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		Version #:	E&O.350.2008.3
<b>E&amp;O 350 Procedure</b>		Effective Date:	5/1/2009
		Internal Compliance:	Energy and Members Services
		External Applicability:	Membership/PURPA QF
		Distribution Restriction:	None

## 1. Objective

- a. To establish Cooperative interconnection with Net Metering, small power producers, and co-generators less than 200 kW nameplate generation capacity. Installations larger than 200 kW nameplate, while having to meet the general requirements of this procedure, shall require a separate contract negotiated on a case by case basis.
- b. The Cooperative recognizes that its members may want to take advantage of alternative on-site generation sources. The Cooperative's intent is to outline the means and requirements for interconnection of this generation with the Cooperative's distribution system under terms and conditions that do not adversely affect other members economically and qualitatively. While this procedure primarily assesses interconnection options, it is recognized that a member may generate without interconnecting to the Cooperative distribution systems.
- c. **When a member desires to generate electricity and interconnect to the Cooperative's grid, they have the following options:**
  1. **Net Metering (Less than 10 kW nameplate)**
  2. **QF Interconnection – Output Purchased by the Cooperative**
  3. **Non-QF Interconnection – Output Wheeled by the Cooperative**
  4. **Non-QF Interconnection – Output Purchased by the Cooperative.**

Member/Generator Application Requirements								
Size	Interconnected with Co-op	Power Export	Application Part 1	Application Part 2	Interconnection Agreement Short Form	Interconnection Agreement Long Form	Board Letter Request	Wheeling Agreement
Less than 10KW	No	No						
	Yes	No	X		X			
	Yes	Yes	X		X			
11 to 199 KW	No	No						
	Yes	No	X	X		X	X	
	Yes	Yes	X	X		X	X	
Over 200 KW	No	No						
	Yes	No	X	X		X	X	
	Yes	Yes	X	X		X	X	
Sell Off Co-op Distribution System						X	X	X


## 2. General Procedure

### a. Safety

- i. Safety of Cooperative personnel and protecting existing members from undesirable system operation is paramount. It will be the responsibility of the member to provide appropriate disconnects and protective devices to prevent inadvertent energizing of the distribution system during outages. Depending on the size of the generator, the equipment shall also prevent unacceptable levels of voltage, frequency, power factor, short circuit current, harmonics or any other condition, that could be detrimental to the operation of the distribution system.

### b. Definitions

- i. **Avoided Cost** is the incremental cost to the Cooperative of electric energy or capacity which, but for the purchase from the QF, the Cooperative would

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generate itself or purchase from another source meeting the PURPA requirements of 18 CFR 292 and approved by the Board of Trustees.


- ii. **Net Metering** is the interconnection of member-owned generation from a renewable source to the Cooperative's distribution system, in which the generation output over and above that consumed at the service location is netted against the energy provided by the Cooperative.
- iii. **Qualifying Facility (QF)** is specifically defined by Federal Energy Regulatory Commission (FERC) under the Public Utilities Regulatory Policies Act (PURPA) as generation utilizing a renewable source or from cogeneration when energy that would otherwise be wasted is harnessed to generate electricity (See 18 CFR 131, 292, and FERC Form No. 556, Certification of qualifying facility status for an existing or a proposed small power production or cogeneration facility).
- iv. **Transmission Owner/Transmission Operator (TO/TOP)** is the control area once power is transmitted off the Cooperative's distribution system. In Northwest Montana, this is the Bonneville Power Administration (BPA). For South-Central Montana, this is PacifiCorp-Wyoming and or Western Area Power Administration-Rocky Mountain Region.

**c. Applicability**


- i. Membership.
- ii. All Personnel.
- iii. Director of Engineering.
- iv. Director of Energy and Member Services

**d. Net Metering (Up to 10 kW nameplate)**

- i. Net Metering is available within the following guidelines:
  1. The Cooperative will not purchase energy produced by the member.
  2. Name-plate generating capacity shall not exceed 10 kW.
  3. Generation source must be renewable including but not limited to wind, solar, geothermal, hydro or fuel cells. Uses as its fuel renewable resources; defined to be solar, wind, hydropower, biomass or another alternative generation system pre-approved by the Cooperative.
  4. Generation is located on the member's premises, connected at a single service location, intended primarily to offset part or all of the member-generator's requirements for electricity.
  5. Net Metering members will be subject to all other terms of the applicable rate schedules including payment of monthly basic charges even if no energy is billed. Charges for energy delivered by the Cooperative net of the energy produced by the member's generator shall be billed monthly at the appropriate retail rate.
  6. Member generation in excess of monthly usage will be allowed to accrue into future periods for the current member at the service location. Accumulated energy credits expire at termination of service or transfer of service to another member without any compensation to the current member. Credit for energy may only be taken as per kWh credit against member's monthly billed energy usage.

