Except for cases of gross negligence or willful misconduct, the liability of any Party to this Agreement shall be limited to direct actual damages, including

death, bodily injury, third-party claims, and reasonable attorney's fees, and all other damages at law are waived. Under no circumstances, except for cases of gross negligence or willful misconduct, shall any Party or its directors, officers, employees, and agents, or any of them, be liable to another Party, whether in tort, contract or other basis in law or equity for any special, indirect, punitive, exemplary, or consequential damages, including lost profits, lost revenues, replacement power, cost of capital, or replacement equipment. This limitation on damages shall not affect any Party's rights to obtain equitable relief, including specific performance, as otherwise provided in this Agreement. The provisions of this Article 6.2 shall survive the termination or expiration of the Agreement.

6.3 Indemnity

- 6.3.1 This provision protects each Party from liability incurred as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in Article 6.2.
- 6.3.2 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 memberconsumer'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.
- 6.3.3 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.
- 6.3.4 Within 5 business days after receipt by an indemnified Party of any claim or notice that an action or administrative or legal proceeding or investigation as to which the indemnity provided for in this Article may apply has commenced, the indemnified Party shall notify the indemnifying Party of such fact. The failure to notify, or a delay in notification, shall not affect a Party's indemnification obligation unless that failure or delay is materially prejudicial to the indemnifying Party.
- 6.3.5 If an indemnified Party is entitled to indemnification under this Article as a result of a claim, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this Article, to assume the

defense of such claim, that indemnified Party may, at the expense of the indemnifying Party, contest, settle, or consent to the entry of any judgment with respect to, or pay in full, the claim.

6.3.6 If an indemnifying Party is obligated to indemnify and hold any indemnified Party harmless under this Article, the amount owing to the indemnified person shall be the amount of the indemnified Party's actual loss, net of any insurance or other recovery by the indemnified Party.

6.4 Force Majeure

- 6.4.1 As used in this Article, a force majeure event shall mean any act of God, labor disturbance, act of the public enemy, war, acts of terrorism, insurrection, riot, fire, storm or flood, explosion, breakage, or accident to machinery or equipment through no direct, indirect, or contributory act of a Party, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities (e.g., MISO), or any other cause beyond a Party's control. A force majeure event does not include an act of gross negligence or intentional wrongdoing by the Party claiming force majeure.
- 6.4.2 If a force majeure event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the force majeure event ("Affected Party") shall notify the other Party of the existence of the force majeure event as soon as reasonably possible. The notification will specify the circumstances of the force majeure event, its expected duration (if known), and the steps that the Affected Party is taking and will take to mitigate the effects of the event on its performance (if known). If the initial notification is verbal, it must be followed up with a written notification promptly thereafter. The Affected Party shall keep the other Party informed on a periodic basis of developments relating to the force majeure event until the event ends. The Affected Party may suspend or modify its obligations under this Agreement without liability only to the extent that the effect of the force majeure event cannot be otherwise mitigated.

6.5 Default

- 6.5.1 No default shall exist when the failure to discharge an obligation results from a force majeure event as defined in this Agreement, or the result of an act or omission of the other Party.
- 6.5.2 A Party shall be in default ("Default") of this Agreement if it fails in any material respect to comply with, observe, or perform, or defaults in the performance of, any covenant or obligation under this Agreement and fails

to cure the failure within 60 calendar days after receiving written notice from the other Party. Upon a default of this Agreement, the non-defaulting Party shall give written notice of the default to the defaulting Party. Except as provided in Article 6.5.3, the defaulting Party has 60 calendar days after receipt of the default notice to cure the default; provided, however, if the default cannot be cured within 60 calendar days, the defaulting Party shall commence the cure within 20 calendar days after original notice and complete the cure within six months from receipt of the default notice; and, if cured within that time, the default specified in the notice shall cease to exist.

- 6.5.3 If a Party has assigned this Agreement in a manner that is not specifically authorized by Article 6.1, fails to provide reasonable access pursuant to Article 2.3, and is in default of its obligations pursuant to Article 7, or if a Party is in default of its payment obligations pursuant to Article 5 of this Agreement, the defaulting Party has 30 days from receipt of the default notice to cure the default.
- 6.5.4 If a default is not cured as provided for in this Article, or if a default is not capable of being cured within the period provided for in this Article, the non-defaulting Party shall have the right to terminate this Agreement without liability by written notice, and be relieved of any further obligation under this Agreement and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due under this Agreement, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Article shall survive termination of this Agreement.

