

BC&E

Bio-Mass Conversation & Energy

Exempt from Certain Regulations and Compliance Requirements

Title 18: Conservation of Power and Water Resources

**PART 292—REGULATIONS UNDER SECTIONS 201 AND 210 OF THE PUBLIC UTILITY
REGULATORY POLICIES ACT OF 1978 WITH REGARD TO SMALL POWER
PRODUCTION AND COGENERATION**

Subpart A—General Provisions

§292.101 Definitions.

(a) *General rule.* Terms defined in the Public Utility Regulatory Policies Act of 1978 (PURPA) shall have the same meaning for purposes of this part as they have under PURPA, unless further defined in this part.

(b) *Definitions.* The following definitions apply for purposes of this part.

(1) *Qualifying facility* means a cogeneration facility or a small power production facility that is a qualifying facility under Subpart B of this part.

(i) A qualifying facility may include transmission lines and other equipment used for interconnection purposes (including transformers and switchyard equipment), if:

(A) Such lines and equipment are used to supply power output to directly and indirectly interconnected electric utilities, and to end users, including thermal hosts, in accordance with state law; or

§292.202 Definitions.

For purposes of this subpart:

- (a) *Biomass* means any organic material not derived from fossil fuels;
- (b) *Waste* means an energy input that is listed below in this subsection, or any energy input that has little or no current commercial value and exists in the absence of the qualifying facility industry. Should a waste energy input acquire commercial value after a facility is qualified by way of Commission certification pursuant to §292.207(b), or selfcertification pursuant to §292.207(a), the facility will not lose its qualifying status for that reason. *Waste* includes, but is not limited to, the following materials that the Commission previously has approved as waste:
 - (9) Materials that a government agency has certified for disposal by combustion;

§292.204 Criteria for qualifying small power production facilities.

(a) *Size of the facility*—(1) *Maximum size*. Except as provided in paragraph (a)(4) of this section, the power production capacity of a facility for which qualification is sought, together with the power production capacity of any other small power production qualifying facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts.

§292.602 Exemption to qualifying facilities from the Public Utility Holding Company Act of 2005 and certain State laws and regulations.

(a) *Applicability.* This section applies to any qualifying facility described in §292.601(a), and to any qualifying small power production facility with a power production capacity over 30 megawatts if such facility produces electric energy solely by the use of biomass as a primary energy source.

§292.601 Exemption to qualifying facilities from the Federal Power Act.

(a) *Applicability.* This section applies to qualifying facilities, other than those described in paragraph (b) of this section. This section also applies to qualifying facilities that meet the criteria of section 3(17)(E) of the Federal Power Act (16 U.S.C. 796(17)(E)), notwithstanding paragraph (b).

(b) *Exclusion.* This section does not apply to a qualifying small power production facility with a power production capacity which exceeds 30 megawatts, if such facility uses any primary energy source other than geothermal resources.

(c) *General rule.* Any qualifying facility described in paragraph (a) of this section shall be exempt from all sections of the Federal Power Act, except:

(1) Sections 205 and 206; however, sales of energy or capacity made by qualifying facilities 20 MW or smaller, or made pursuant to a contract executed on or before March 17, 2006 or made pursuant to a state regulatory authority's implementation of section 210 the Public Utility Regulatory Policies Act of 1978, 16 U.S.C. 824a-1, shall be exempt from scrutiny under sections 205 and 206;

Glossary

Exempt Wholesale Generator

Created under the Energy Policy Act of 1992, these are independent power producers (IPP) that qualify for exemption from regulation under the Public Utility Holding Company Act of 1935 and, after its repeal under the Energy Policy Act of 2005, the Public Utility Holding Company Act of 2005 (PUHCA). EWG status is determined by the Federal Energy Regulatory Commission (FERC). EWG status is available to any IPP, regardless of size provided certain conditions are met.

To qualify as an EWG, an IPP must:

- Be exclusively engaged in the business of owning and/or operating generation facilities. To ensure that the IPP qualifies as an EWG, project developers typically establish a special purpose vehicle to own the generation facility and sell the electricity it generates.
- Sell electricity solely to wholesale customers. However, before an EWG can make wholesale sales of electricity at market rates it must obtain an authorization (a Market-Based Rate Authorization) from FERC.

Pyrolysis Conversion Calculations for Renewable Energy Produced

1 pound of Biomass or Biosolids contains 6,000 Btu
Megawatt to Btu Per Hour Conversion - 1 MW equates to 3,412,142 Btu/h

- $6,000 \text{ btu/lbs.} \times 2000 \text{ lbs.} = 12,000,000 \text{ Btu/Ton}$
- $12,000,000 \text{ Btu/Ton} \div 3,412,142 \text{ Btu/Ton (needed to make 1 MW)} = 3.51 \text{ Tons per Hours (TPH)}$
- $3.51 \text{ TPH} \times 70\% \text{ Conversion Factor} = 2.45 \text{ TPH}$
- $2.45 \text{ TPH} \times 50\% \text{ loss due to heat value loss in Conversion} = \mathbf{1.22 \text{ MW Per One Ton of Biomass Per Hour}}$
- $60 \text{ Tons of Biomass Converted per day} = 73.20 \text{ MWh}$

1 pound of Biosolids contains 7,000 Btu

$7,000 \text{ Btu/lbs.} \times 2,000 \text{ lbs.} = 14,000,000 \text{ Btu/Ton}$

$14,000,000 \text{ Btu/Ton} \div 3,412,142 \text{ Btu/h} = 4.10 \text{ Tons Per Hour}$

$4.10 \text{ TPH} \times 70\% \text{ Conversion Factor} = 2.87 \text{ TPH}$

$2.87 \text{ TPH} \times 50\% \text{ loss due to heat value loss in Conversion} = 1.43 \text{ MW per One Ton of Biosolids per Hour}$

$60 \text{ Tons of Biosolids Converted per day} = 85.80 \text{ MWh}$