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7. Operates in parallel with the Cooperative distribution system.
  8. A standard non-detent meter may be allowed to turn the direction the power flows. All costs above standard metering for the applicable member rate class will be borne by the member including, but not limited to, modifications to an existing meter base and wires and addition of a second meter and base if required.
  9. Member must complete the ***Flathead Electric Cooperative Application for Operation of Member-Owned Generation Part 1 (Appendix B)*** and sign an ***Interconnection and Parallel Operation of Distributed Generation Short Form Contract (Appendix C)*** with the Cooperative that outlines specific terms, agreements and issues such as safety, insurance, responsibilities, charges, power quality and other pertinent issues.
  10. Subject to case by case approval of the Board of Trustees, Net Metering may be considered for renewable projects between 11 kW nameplate up to 199 KW nameplate. Member must complete the ***Flathead Electric Cooperative Application for Operation of Member-Owned Generation Parts 1 & 2 (Appendix B)*** and sign an ***Interconnection and Parallel Operation of Distributed Generation Long Form Contract (Appendix D)*** and include a cover letter detailed their request for Board of Trustees consideration.
- e. **QF Interconnection – Output purchased by the Cooperative (Greater than 10 kW)**
- i. The Cooperative will purchase power produced by member owned generation under the following guidelines:
    1. The generation must meet the definition of QF and the generation must have obtained certification from FERC as a QF. Member is responsible for all costs of obtaining QF certification with FERC.
    2. The generation may be stand-alone or may provide all or part of the member's own electrical requirements at the point of service.
    3. Name-plate generating shall exceed 10 kW.
    4. Metering is required that is appropriate to measure power flow in both directions and is capable of meeting requirements established by an engineering study.
    5. Charges for power delivered by the Cooperative shall be billed monthly at the appropriate retail rate.
    6. Power sold to the Cooperative by the member may be purchased at the Cooperative's Avoided Cost as approved by the Board of Trustees. A separate power purchase agreement is required.
    7. An advance payment by the member for engineering studies may be required, at the discretion of the Cooperative. Any engineering studies completed for the project must be accepted by the Cooperative prior to interconnection.
    8. The member will be required to pay all costs incurred by the Cooperative prior to interconnection for upgrades to the Cooperative's system.

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9. Member must complete the ***Flathead Electric Cooperative Application for Operation of Member-Owned Generation Parts 1 & 2 (Appendix B)*** and sign an ***Interconnection and Parallel Operation of Distributed Generation Long Form Contract (Appendix D)*** and include a cover letter detailing their request for Board of Trustees consideration.
10. Installations larger than 200 kW nameplate shall be dealt with on a case by case basis, require a separate contract(s), and are subject to individual approval of the Board of Trustees. At a minimum, a potential generator should complete the ***Flathead Electric Cooperative Application for Operation of Member-Owned Generation Parts 1 & 2 (Appendix B)*** and sign an ***Interconnection and Parallel Operation of Distributed Generation Long Form Contract (Appendix D)***. In addition, a potential generator shall include a cover letter detailing the request for Board of Trustees consideration and should be prepared to provide the Board of Trustees with the following information for consideration of a project.
  - i. Project Overview
  - ii. Power Purchase Agreement Terms and Pricing
  - iii. Facility Output Characteristics
  - iv. Project Fuel Supply
  - v. Project Operation and Maintenance
  - vi. Project Financing
  - vii. Project Timing
  - viii. Other information as needed for the Board to make an informed decision.

**f. Non-QF Interconnection – Output wheeled to TO/TOP.**

- i. The Cooperative will wheel power produced by member owned generation across the Cooperative's system to the TO/TOP's Transmission system under the following guidelines:
  1. The power generated by the member is not purchased by the Cooperative or any member connected to the Cooperative's distribution system.
  2. TO/TOPs generally require scheduled deliveries in 1000 kW increments.
  3. Metering shall be required that is capable of measuring flow in both directions, with energy and capacity (demand) measured consistent with the requirements of the affected systems.
  4. The member will be required to obtain capacity (demand) rights from all TO/TOP Transmission systems affected and is directly responsible for payment of associated charges.
  5. Charges for power delivered by the Cooperative shall be billed monthly at the appropriate rate. Monthly facilities charges will be assessed for distribution and transmission services. A Transmission and Distribution Facilities Use Agreement (Wheeling Agreement) may be required. Charges from the Cooperative to the member for wheeling shall be based on pro forma tariffs including a rate of return and payment of those charges, line losses, and shall be the member's responsibility.

