

Part III - Administrative, Procedural, and Miscellaneous

Section 45.--Electricity Produced from Open-loop-Biomass

Notice 2006-88

SECTION 1. PURPOSE

This notice sets forth interim guidance, pending the issuance of regulations, regarding the tax credit under § 45 of the Internal Revenue Code for electricity produced from open-loop biomass.

SECTION 2. BACKGROUND

.01 In General. Section 710 of the American Jobs Creation Act of 2004 (P.L. 108-357) amended § 45 to add open-loop biomass to the definition of qualified energy resources and to add open-loop biomass facilities to the definition of qualified facilities. Section 1301 of the Energy Tax Incentives Act of 2005 (P.L. 109-58) added “any nonhazardous lignin waste material” to the definition of open-loop biomass and extended the deadline for placing open-loop biomass facilities in service to December 31, 2007. Section 402(b) of the Gulf Opportunity Zone Act of 2005 (P.L. 109-135) amended the definition of open-loop biomass to include “any lignin material.” As a result of these recent amendments, the Internal Revenue Service has received requests for guidance on the § 45 tax credit for electricity produced from open-loop biomass.

Section 38(a) provides for a general business tax credit that includes the amount of the current year business credit. Section 38(b)(8) provides that the amount of the current year business credit includes the renewable electricity production credit under § 45(a).

Section 45(a) provides that the renewable electricity production credit for a taxable year is 1.5 cents (adjusted for inflation) for each kilowatt hour of electricity that the taxpayer (1) produces from qualified energy resources at a qualified facility during the 10-year period beginning on the date the facility was originally placed in service, and (2) sells to an unrelated person during the taxable year.

.02 Open-Loop Biomass. (1) In General. Section 45(c)(1)(C) provides that the term qualified energy resources includes open-loop biomass.

Section 45(c)(3)(A) defines the term “open-loop biomass” to mean:

(a) any agricultural livestock (including bovine, swine, poultry, and sheep) manure and litter, including wood shavings, straw, rice hulls, and other bedding material for the disposition of manure (agricultural livestock waste nutrients); or

(b) any solid, nonhazardous, cellulosic waste material or any lignin material which is segregated from other waste materials and which is derived from--

(i) any of the following forest-related resources: mill and harvesting residues, precommercial thinnings, slash, and brush;

(ii) solid wood waste materials, including waste pallets, crates, dunnage, manufacturing and construction wood wastes, and landscape or right-of-way tree trimmings; or

(iii) agricultural sources, including orchard tree crops, vineyards, grain, legumes, sugar, and other crop by-products or residues.

(2) Exclusions. The term “open-loop biomass” does not include the following:

(a) manufacturing or construction wood waste that has been pressure treated, chemically treated, or painted;

(b) municipal solid waste as defined in § 45(c)(6);

(c) gas derived from the biodegradation of solid waste;

(d) paper products that are commonly recycled (for example, office paper, newspaper, paperboard, and cardboard);

(e) closed-loop biomass as defined in § 45(c)(2); or

(f) biomass cofired with fossil fuel in excess of the minimum amount of fossil fuel necessary for startup and flame stabilization.

.03 Qualified Open-Loop Biomass Facilities. Section 45(d)(3)(A) provides, in the case of a facility using open-loop biomass to produce electricity (an open-loop biomass facility), that a qualified facility (a qualified open-loop biomass facility) is any facility that is owned by the taxpayer and that--

(i) in the case of a facility using agricultural livestock waste nutrients, is originally placed in service after October 22, 2004, and before January 1, 2008, and has a nameplate capacity rating of not less than 150 kilowatts, or

(ii) in the case of other facility, is originally placed in service before January 1, 2008.

.04 Credit Rate. Section 45(b)(4)(A) provides that the credit rate for electricity produced at a qualified open-loop biomass facility is one-half the amount in effect under ' 45(a)(1) for the calendar year in which the electricity is sold.

.05 Credit Period. (1) Facilities placed in service after August 8, 2005. For qualified open-loop biomass facilities placed in service after August 8, 2005, § 45(b)(4)(B)(iii) provides that the 10-year credit period in § 45(a)(2)(A)(ii) applies.

(2) Facilities placed in service after October 21, 2004, and on or before August 8, 2005. For qualified open-loop biomass facilities placed in service after October 21, 2004, and on or before August 8, 2005, ' 45(b)(4)(B)(i) provides that the § 45 credit is determined by substituting the 5-year period beginning on the date the facility was originally placed in service for the 10-year credit period in ' 45(a)(2)(A)(ii).

