



Interconnection Policies, Standards and Procedures for Distribution Connected Generating Resources

In this article we will explore the following questions:

- What is interconnection?
- What are the requirements for interconnection?
- What should a good Interconnection Policy do?
- What does your cooperative need?
- What do the regulators/government expect?

Background

The numbers of consumers that are expressing an interest to interconnect generation sources with the distribution system are becoming more numerous each month. Marketing of generation options to end consumers has dramatically intensified over the last year, generally increasing public and consumer awareness, and raising expectations of revenues, cost savings, and environmental stewardship. Accordingly, interests in connecting a generator to the cooperative's distribution system have increased and are continuing to grow.

**PREDICTABLE,
TRANSPARENT &
REASONABLE
INTERCONNECTION
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BECOME CRITICAL**

In many cases the process, technical details and costs of interconnecting with the electric system aren't readily available to consumers or developers. Some have committed to projects only to be surprised that it wasn't as easy or as inexpensive as they imagined (or were led to believe) to connect their generator to the electric system.

Too often this has placed the distribution company in a defensive position, and has led to accusations that the utility is purposely blocking the consumer's effort to interconnect. Predictable, transparent and reasonable interconnection processes and standards become critical in preventing this from occurring.

The Basics

Interconnection (as opposed to connection) implies that there is a supply of power other than that provided by the primary source of the distribution feeder. Connecting a consumer to the system is relatively straightforward, while the interconnection of a generator may require that special protective systems and metering be employed to protect the distribution system and properly account for the additional source of supply.

In addition, for those distribution cooperatives (or their G&Ts) considering DG as a supplement to their future power supply options, consumers and developers need the ability to accurately budget both time and money for the interconnection process, including any required studies, and need clear standards detailing any necessary protective equipment and metering

Interconnection Policy

First and foremost, an Interconnection Policy needs to be a formal, written document that is publicly available. To be complete the Policy needs to address safety, reliability and rates, and set out the process by which an interconnection application can be made. The Policy should be approved by the cooperative's board of directors and formally adopted by management. It also needs to be consistently applied across member classes and allow for appropriate rate structures.

Consistency is a key initiative to avert problems and avoid poor public perceptions.

An Interconnection Policy needs to be concise, unambiguous and refer to the cooperative's standards and procedures for interconnection. In any case, implementing standards and procedures should accompany the development of an Interconnection Policy. The Policy, and the related standards and procedures for interconnection, (net) metering, billing, and rates also need to be conformed as these areas will inevitably interrelate when interconnection applications are processed.



Relationship to Rural Utilities Service 7 CFR Part 1730, Subpart C Interconnection of Distributed Resources (IDR)

These new RUS rules were made effective August 7, 2009, and require:

- All electric program borrowers with an approved electric program loan as of July 8, 2009 shall have an IDR Policy board approved and in effect no later than July 8, 2011.
- All other electric program borrowers that have pending applications or submit an application to the Agency for financial assistance on or after July 8, 2009 shall provide a letter of certification executed by the General Manager that the borrower meets the requirements of this subpart before such loan may be approved.

Of course, if you are not a RUS program borrower, the rules do not apply to your cooperative.

Relationship to EAct PURPA Amendments

The federal Policy states, in part:

“Each electric utility shall make available, upon request, interconnection service to any electric consumer that the electric utility serves. For purposes of this paragraph, the term ‘interconnection service’ means service to an electric consumer under which an on-site generating facility on the consumer’s premises shall be connected to the local distribution facilities. Interconnection services shall be offered based upon the standards developed by the Institute of Electrical and Electronics Engineers: IEEE Standard 1547 for Interconnecting Distributed Resources with Electric Power Systems, as they may be amended from time to time.”

There are size considerations to the federal PURPA requirements, and this may not apply directly to your cooperative.

Relationship to State Requirements

Several states have already implemented net metering or distribution interconnection requirements for variously sized generators. Among these are New York, Texas, Georgia, Florida, Wisconsin, Delaware and California. Several other states are considering implementation of requirements. In some states, the requirements do not apply to cooperatives, but where they do apply, the cooperative needs to make sure that it is in compliance with both the state and federal requirements.

It’s Good Business

Even if your cooperative is not required by RUS, PURPA or the State to develop and implement an Interconnection Policy, it makes good sense to be proactive and put one in place.

- Distributed generation is a growth area, and public interest is increasing.
- Consumer requests to interconnect are increasing across the country for residential, commercial and industrial applications.
- Not having a publicly available Interconnection Policy or developing an Interconnection Policy “on the fly” exposes the cooperative to poor public perceptions, public criticism and implementation errors and omissions.



Where EnerVision Can Help

EnerVision has considerable experience in developing and implementing Interconnections Policies, Standards and Procedures. We would be happy to discuss your specific situation as well as our qualifications, experiences, and how we might be of service to you! Please contact Charles Nash or Tom Siegrist for additional information.