Article 7. Insurance

- 7.1 For distributed generation facilities with a nameplate capacity less than 40 kVA, the interconnection member-consumer shall carry general liability insurance coverage, such as, but not limited to, homeowner's insurance.
- 7.2 For distributed generation facilities with a nameplate capacity of 40 kVA or above; but less than 1 MVA, the interconnection member-consumer shall carry sufficient coverage so that the maximum comprehensive/general liability coverage that is continuously maintained by the interconnection member-consumer during the terms shall be not less than \$1,000,000 for each occurrence. The Cooperative, its officers, employees and agents shall be added as an additional insured on this policy.
- 7.3 For distributed generation facilities with a nameplate capacity of 1 MVA or above, the interconnection member-consumer shall carry sufficient insurance coverage so that the maximum comprehensive/general liability coverage that is continuously maintained by the interconnection member-consumer during the

- term shall be not less than \$2,000,000 for each occurrence, and an aggregate, if any, of at least \$4,000,000. The Cooperative, its officers, employees and agents shall be added as an additional insured on this policy.
- 7.4 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 Article.

Article 8. Dispute Resolution

- 8.1 Parties shall attempt to resolve all disputes regarding interconnection as provided in this Article in a good faith manner.
- 8.2 If there is a dispute between the Parties about an interpretation of the Agreement, the aggrieved Party shall issue a written notice to the other Party to the agreement that specifies the dispute and the Agreement articles that are disputed.
- 8.3 A meeting between the Parties shall be held within ten business days after receipt of the written notice. Persons with decision-making authority from each Party shall attend the meeting. If the dispute involves technical issues, persons with sufficient technical expertise and familiarity with the issue in dispute from each Party shall also attend the meeting. If the Parties agree, the meeting may be conducted by teleconference.
- 8.4 After the first meeting, each Party may seek resolution through the Iowa Utilities Board Chapter 6 complaint procedures (199 IAC 6). Dispute resolution under these procedures will initially be conducted informally under 199 IAC 6.2 through 6.4 to minimize cost and delay. If any Party is dissatisfied with the outcome of the informal process, the Party may file a formal complaint with the Board under 199 IAC 6.5.
- 8.5 Pursuit of dispute resolution may not affect an interconnection request or an interconnection applicant's position in the Cooperative's interconnection review order.
- 8.6 If the Parties fail to resolve their dispute under the dispute resolution provisions of this Article, nothing in this Article shall affect any Party's rights to obtain equitable relief, including specific performance, as otherwise provided in this Agreement.

Article 9. Miscellaneous

9.1 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, without regard to its conflicts of law principles. This Agreement is subject to all applicable laws and regulations. Each Party expressly reserves the right to seek change in, appeal, or otherwise contest any laws, orders, or regulations of a governmental authority. The language in all parts of this Agreement shall in all cases be construed as a whole, according to its fair meaning, and not strictly for or against the Cooperative or interconnection member-consumer, regardless of the involvement of either Party in drafting this Agreement.

9.2 Amendment

Modification of this Agreement shall be only by a written instrument duly executed by both Parties.

9.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations in this Agreement assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

9.4 Waiver

- 9.4.1 Except as otherwise provided in this Agreement, a Party's compliance with any obligation, covenant, agreement, or condition in this Agreement may be waived by the Party entitled to the benefits thereof only by a written instrument signed by the Party granting the waiver, but the waiver or failure to insist upon strict compliance with the obligation, covenant, agreement, or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent or other failure.
- 9.4.2. Failure of any Party to enforce or insist upon compliance with any of the terms or conditions of this Agreement, or to give notice or declare this Agreement or the rights under this Agreement terminated, shall not constitute a waiver or relinquishment of any rights set out in this Agreement, but the same shall be and remain at all times in full force and effect, unless and only to the extent expressly set forth in a written document signed by that Party granting the waiver or relinquishing any such rights. Any waiver granted, or relinquishment of any right, by a Party shall not operate as a relinquishment of any other rights or a waiver of any other failure of the Party granted the waiver to comply with any obligation, covenant, agreement, or condition of this Agreement.