(3) Facilities placed in service before October 22, 2004. For facilities placed in service before October 22, 2004, § 45(b)(4)(B)(ii) provides that the § 45 credit is determined by substituting the 5-year period beginning on January 1, 2005, for the 10-year credit period in ' 45(a)(2)(A)(ii).

.06 Credit Eligibility. If the owner of a qualified open-loop biomass facility is not the producer of the electricity, § 45(d)(3)(B) provides that the person

eligible for the credit allowable under ' 45(a) is the lessee or the operator of such facility.

SECTION 3. RULES RELATING TO OPEN-LOOP BIOMASS

.01 Components of Facility. (1) In general. For purposes of ' 45(d)(3), an open-loop biomass facility is a power plant consisting of all components necessary for the production of electricity from open-loop biomass (and, if applicable, other energy sources). Thus, a qualified open-loop biomass facility includes all burners and boilers (whether or not burning open-loop biomass), any handling and delivery equipment that supplies fuel directly to and is integrated with such burners and boilers, steam headers, turbines, generators, and all other depreciable property necessary to the production of electricity. The facility does not include (i) property used for the collection, processing, or storage of open-loop biomass before its use in the production of electricity, (ii) transformers or other property used in the transmission of electricity after its production, or (iii) ancillary site improvements, such as roadways and fencing, that are not necessary to the production of electricity. Each power plant that is operated as a separate integrated unit is treated as a separate facility for purposes of § 45(d)(3).

(2) Cogeneration. A facility using open-loop biomass to produce both electric energy and useful thermal energy, such as heat or steam, through the sequential use of energy (cogeneration) may be a qualified open-loop biomass facility.

(3) Addition or improvement to an existing facility. An open-loop biomass facility will not be treated as originally placed in service after October 22, 2004, if more than 20 percent of the facility's total value (the cost of the new property plus the value of the used property) is attributable to property placed in service on or before October 22, 2004. Similarly, an open-loop biomass facility will not be treated as originally placed in service after August 8, 2005, if more than 20 percent of the facility's total value (the cost of the new property plus the value of the used property) is attributable to property placed in service on or before August 8, 2005.

(4) Example. The following example illustrates the application of section 3.01 of this notice:

Example. A power plant using fossil fuel was originally placed in service before October 22, 2004. The power plant consists of a burner, a boiler, a steam header, a turbine, and a generator. After October 22, 2004, one new burner and boiler using open-loop biomass are added to the power plant. The new burner and boiler are connected to the existing steam header, turbine, and generator in the power plant. Under section 3.01(1) of this notice, the open-loop biomass facility consists of the entire power plant that is operated as a separate integrated unit and includes both the existing power plant and the new burner and boiler. The fair market value of the existing power plant on the date the new burner and boiler are placed in service exceeds 20 percent of the facility's total value (the cost of the new burner and boiler plus the value of the used property). Under section 3.01(3) of this notice, the facility will not be treated as originally placed in

service after October 22, 2004. Accordingly, ' 45(b)(4)(B)(ii) applies and the credit period for the facility is the 5-year period beginning on January 1, 2005.

.02 Cofiring. (1) In general. Electricity produced from open-loop biomass that is cofired with fuels other than fossil fuels may qualify for the ' 45 credit. Electricity produced from the other fuel may separately qualify for the ' 45 credit if the other fuel meets the definition of a qualified energy resource under ' 45(c) and the facility is placed in service during the period specified in ' 45(d) for that qualified energy resource.

(2) Cofiring with agricultural livestock waste nutrients. If open-loop biomass other than agricultural livestock waste nutrients is cofired with agricultural livestock waste nutrients at a facility placed in service on or before October 22, 2004, electricity produced from the open-loop biomass other than agricultural livestock waste nutrients may qualify for the § 45 credit because the facility is placed in service before January 1, 2008 (the generally applicable placed-in-service deadline for purposes of determining whether electricity produced from open-loop biomass qualifies for the § 45 credit). The electricity produced from agricultural livestock waste nutrients does not qualify for the § 45 credit because the facility is not placed in service after October 22, 2004, and before January 1, 2008 (the placed-in-service period for purposes of determining whether electricity produced from agricultural livestock waste nutrients qualifies for the § 45 credit).

