# **Your Friendly and Caring Member Cooperative**

# Consumer Guidelines for Electric Power Generator Installation and Interconnection

Your electric cooperative seeks to provide its members and patrons with the best electric service possible, and at the lowest cost consistent with sound economy and good management. In some cases, cooperative members and patrons may become interested in installing their own electric power generation equipment. In these cases, we stand ready to work with you to ensure that your generation equipment is installed in a proper and safe manner, and in accordance with all applicable codes, standards, regulations, laws, and insurance requirements. In most of these cases, you will also need to coordinate the installation and approval of your electric power generator with the local code inspection authority. Your cooperative engineers and customer service representatives can also help you identify the appropriate contact for this purpose.

Table 1 summarizes the documents required from a customer who is installing distributed generation.

**Table 1. Documents Required When Installing Distributed Generation** 

Distributed Generation Information				Information Required from Consumer				
Size	Interconnected with Cooperative? 1	Inverter Based?	Power Export?	10kW Inverter- Based Process	Application Part 1	Application Part 2	Contract Agreement Short	Contract Agreement Long
Less than 10 kW	No	-	No					
	Yes	-	No		Х		х	
		No	Yes		х		х	
		Yes	Yes	х				
10 - 30 kW	No	-	No		Х			
	Yes	-	No		х			х
		-	Yes		х	х		х
More than 30 kW	No	-	No		х	х		
	Yes	-	No		х	х		х
		-	Yes		х	х		х

<sup>&</sup>lt;sup>1</sup> Interconnected with the Cooperative means that the generation will be electrically connected to the Cooperative system. Backup generation that uses an automatic transfer switch is not interconnected with the Cooperative.

In lieu of Table 1, a customer can use the following flow charts to determine the required information.

Figure 1. Information Required When Installing Less than 10 kW

# LESS THAN 10 KW NO Interconnected with No Information Required to be submitted the Co-op? YES YES Inverter Based? "10 KW Inverter Process" NO **Application Documents: Application Part 1** Contract Documents:

**Short Form Contract** 

Figure 2. Information Required When Installing 10-30 kW

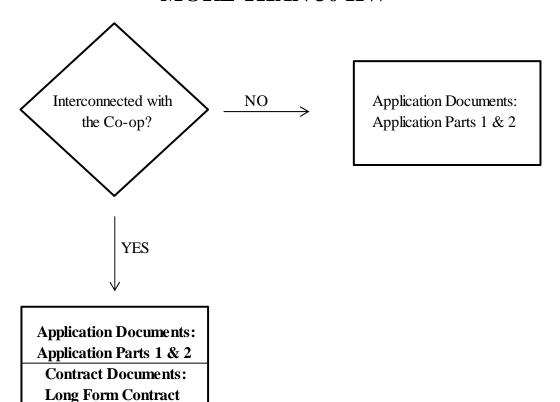
Application Documents: Application Parts 1 & 2 Contract Documents: Long Form Contract

# Interconnected with the Co-op? NO Application Part 1 is all that is needed YES Application Part 1 Long Form Contract

## 10 THROUGH 30 KW

Figure 3. Information Required When Installing More than 30 kW

# **MORE THAN 30 KW**



The remainder of these guidelines detail specific information required for different sizes and applications of customer-owned distributed generation.

### **Special Accelerated Application Process for Small Generators**

If you are planning to install photovoltaic (PV) or other generation of less than 10 kilowatts (kW) in a home residence or farm, we have established a special streamlined process to make it easy for you to complete the installation.

### Inverter-Based

If your generator utilizes an inverter, the "10 kW Inverter Process" packet includes everything required, from the initial application to the final contract. No other documents or information are required.

### Not to Be Interconnected

If your small generator is not to be interconnected with the electric power system, all you need to do is give us a call and provide us with the electrical capacity, manufacturer, and name of your electrical installer. We may ask you to send us a copy of your manufacturer information. No formal application or fee is required.