9.5 Entire Agreement

Except as provided in Article 9.1, this Agreement, including all attachments and the completed Standard Certificate of Completion, constitutes the entire Agreement between the Parties with reference to the subject matter of this Agreement, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants that constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

9.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original, but all constitute one and the same instrument.

9.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties, or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power, or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

9.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other governmental authority, (1) that portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by the ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

9.9 Environmental Releases

Each Party shall notify the other Party of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the distributed generation facility or the interconnection facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided that Party makes a good faith effort to provide the notice no later than 24 hours after that Party becomes aware of the occurrence, and (2)

promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

9.10 Subcontractors

Nothing in this Agreement shall prevent a Party from using the services of any subcontractor it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing services and each Party shall remain primarily liable to the other Party for the performance of the subcontractor.

- 9.10.1 A subcontract relationship does not relieve any Party of any of its obligations under this Agreement. The hiring Party remains responsible to the other Party for the acts or omissions of its subcontractor. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of the hiring Party.
- 9.10.2 The obligations under this Article cannot be limited in any way by any limitation of subcontractor's insurance.

Article 10. Notices

10.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first-class mail, postage prepaid, to the person specified below:

If Notice is to Interconnection Customer:

Interconnection C	ustomer:		
Attention:			
City:		State:	Zip:
Phone:	Fax:	E-mail:	

If Notice is to Cooperative:

Allamakee-Clayton Electric Cooperative 229 Highway 51 PO Box 715 Postville, IA 52162

Phone: 1-563-864-7611 Toll Free: 1-888-788-1551

Facsimile Number: 1-563-864-3095 Email Address: acree@acree.coop

Alternative Forms of Notice:

Any notice or request required or permitted to be given by either Party to the other Party and not required by this Agreement to be in writing may be given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out above.

10.2 Billing and Payment

Billings and payments shall be sent to the contacts specified for Notices in Article 10.1 above, unless a different address is set out below:

If Billing or Payment is to Interconnection Customer:

Interconnection Customer:		
Attention:		
Address:		
City:	State:	Zip:

If Billing or Payment is to Cooperative:

Allamakee-Clayton Electric Cooperative 229 Highway 51 PO Box 715 Postville, IA 52162

Phone: 1-563-864-7611 Toll Free: 1-888-788-1551

Facsimile Number: 1-563-864-3095 Email Address: acrec@acrec.coop

10.3 Designated Operating Representative

The Parties shall also designate operating representatives to conduct the communications that may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

	Attention:		
	Address:		
	City:	State:	
	Telephone:		
	Fax: E-mail:		
	Cooperative's Operating Repre	esentative:	
	Allamakee-Clayton Electric Cod 229 Highway 51 PO Box 715 Postville, IA 52162 Phone: 1-563-864-7611 Toll Fr	ree: 1-888-788-1551	
	Facsimile Number: 1-563-864-	3095 Email Address: acrec	@acrec.coop
0.4	Changes to the Notice Informa	tion	
	Either Party may change this n written notice before the effecti	, , ,	five business days'
rtic	<u>e 11.</u> Signatures		
	IN WITNESS WHEREOF, the I executed by their respective du		
	For the Interconnection Custon	ner:	
	Name		
	Name:		
	Title:		
	Date:		
	For the Cooperative:		
	Name:		
	Title:		
	Date:		

ATTACHMENT 1

Levels 2 To 4: Standard Interconnection Agreement

Definitions

<u>Adverse system impact</u> – A negative effect that compromises the safety or reliability of the electric distribution system or materially affects the quality of electric service provided by the Cooperative to other member-consumers.

<u>AEP facility</u> – An AEP facility as defined in 199 IAC 15 (Iowa Utilities Board Chapter 15 rules on Cogeneration and Small Power Production), used by an interconnection member-consumer to generate electricity that operates in parallel with the electric distribution system. An AEP facility typically includes an electric generator and the interconnection equipment required to interconnect safely with the electric distribution system or local electric power system.

<u>Applicable laws and regulations</u> – All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any governmental authority, having jurisdiction over the Parties.