(3) Cofiring with fossil fuel for startup and flame stabilization. Electricity produced from open-loop biomass that is cofired with fossil fuel may qualify for

the ' 45 credit, but biomass will qualify as open-loop biomass only if the amount of fossil fuel used is the minimum necessary for startup and flame stabilization. See § 45(c)(3)(A) and section 2.02(2)(f) of this notice. If open-loop biomass is cofired with the minimum amount of fossil fuel necessary for startup and flame stabilization, only the electricity produced from the open-loop biomass can qualify for the credit. The electricity produced from the fossil fuel used for startup and flame stabilization does not qualify for the credit. In addition, if biomass (other than closed-loop biomass) is cofired with fossil fuel in excess of the minimum amount of fossil fuel necessary for startup and flame stabilization, the biomass is not open-loop biomass and the electricity produced from the biomass does not qualify for the ' 45 credit.

.03 Rules Relating To Sales. (1) Simultaneous sale and purchase of electricity. If electricity produced from open-loop biomass at any location is sold by a taxpayer to an unrelated person and either the taxpayer or a related person simultaneously purchases electricity from an unrelated person for use at the same location, the sale of the electricity will be treated as a sale to an unrelated person only to the extent the amount of electricity sold exceeds the amount of electricity purchased.

(2) Sales of commingled electricity. If a taxpayer produces electricity from both open-loop biomass and other fuels and sells part or all of the electricity produced to an unrelated party, only the applicable percentage of the electricity sold to the unrelated party is treated as electricity produced from open-loop biomass. The applicable percentage for this purpose is the percentage of the

thermal content of all fuels used to produce the electricity that is thermal content from open-loop biomass. Electricity is treated as produced from both open-loop biomass and other fuels to the extent (i) open-loop biomass and other fuels are commingled during combustion, (ii) steam produced from the combustion of open-loop biomass and from the combustion of other fuels is commingled before or during the production of the electricity, and (iii) electricity produced from open-loop biomass and from other fuels is commingled before transmission to the purchaser.

(3) Examples. The following examples illustrate the application of section 3.03 of this notice:

Example 1. A qualified facility at a paper mill produces 100 kilowatt hours of electricity per day. At all times, 25 percent of the thermal content of the fuels used in the facility is from open-loop biomass and the remainder is from other fuels. The facility uses separate boilers for the combustion of the open-loop biomass and the combustion of other fuels, but the steam from both boilers is commingled during the production of electricity. The entire electric output of the facility is sold to a public utility. Each day, simultaneously with the sales, 60 kilowatt hours of electricity are purchased from a public utility to operate the facility and the paper mill. Only 40 kilowatt hours of electricity per day (100 kilowatt hours sold minus 60 kilowatt hours purchased) will be treated as sold to an unrelated party. In addition, only 10 kilowatt hours (25 percent of 40 kilowatt hours) per day of the electricity sold to the unrelated party will be treated as electricity produced from open-loop biomass.

Example 2. A qualified facility at a paper mill produces 100 kilowatt hours of electricity per day. The entire electric output of the facility is sold to a public utility. Each day, simultaneously with the sales, 120 kilowatt hours of electricity are purchased from a public utility to operate the facility and the paper mill. Because the amount of electricity sold is less than the amount of electricity simultaneously purchased, none of the electricity will be treated as sold to an unrelated party.

.04 Wood Bark And Lignin. Open-loop biomass includes wood bark and lignin material recovered from spent pulping liquors.

.05 No Rule Area. The Service will not issue private letter rulings regarding § 45 as it relates to open-loop biomass. In addition, the Service will not rule on any issues under Subchapter K for partnerships claiming the credit under § 45.

SECTION 4. EFFECTIVE DATE

The Internal Revenue Service and Treasury Department are developing regulations regarding the tax credit under § 45 of the Internal Revenue Code for electricity produced from open-loop biomass. This notice provides interim guidance on which taxpayers may rely until the regulations are issued. The Service and Treasury Department expect that the regulations will incorporate the rules set forth in this notice and will be effective for electricity produced after the date of publication of this notice in the Internal Revenue Bulletin.

SECTION 5. DRAFTING INFORMATION

The principal authors of this notice are David Selig and David McDonnell of the Office of Associate Chief Counsel (Passthroughs and Special Industries). However, other personnel from the IRS and Treasury participated in its development. For further information regarding this notice, contact Mr. Selig or Mr. McDonnell at (202) 622-3040 (not a toll-free call).