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6. Payment for energy delivered by the member's generator through the Cooperative's system is not the responsibility of the Cooperative.
7. The member will be required to enter into a ***Transmission and Distribution Facilities Use Agreement (Wheeling Agreement, Appendix E)*** and complete ***Interconnection and Parallel Operation of Distributed Generation Long Form Contract (Appendix D)***. Any interconnection agreement will be consistent with the Cooperative's wholesale power contracts and policies.
8. The Cooperative shall not be held responsible for damages in the event the Cooperative is unable to perform wheeling.
9. Member is responsible for arranging and paying all costs associated with obtaining transmission service from the point-of-delivery at the BATO's Transmission System to its final point of delivery.

**g. Non-QF Interconnection – Output purchased by the Cooperative**

- i. The Cooperative will consider purchasing competitively-priced power produced by member owned generation on a case by case basis, require a separate contract(s), and are subject to individual approval of the Board of Trustees. At a minimum, a potential generator should complete the ***Flathead Electric Cooperative Application for Operation of Member-Owned Generation Parts 1 & 2 (Appendix B)*** and sign an ***Interconnection and Parallel Operation of Distributed Generation Long Form Contract (Appendix D)***. In addition, a potential generator shall include a cover letter detailing the request for Board of Trustees consideration and should be prepared to provide the Board of Trustees with the following information for consideration of a project.
  - i. Project Overview
  - ii. Power Purchase Agreement Terms and Pricing
  - iii. Facility Output Characteristics
  - iv. Project Fuel Supply
  - v. Project Operation and Maintenance
  - vi. Project Financing
  - vii. Project Timing
  - viii. Other information as needed for the Board to make an informed decision.

**h. EMERGENCY OR STANDBY GENERATORS:**

- i. It is recognized that members may wish to install emergency or standby generators for those times there is a prolonged outage on the Cooperative system. The output from these installations will not be considered for the purposes of Net Metering, purchase or wheeling.
- ii. Permanent or portable generators shall not be connected through wiring internal to the member's home, business or any other structure that the Cooperative provides electrical service to, unless the connection is made through a permanently installed transfer switch. The transfer switch shall be designed and installed so that the generator cannot be connected to the Cooperative's system in any mode of operation. When the switch is in the position that disconnects the

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Cooperative's service, it must have a visible opening and be lockable in that position. Compliance with these provisions is necessary to prevent serious or possibly fatal accidents to Cooperative personnel as well as the public.

- iii. All transfer switches and/or transfer operating schemes must meet applicable building and electrical codes and be inspected by the appropriate governmental electrical inspector. The Cooperative will require that an inspection be made by Cooperative personnel prior to operation of the member's generator.

**i. Internal Reporting**


- i. Energy and Member Services shall maintain an internal list of member generation facilities. Energy and Member Services shall be responsible for the administration of this procedure.
- ii. Energy and Member Services shall collect and store internal data on all such facilities for reporting to external entities such as BPA.

**j. External Reporting**

- i. Energy and Member Services shall be responsible for reporting to BPA any information required.
- ii. Data on facilities greater than 200 KW within BPA's control area must be provided to BPA as requested.

**k. Document Retention**

- i. Energy Services Administrative Assistant shall maintain documents and records of member generation interconnection as specified in GM-610 Procedure re Document Retention.

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### 3. Review and Update Responsibility and Cycle

#### a. Procedure Review & Acknowledgement


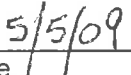
Review Responsibility: Director of Engineering  
 Director of Energy and Member Services  
 Director of Regulatory Affairs

Review Cycle: Annually

Review Procedure:

1. Confirm Procedure
2. Make sure contracts are up to date.
3. Confirm annual review and report to Internal Compliance Committee.
4. Annual Review Acknowledgement: Appendix A

#### b. Procedure Approvals

<b>MEMBER GENERATION INTERCONNECTION - <u>Approval</u></b>	
 <hr style="border: 0; border-top: 1px solid black;"/> General Manager	<div style="text-align: center;">   <hr style="border: 0; border-top: 1px solid black;"/>         Date       </div>

#### c. Procedure Revision History

Effective Date	Version #	Revised By	Revision History
April 28, 2004	1.0		Approved
July 28, 2004	2.0		Amended
May 1, 200 <del>5</del> <sup>9</sup>	3.0	Staff	Amended