<u>Commissioning test</u> – Tests applied to a distributed generation facility by the applicant after construction is completed to verify that the facility does not create adverse system impacts. At a minimum, the scope of the commissioning tests performed shall include the commissioning test specified IEEE Standard 1547 Section 5.4 "Commissioning tests."

Distributed generation facility - A qualifying facility or an AEP facility.

<u>Distribution upgrades</u> – A required addition or modification to the Cooperative's electric distribution system at or beyond the point of interconnection to accommodate the interconnection of a distributed generation facility. Distribution upgrades do not include interconnection facilities.

<u>Electric distribution system</u> – The facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries from interchanges with higher voltage transmission networks that transport bulk power over longer distances. The voltage levels at which electric distribution systems operate differ among areas but generally carry less than 100 kilovolts of electricity. Electric distribution system has the same meaning as the term Area EPS, as defined in 3.1.6.1 of IEEE Standard 1547.

<u>Facilities study</u> – An engineering study conducted by the Cooperative to determine the required modifications to the Cooperative's electric distribution system, including the

cost and the time required to build and install the modifications, as necessary to accommodate an interconnection request.

<u>Force majeure event</u> – Any act of God, labor disturbance, act of the public enemy, war, acts of terrorism, insurrection, riot, fire, storm or flood, explosion, breakage, or accident to machinery or equipment through no direct, indirect, or contributory act of a Party, any order, regulation, or restriction imposed by governmental, military, or lawfully established civilian authorities (e.g., MISO), or any other cause beyond a Party's control. A force majeure event does not include an act of gross negligence or intentional wrongdoing by the Party claiming force majeure.

Governmental authority – Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that this term does not include the interconnection member-consumer, Cooperative, or any affiliate of either.

<u>IEEE Standard 1547</u> – 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."

<u>IEEE Standard 1547.1</u> – The IEEE Standard 1547.1 (2005), "Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems."

<u>Interconnection agreement or Agreement</u> – The agreement between the interconnection member-consumer and the Cooperative. The interconnection agreement governs the connection of the distributed generation facility to the Cooperative's electric distribution system and the ongoing operation of the distributed generation facility after it is connected to the Cooperative's electric distribution system.

<u>Interconnection member-consumer</u> – The entity entering into this Agreement for the purpose of interconnecting a distributed generation facility to the Cooperative's electric distribution system.

Interconnection equipment – A group of components or an integrated system connecting an electric generator with a local electric power system or an electric distribution system that includes all interface equipment, including switchgear, protective devices, inverters, or other interface devices. Interconnection equipment may be installed as part of an integrated equipment package that includes a generator or other electric source.

Section 25 COGENERATION AND SMALL POWER PRODUCTION

Effective Date: June 15, 2016

Interconnection facilities – Facilities and equipment required by the Cooperative to accommodate the interconnection of a distributed generation facility. Collectively, interconnection facilities include all facilities, and equipment between the distributed generation facility and the point of interconnection, including modification, additions, or upgrades that are necessary to physically and electrically interconnect the distributed generation facility to the electric distribution system. Interconnection facilities are sole use facilities and do not include distribution upgrades.

<u>Interconnection request</u> – An interconnection member-consumer's request, on the required form, for the interconnection of a new distributed generation facility, or to increase the capacity or change the operating characteristics of an existing distributed generation facility that is interconnected with the Cooperative's electric distribution system.

<u>Interconnection study</u> – Any of the following studies, as determined to be appropriate by the Cooperative: the interconnection feasibility study, the interconnection system impact study, and the interconnection facilities study.

<u>Parallel operation or Parallel</u> – The state of operation that occurs when a distributed generation facility is connected electrically to the electric distribution system for longer than 100 milliseconds.

<u>Point of interconnection</u> – The point where the distributed generation facility is electrically connected to the electric distribution system. Point of interconnection has the same meaning as the term "point of common coupling" defined in 3.1.13 of IEEE Standard 1547.

Qualifying facility — A cogeneration facility or a small power production facility that is a qualifying facility under 18 CFR Part 292, Subpart B, used by an interconnection member-consumer to generate electricity that operates in parallel with the electric distribution system. A qualifying facility typically includes an electric generator and the interconnection equipment required to interconnect safely with the electric distribution system or local electric power system.

