

WILSON ENERGY
Wilson, North Carolina

Renewable Energy Generating System Interface Criteria

Wilson Energy (WE) supports the development of renewable resources for generation of electric power. In order to maintain current levels of safety and power quality for the general public, electric system employees and customers, certain criteria must be applied to all alternative sources of electric power.

Specific criteria applying to Renewable Energy Generating System (REGS) installations are as follows:

- ! All REGS installations must be connected to WE's electric system through a separate meter with only the REGS connected to the source side of the REGS interconnection meter. See attached installation illustration and single-line diagram.
- ! All REGS equipment must comply with the requirements of and be labeled under Underwriters Laboratories Standard 1741 "Inverters, Converters, Controllers, and Interconnection Systems Equipment for Use with Distributed Energy Resources".
- ! All REGS installations must comply with IEEE Standard 929 "IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems".
- ! All REGS must comply with IEEE Standard 1547 "IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems".
- ! All REGS must comply with IEEE Standard 1547.1 "IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems".
- ! All REGS installations shall be made in accordance with the National Electrical Code (NFPA 70). Specific compliance with Article 690 and Article 705 is required. Installations shall be inspected and approved by the local Authority having jurisdiction.
- ! All REGS installations shall have a service disconnect installed immediately adjacent to the meter for the REGS. The service disconnect shall be fully accessible to and operable by WE's personnel at all times. The service disconnect shall include provisions for locking in the open position. The service disconnect shall be labeled in accordance with NEC 705.10.
- ! All REGS installations are subject to review and testing by WE prior to connection and at subsequent times of their choosing.
- ! All interconnected REGS shall be non-islanding. Systems found to produce voltage when disconnected from the electric distribution system will be disconnected without notice and will remain disconnected until installations are brought into compliance with specified standards.

- ! REGS shall not interfere with the power quality of any customer of WE's distribution system. REGS found to interfere with utility industry-accepted power quality standards will be disconnected from the system.
- ! WE will design and install reasonable and practical modifications to the electric distribution system to allow the interconnection of REGS resources which would otherwise interfere with power quality delivered to other connections. In such cases, the REGS owner shall make an advance payment to WE in an amount equal to the cost of the required facility modifications.
- ! All REGS shall operate within the range of 0.90 lead to 0.90 lag power factor.
- ! Residential REGS shall be limited to 20 kW maximum ac output. Non-residential REGS shall be limited to 100 kW maximum ac output. Special provision may be negotiated for larger REGS installations on an independent connection basis. REGS larger than 100 kW maximum ac output capacity may require special review, additional testing and special interconnection facilities.
- ! Owners of REGS shall obtain and retain in effect, for as long as the REGS is interconnected with the Company's system, liability insurance which protects the insured from claims for bodily injury and/or property damage. For a non-residential system the minimum coverage shall be comprehensive general liability insurance with coverage at least \$300,000 per occurrence and for a residential system the minimum coverage shall be standard homeowner's insurance policy with liability coverage in the amount of at least \$100,000 per occurrence. This insurance shall be primary for all purposes. The owner shall provide certificates evidencing this coverage as required by Wilson Energy initially and annually thereafter. Wilson Energy reserves the right to refuse to establish, or continue the interconnection of the REGS system with the Company's system if such insurance is not in effect.

The rules and references cited above represent the state of REGS technology in February 2007. Information available subsequent to this writing may result in changes by WE in order to protect the safety of the public and WE's employees; as well as to maintain appropriate levels of power quality for all electric customers.

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