### To Be Interconnected

If you are planning to interconnect your generator with the cooperative's electric power distribution system, you need to complete Part 1 of the attached application and submit it to us. A minimal application fee also is required (see Fee Schedule attached). You also need to sign our streamlined contract form (copy of Short-Form Contract Agreement attached).

# Generators Not Interconnected with the Cooperative Distribution System

You may be planning to install a generator for isolated operation, with no connection to the cooperative distribution system. Find your specific situation below.

# Generator Installation (10–30 kW and not interconnected with the cooperative distribution system)

If you are considering installation of an emergency generator from 10–30 kW, typically running on gasoline or diesel fuel oil, you probably are not planning to interconnect your generator with the cooperative's electric power distribution system. It is important that your installation is safe for you, our other customers, and our utility workers. It also should not interfere with the co-op's reliable supply of electric power to your residence or other facility. To accomplish this, care must be taken to install your generator so that it will either (1) start up only to serve your entire load when you have disconnected from the electric power grid, or (2) you are serving only isolated loads when there is a choice of power supply (the cooperative system or your emergency generator). You are required to complete Part 1 of the attached application to notify us of your plans. A small application fee is required. You should also let us know once your generator is up and running.

# Generator Installation (greater than 30 kW and not interconnected with the cooperative distribution system)

Installation of larger generators within a customer facility has the potential to impact distribution system operations. If you are planning to install a large generator, you must complete Parts 1 and 2 of the attached application and submit it to us so we are aware of your plans. There is a fee associated with this application (see Fee Schedule attached). We will review your plans to ensure that your installation is not interconnected and make certain to the greatest extent possible that your installation will not endanger safety or reliability on the cooperative's electrical distribution system. We want to make sure that your installation will not place our utility workers in any danger of electric shock. We will report back to you with our findings within 12 business days of your application.

# **Generators Interconnected with the Cooperative Distribution System**

When installing a generator and planning to interconnect with the distribution system, we must review your plans to ensure that personnel safety and system reliability will not be compromised.

### [TO BE CUSTOMIZED BY COOPERATIVE, AS APPROPRIATE]

If you are interested in selling some or all of the power that you generate, (1) we have/do not have one or more programs in place for the purchase of power from consumers, and/or (2) we are/are not willing to wheel excess power for you.

# Generator Installation and Interconnection with the Cooperative Distribution System (all generators)

Customers may wish to install a new generator and interconnect it with the cooperative electric distribution system. In such cases, you need to complete the attached application form and pay the application fee. If your proposed generator installation is 30,000 watts or less and no power will be exported, you only need to complete Part 1 of the application. If your generator installation is more than 30,000 watts, you must complete Parts 1 and 2. If you are interconnected with the cooperative, you also need to complete the Long-Form Contract Agreement. A check made out to the cooperative in the amount of the proper fee must accompany the application. An application fee schedule is attached. Submit your application to your electric cooperative representative as indicated below.

Once we receive your application, we will review your proposed generator installation. If we approve your application, we will let you know if there are special steps you need to take during the generator installation process. We may request additional information regarding your planned installation. We will also ask you to sign a contract in which you agree to operate your generator safely, maintain the unit properly, and maintain insurance as needed. We will furnish you with an advance copy of the contract upon request.

You can give us a call at any time during this review process to find out the status of your application. If your application is not approved, we will explain the reason and be available to discuss your plans.

As part of our application review process, we will examine the ability of the cooperative's electric distribution system to accept your new power generation unit. On certain parts of our system, we may need to replace existing equipment or add some new equipment to accommodate customer generation. Your cooperative then will incur costs beyond what are normally required to operate and maintain the system to benefit all of our members. To be fair to all members, you will need to pay for any necessary system upgrades. If this is the case for your planned generator installation, we will advise you of the additional cost and seek your agreement before approving your application. You also

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<sup>&</sup>lt;sup>1</sup> If you are planning power export, you must complete Parts 1 and 2 of the application.

will be asked to sign a system upgrade contract that obligates you to reimburse us for the additional expense incurred on your behalf.

Submit your applicati	on to your electric cooperative	representative as follows:
Title:		<u></u>
Address:		
Phone:		
Fax:		
e-mail:		