<u>Witness test</u> – For lab-certified equipment, verification (either by an on-site observation or review of documents) by the Cooperative that the interconnection installation evaluation required by IEEE Standard 1547 Section 5.3 and the commissioning test required by IEEE Standard 1547 Section 5.4 have been adequately performed. For interconnection equipment that has not been lab-certified, the witness test shall also include verification by the Cooperative of the on-site design tests required by IEEE Standard 1547 Section 5.1 and verification by the Cooperative of production tests required by IEEE Standard 1547 Section 5.2. All tests verified by the Cooperative are to be performed in accordance with the test procedures specified by IEEE Standard 1547.1.

ATTACHMENT 2

Levels 2 To 4: Standard Interconnection Agreement

Construction Schedule, Proposed Equipment & Settings

This attachment is to be completed by the interconnection member-consumer and shall include the following:

- 1. The construction schedule for the distributed generation facility.
- A one-line diagram indicating the distributed generation facility, interconnection equipment, interconnection facilities, metering equipment, and distribution upgrades.
- 3. Component specifications for equipment identified in the one-line diagram.
- 4. Component settings.
- 5. Proposed sequence of operations.
- 6. A three-line diagram showing current potential circuits for protective relays.
- 7. Relay tripping and control schematic diagram.
- 8. A plot plan showing the distributed generation facility's location in relation to streets, alleys, address or other geographical markers.

ATTACHMENT 3

Levels 2 To 4: Standard Interconnection Agreement

<u>Description, Costs and Time Required to</u> Build and Install the Cooperative's Interconnection Facilities

This attachment is to be completed by the Cooperative and shall include the following:

- 1. Required interconnection facilities, including any required metering.
- 2. An estimate of itemized costs charged by the Cooperative for interconnection, including overheads, based on results from prior studies.
- 3. An estimate for the time required to build and install the Cooperative's interconnection facilities based on results from prior studies and an estimate of the date upon which the facilities will be completed.

ATTACHMENT 4

Levels 2 To 4: Standard Interconnection Agreement

Operating Requirements for Distributed Generation Facilities Operating in Parallel

The Cooperative shall list specific operating practices that apply to this distributed generation interconnection and the conditions under which each listed specific operating practice applies.

ATTACHMENT 5

Levels 2 To 4: Standard Interconnection Agreement

Monitoring and Control Requirements

This attachment is to be completed by the Cooperative and shall include the following:

- 1. The Cooperative's monitoring and control requirements must be specified, along with a reference to the Cooperative's written requirements and the documents from which these requirements are derived.
- 2. An internet link to the requirements documents.

ATTACHMENT 6

Levels 2 To 4: Standard Interconnection Agreement

Metering Requirements

This attachment is to be completed by the Cooperative and shall include the following:

- 1. The metering requirements for the distributed generation facility.
- 2. Identification of the appropriate metering rules as set out in the Cooperative's tariff filed with the Iowa Utilities Board under subrule 199 IAC 20.2(5), and inspection and testing practices adopted under rule 199 IAC 20.6 that establish these requirements.
- 3. An internet link to these rules and practices.

ATTACHMENT 7

Levels 2 To 4: Standard Interconnection Agreement

As Built Documents

This attachment is to be completed by the interconnection member-consumer and shall include the following:

When it returns the certificate of completion to the Cooperative, the interconnection member-consumer shall provide the Cooperative with documents detailing the as-built status of the following:

- 1. A one-line diagram indicating the distributed generation facility, interconnection equipment, interconnection facilities, and metering equipment.
- 2. Component specifications for equipment identified in the one-line diagram.
- 3. Component settings.
- 4. Proposed sequence of operations.
- 5. A three-line diagram showing current potential circuits for protective relays.
- 6. Relay tripping and control schematic diagram.

Appendix F – Standard interconnection feasibility study agreement

INTERCONNECTION FEASIBILITY STUDY AGREEMENT

This agreement ("Agreement") is made and enter	red into this day of
by and between	("interconnection member-
consumer"), as an individual person, or as a	
existing under the laws of the State of	, and Allamakee-Clayton
Electric Cooperative, Inc., ("Cooperative"), a cooperative	perative corporation existing under the
laws of the State of Iowa. Interconnection members	er-consumer and Cooperative each
may be referred to as a "Party," or collectively as	the "Parties."
Recitals:	
Whereas, interconnection member-consumer is p	. •
generation facility or modify an existing distribute	,
interconnection request application form submitte	ed by interconnection member-
consumer on; and	
Whereas, interconnection member-consumer des	sires to interconnect the distributed

Whereas, interconnection member-consumer desires to interconnect the distributed generation facility with Cooperative's electric distribution system; and

Whereas, interconnection member-consumer has requested Cooperative to perform an interconnection feasibility study to assess the feasibility of interconnecting the proposed distributed generation facility to Cooperative's electric distribution system;

Now, therefore, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1. All terms defined in Iowa Utilities Board Chapter 45 rules on Electric Interconnection of Distributed Generation Facilities (199 IAC 45.1) shall have the meanings indicated in that rule when used in this Agreement, unless otherwise specified. 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.
- Interconnection member-consumer elects and Cooperative shall cause to be performed an interconnection feasibility study
- The scope of the interconnection feasibility study shall be based upon the information set forth in the interconnection request application form and Attachment A to this Agreement.
- 4. The interconnection feasibility study shall be based on the technical information provided by interconnection member-consumer in the interconnection request application form, as modified with the written agreement of the Parties. Cooperative has the right to request additional technical information from interconnection member-consumer during the course of the interconnection

feasibility study. If the interconnection member-consumer modifies its interconnection request, the time to complete the interconnection feasibility study may be extended by the Cooperative.

- 5. In performing the study, Cooperative shall rely on existing studies of recent vintage to the extent practical. The interconnection member-consumer will not be charged for such existing studies; however, interconnection member-consumer is responsible for the cost of applying any existing study to the interconnection member-consumer specific requirements and for any new study that the Cooperative performs.
- 6. The interconnection feasibility study report must provide the following information:
 - 6.1 Identification of any equipment short circuit capability limits exceeded as a result of the interconnection,
 - 6.2 Identification of any thermal overload or voltage limit violations resulting from the interconnection, and
 - 6.3 A description and nonbinding estimated cost of facilities required to interconnect the distributed generation facility to Cooperative's electric distribution system
- Interconnection member-consumer shall provide a study deposit equal to 100% of the estimated nonbinding study costs at least 20 business days prior to the date upon which the study commences.
- 8. The interconnection feasibility study shall be completed and the results shall be transmitted to interconnection member-consumer within 60 business days after this Agreement is signed by the Parties or the complete study deposit is received by the Cooperative, whichever occurs later. If the interconnection member-consumer's study request involves more than one point of interconnection and configuration, the time to complete the interconnection feasibility study may be extended by the Cooperative.
- Study fees shall be based on actual costs and will be invoiced to interconnection member-consumer after the study is transmitted to interconnection memberconsumer. The invoice must include an itemized listing of employee time and costs expended on the study.
- 10. Interconnection member-consumer shall pay any actual study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice. Cooperative shall refund any excess deposit amount without interest within 30 calendar days after the invoice.

In witness whereof, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of in	erconnection member-consumer]	
Signed:		
Name (Printed): _	Title:	

Allamakee-Clayton Electric Cooperative, Inc. Electric Tariff - Filed with Iowa Utilities Board

Section 25 COGENERATION AND	SMALL POWER PRODUCTION
Section 23 COGENERATION AND	SWALL FOWER FRODUCTION

Effective Date: June 15, 2016

Allamakee-Clayton Electric Cooperative, Inc.		
Signed:	Title·	
Name (Printed):	Title:	

<u>ATTACHMENT A</u> Interconnection Feasibility Study Agreement

Assumptions Used in Conducting the Interconnection Feasibility Study

The interconnection feasibility study will be based upon the information in the interconnection request application form, agreed upon on:
Point of interconnection and configuration to be studied.
2. Alternative points of interconnection and configurations to be studied.
Note: 1 and 2 are to be completed by the interconnection member-consumer. Any additional assumptions (explained below) may be provided by either the interconnection member-consumer or the Cooperative.

Appendix G – Standard interconnection system impact study agreement

INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT

This agreement ("Agreement") is made and entered into this	day of
by and between ("interconnections are connected to the connected to	on member-
consumer"), as an individual person, or as a	organized and
existing under the laws of the State of, and Alla	
Electric Cooperative, Inc., ("Cooperative"), a cooperative corporation	n existing under the
laws of the State of Iowa. Interconnection member-consumer and C	Cooperative each
may be referred to as a "Party," or collectively as the "Parties."	
Recitals:	
Whereas, interconnection member-consumer is proposing to develop	op a distributed
generation facility or modifying an existing distributed generation fa	•
the interconnection request application form completed by intercon	,
consumer on; and	
Whereas, interconnection member-consumer desires to interconne	ct the distributed
generation facility to Cooperative's electric distribution system; and	

Whereas, Cooperative has completed an interconnection feasibility study and provided the results of said study to interconnection member-consumer (this recital to be omitted if the Parties have agreed to forego the interconnection feasibility study); and

Whereas, interconnection member-consumer has requested Cooperative to perform an interconnection system impact study to assess the impact of interconnecting the distributed generation facility to Cooperative's electric distribution system;

Now, therefore, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1. All terms defined in Iowa Utilities Board Chapter 45 rules on Electric Interconnection of Distributed Generation Facilities (199 IAC 45.1) shall have the meanings indicated in that rule when used in this Agreement, unless otherwise specified. 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.
- Interconnection member-consumer elects and Cooperative shall cause to be performed an interconnection system impact study.
- 3. The scope of the interconnection system impact study shall be based upon the information set forth in the interconnection request application form and in Attachment A to this Agreement.

- 4. The interconnection system impact study shall be based upon the interconnection feasibility study and the technical information provided by interconnection member-consumer in the interconnection request application form. Cooperative reserves the right to request additional technical information from interconnection member-consumer. If interconnection member-consumer modifies its proposed point of interconnection, interconnection request, or the technical information provided therein is modified, the time to complete the interconnection system impact study may be extended.
- 5. The interconnection system impact study report shall provide the following information:
 - 5.1 The underlying assumptions of the study;
 - 5.2 The results of the analyses;
 - 5.3 A list of any potential impediments to providing the requested interconnection service;
 - 5.4 Required distribution upgrades; and
 - 5.5 A nonbinding estimate of cost and time to construct any required distribution upgrades.
- 6. Interconnection member-consumer shall provide a study deposit equal to 100% of the estimated nonbinding study costs at least 20 business days prior to the date upon which the study commences.
- 7. The interconnection system impact study, if required, shall be completed and the results transmitted to interconnection member-consumer within 60 business days after this Agreement is signed by the Parties or the complete study deposit is received by the Cooperative, whichever occurs later. If the interconnection member-consumer's study request involves more than one point of interconnection and configuration, the time to complete the interconnection system impact study may be extended by the Cooperative.
- 8. Study fees shall be based on actual costs and shall be invoiced to interconnection member-consumer after the study is transmitted to interconnection member-consumer. The invoice shall include an itemized listing of employee time and costs expended on the study.
- 9. Interconnection member-consumer shall pay any study costs that exceed the deposit within 30 calendar days after receipt of the invoice. Cooperative shall refund any excess deposit amount within 30 calendar days of the invoice.

In witness thereof, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of intercon	nection member-consumer]
Signed:	

Allamakee-Clayton Electric Cooperative, Inc. Electric Tariff - Filed with Iowa Utilities Board

Section 25 COGENERATION AND SMALL POWER PRO	DUCTION	Effective Date: June 15, 2016
Name (Printed):	_ Title:	
Allamakee, Clayton Electric Cooperative, Inc.		
Signed:Name (Printed):	_ Title:	

ATTACHMENT A Interconnection System Impact Study Agreement

Assumptions Used in Conducting the Interconnection System Impact Study

The interconnection system impact study shall be based upon the results of the interconnection feasibility study, subject to any modifications, and the following assumptions:

Point of interconnection and configuration to be studied.
Alternative points of interconnection and configurations to be studied.
Note: 1 and 2 are to be completed by the interconnection member-consumer. Any additional assumptions (explained below) may be provided by either the interconnection member-consumer or the Cooperative.

Appendix H – Standard interconnection facilities study agreement

INTERCONNECTION FACILITIES STUDY AGREEMENT

This agreement ("Agreement") is made and entered in	•
by and between("	'interconnection member-
consumer"), as an individual person, or as a	organized and
existing under the laws of the State of	
Electric Cooperative, Inc., ("Cooperative"), a cooperative	
laws of the State of Iowa. Interconnection member-cor	
may be referred to as a "Party," or collectively as the "	• • • • • • • • • • • • • • • • • • •
Recitals:	
Whereas, interconnection member-consumer is propose	•
generation facility or modifying an existing distributed of	
the interconnection request application form completed	d by interconnection member-
consumer on; and	
Whereas, interconnection member-consumer desires t	to interconnect the distributed
generation facility with Cooperative's electric distribution	on system; and

Whereas, Cooperative has completed an interconnection system impact study and provided the results of said study to interconnection member-consumer; and

Whereas, interconnection member-consumer has requested Cooperative to perform an interconnection facilities study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to interconnect the distributed generation facility;

Now, therefore, in consideration of and subject to the mutual covenants contained in this Agreement, the Parties agree as follows:

- 1. All terms defined in Iowa Utilities Board Chapter 45 rules on Electric Interconnection of Distributed Generation Facilities (199 IAC 45.1) shall have the meanings indicated in that rule when used in this Agreement, except as otherwise specified. 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.
- 2. Interconnection member-consumer elects and Cooperative shall cause to be performed an interconnection facilities study.
- 3. The scope of the interconnection facilities study shall be determined by the information provided in Attachment A to this Agreement.

- 4. An interconnection facilities study report (1) shall provide a description, estimated cost of distribution upgrades, and a schedule for required facilities to interconnect the distributed generation facility to Cooperative's electric distribution system; and (2) shall address all issues identified in the interconnection system impact study (or identified in this study if the system impact study is combined herein).
- 5. Interconnection member-consumer shall provide a study deposit of 100% of the estimated nonbinding study costs at least 20 business days prior to the date upon which the study commences.
- 6. In cases where no distribution upgrades are required, the interconnection facilities study shall be completed and the results shall be transmitted to interconnection member-consumer within 20 business days after this Agreement is signed by the Parties. In cases where distribution upgrades are required, the interconnection facilities study shall be completed and the results shall be transmitted to interconnection member-consumer within 45 business days after this Agreement is signed by the Parties or the complete study deposit is received by the Cooperative, whichever occurs later.
- 7. Study fees shall be based on actual costs and will be invoiced to interconnection member-consumer after the study is transmitted to interconnection member-consumer. The invoice shall include an itemized listing of employee time and costs expended on the study.
- 8. Interconnection member-consumer shall pay any actual study costs that exceed the deposit within 30 calendar days on receipt of the invoice. Cooperative shall refund any excess deposit amount within 30 calendar days after the invoice.

In witness whereof, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of interconnection member-cons	umer]	
Signed:		_
Name (Printed):	Title:	
Allamakee-Clayton Electric Cooperative, Inc.		
Signed:		_
Name (Printed):	Title:	

ATTACHMENT A Interconnection Facilities Study Agreement

Minimum Information that the Interconnection Customer Must Provide with the Interconnection Facilities Study Agreement

Provide location plan and simplified one-line diagram of the distributed generation facilities.

For staged projects, please indicate size and location of planned additional future generation.

On the one-line diagram, indicate the generation capacity attached at each metering location. (Maximum load on CT/PT).

On the one-line diagram, indicate the location of auxiliary power. (Minimum load on CT/PT) Amps.

One set of metering is required for each generation connection to the Cooperative's electric distribution system.

Number of generation connections:
Will an alternate source of auxiliary power be available during CT/PT maintenance? Yes No
Will a transfer bus on the generation side of the metering require that each meter set be designed for the total distributed generation capacity? Yes No (Please indicate on the one-line diagram).
What type of control system or PLC will be located at the distributed generation facility?
What protocol does the control system or PLC use?
Please provide a scale drawing of the site. Indicate the point of interconnection, distribution line, and property lines.
Number of third-party easements required for Cooperative's interconnection facilities:

To be Completed in Coordination with the Cooperative

Section 25 COGENERATION AND SMALL POWER PRODUCTION

Effective Date: June 15, 2016

Is the distributed generation facility located in Cooperative's service area? YesNo
If No, please provide name of local provider:
Please provide the following proposed schedule dates:
Begin construction date:
Generator step-up transformers receive back feed power date:
Commissioning testing date:
Witness testing date:
Commercial operation date: