

**Internal Revenue Service**

Department of the Treasury  
Washington, DC 20224

Number: **200837028**  
Release Date: 9/12/2008

Third Party Communication: None  
Date of Communication: Not Applicable  
Person To Contact:

Index Number: 45.00-00

Telephone Number: , ID No.

Telephone Number:

Refer Reply To:  
CC:PSI:B06  
PLR-149046-07  
Date:  
June 11, 2008

**LEGEND:**

- Taxpayer =
- State =
- Location =
- Parent =
- Date =
- a =
- b =
- c =
- d =
- e =
- f =
- g =
- h =
- i =
- j =
- k =

(EIN: )

(EIN: )

Dear :

This letter responds to your request, dated , requesting private letter rulings regarding Taxpayer's qualification under section 45 of the Internal Revenue Code for a tax credit for the production and sale of electricity from a Plant that generates electricity from both municipal solid waste and open-loop biomass.

The facts as represented by Taxpayer and Taxpayer's representatives are as follows:

Taxpayer is a State limited liability company that was formed on Date as a holding company for ( ) disregarded subsidiaries (Project Companies), each of which will own a section of a power project (Plant) being developed near Location. Taxpayer is expected to have other members by the time the Plant is placed in service. Taxpayer is a disregarded subsidiary of Parent, which is treated as a partnership for federal tax purposes. Taxpayer and Parent use the accrual method of accounting.

The Plant is a a-megawatt power plant that will burn a combination of municipal solid waste (b tons per day) and open-loop biomass (construction and demolition debris) (c tons per day) to generate electricity. The fuels will be referred to collectively as waste.

First, the waste will be sorted to divert recyclable materials such as cardboard, metals, glass, plastics, and reusable paper and to remove hazardous waste such as batteries and treated wood that might release dangerous toxins if burned. The material that remains will move along a conveyor belt and be fed into the Plant. The material fed into the Plant prior to sorting is expected to be at least d percent organic by weight. The material that makes it through sorting to fuel the Plant will be e percent organic in terms of Btu content.

At the front of the Plant will be f large hollow vertical tubes, each about g feet tall and h feet in diameter. One of the tubes will be a gasification chamber and the other a combustion chamber. The waste will be fed into the gasification chamber where sand will mix the waste, causing the waste to be rapidly heated, in less than one second, to approximately i degrees Fahrenheit, turning the waste into ash and char and releasing methane, hydrogen, and some carbon monoxide. The sand and char will then enter the second tube (combustion chamber). The char, which is similar in makeup to charcoal, will be burned in the combustion chamber to heat the sand to about j degrees Fahrenheit and also to act as a further heat source for boiling water in the boiler to make steam. The sand will then be transferred into the first tube (gasification chamber), completing the cycle.

The gas produced in the gasification chamber will be separated and will move into a separate "gas conditioning" chamber where it will be cleaned to remove pollutants and then be fed into a combustion turbine to generate electricity. The exhaust from the combustion turbine will cause water to boil in a boiler, turning into steam that will be run through a steam turbine to generate more electricity. Meanwhile, the ash from the combustion chamber will ultimately be removed like it is in a coal-fired power plant and it may be used for making cement or fertilizers.

The electricity from the Plant will be sold into the State power pool. The pool dispatches generators that have signed up to supply power each half-hour based on the prices at which they have indicated they are prepared to supply electricity, starting with the lowest-cost provider that half-hour until the electricity that utilities have indicated that they want to buy that half-hour has been fully supplied.

There is a possibility that some of the electricity will be sold to an energy trading company as part of a hedging arrangement to ensure more predictable prices during the period of debt borrowed to finance the Plant will have to be repaid. Nothing will be paid

for the waste that the Plant uses as fuel. Rather, the Plant expects to be paid tipping fees of approximately \$k per ton from haulers for accepting the waste.

Taxpayer represents that the Plant will be a “qualifying small power production facility” within the meaning of section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)), as in effect on September 1, 1986. No government grants, tax-exempt financing, or “subsidized energy financing,” within the meaning of § 45(b)(3), will be used to pay or finance any portion of the capital cost of the Plant. No tax-exempt entity will own an interest in Taxpayer or Parent. The Project Companies will not lease the Plant; rather they will either operate the Plant themselves or hire a qualified third party to operate the Plant under a standard operating and maintenance agreement.

Taxpayer provided a process diagram of the proposed Plant. See diagram attached as Exhibit A. Taxpayer represents that it will not treat any building that is part of the Plant as a 5-year property under section 168 of the Internal Revenue Code.

Taxpayer requests the following rulings:

1. Assuming the Plant is placed in service by the deadline in § 45(d) to qualify for production tax credits, such credits may be claimed on the electricity generated at the Plant and sold to unrelated persons, net of any electricity supplied from the grid for use in the Plant.

2. The equipment at the Plant, as illustrated in Exhibit A, excluding the equipment in the shaded area in Exhibit A and excluding any building and any other § 1250 property, qualifies as 5-year property under § 168(e)(3)(B)(vi)(II).

3. Any termination of the Taxpayer under § 708(b)(1)(B) will not prevent the reconstituted partnership, or the sole partner if the Taxpayer turns into a disregarded entity, from continuing to rely on the rulings.

### **RULING 1**

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 a renewable electricity production credit, in an amount equal to the product of 1.5 cents, multiplied by the kilowatt hours of electricity produced by the taxpayer from qualified energy resources and at a qualified facility during the 10-year period beginning on the date the facility was originally placed in service, and sold by the taxpayer to an unrelated person during the taxable year.

Section 45(b) limits and adjusts the amount of credit available under § 45(a). Section 45(b)(1) requires a phaseout of the credit in an amount which bears the same ratio to the amount of the credit (determined without regard to this paragraph) as the amount by which the reference price for the calendar year in which the sale occurs

exceeds 8 cents, bears to 3 cents. Section 45(b)(2) requires that the credit be phased out based on the inflation adjustment factor for the calendar year in which the sale occurs. Section 45(b)(3) requires the credit amount determined under § 45(a) to be reduced by the amount of grants, tax-exempt bonds, subsidized energy financing, and other credits received by a taxpayer as of the close of the taxable year with respect to any project for any taxable year.

Section 45(b)(4) provides the credit rate and establishes the period in which electricity must be produced and sold from certain facilities. Under § 45(b)(4)(A), for a facility which burns municipal solid waste to produce electricity and sells the electricity in any calendar year after 2003, the credit amount for such calendar year (determined before the application of the credit phaseout adjustment) shall be reduced by one-half. Section 45(b)(4)(B) provides that the credit period for a facility which burns municipal solid waste to produce electricity is the 5-year period beginning on January 1, 2005, with the exception of any facility placed in service after August 8, 2005.

Section 45(c)(1) defines “qualified energy resources” to include municipal solid waste and open-loop biomass. Section 45(c)(6) states that the term “municipal solid waste” has the meaning given the term “solid waste” under § 2(27) of the Solid Waste Disposal Act (42 U.S.C. 6903). Section 45(d)(7) defines a “qualified facility,” in the case of a facility which burns municipal solid waste to produce electricity, as any facility owned by the taxpayer that is originally placed in service after October 22, 2004, and before January 1, 2009. The term “qualified facility” includes a new unit placed in service in connection with a facility placed in service on or before October 22, 2004, but only to the extent of the increased amount of electricity produced at the facility by reason of such new unit.

Although § 45 does not define “placed in service,” the term has been defined for purposes of the deduction for depreciation and the investment tax credit. For these purposes, property is considered to be placed in service in the taxable year that the property is placed in a condition or state of readiness and available for a specifically assigned function. See §§ 1.46-3(d)(1)(ii) and 1.167(a)-11(e)(1)(i) of the Income Tax Regulations.

Section 45(c)(3) defines the term “open-loop biomass” to mean: (i) any agricultural livestock waste nutrients, or (ii) any solid, nonhazardous, cellulosic waste material or any lignin material 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 (other than pressure-treated, chemically-treated, or painted wood wastes), and landscape or right-of-way tree trimmings, but not including municipal solid waste, gas derived from the biodegradation of solid waste, or paper which is commonly recycled, or (III) agriculture sources, including orchard tree crops, vineyard, grain, legumes, sugar, and other crop by-products or residues.

Further, § 45(d)(3)(A) requires that in the case of a facility using open-loop biomass to produce electricity, the term “qualified facility” means any facility owned by the taxpayer which (i) in the case of a facility using agricultural livestock waste nutrients, (I) is originally placed in service after October 22, 2004, and before January 1, 2009,

and (II) the nameplate capacity rating of which is not less than 150 kilowatts, and (ii) in the case of any other facility, is originally placed in service before January 1, 2009. Section 45(d)(3)(B) also provides that for facilities described in § 45(d)(3)(A), if the owner of such facility is not the producer of the electricity, the person eligible for the credit allowable under § 45 shall be the lessee or the operator of such facility.

In Notice 2006-88, 2006-42 I.R.B. 686, regarding electricity produced from open-loop biomass, the Service announced that it will not issue private letter rulings regarding § 45 as it relates to open-loop biomass. As a result, the Service will not make a determination as to the Plant's eligibility for § 45 tax credits for electricity generated from open-loop biomass used a fuel in the Plant.

In the instant case, assuming the Plant is placed in service before January 1, 2009, the Plant should qualify as a "qualified facility" that burns municipal solid waste to generate electricity. As owner of the Plant, Taxpayer may claim § 45 tax credits for electricity generated at the Plant and sold to unrelated parties, net of any electricity supplied from the grid for use in the Plant.

## **RULING 2**

Section 168(e)(3)(B)(vi)(II) provides that the term "5-year property" includes any property which is described in paragraph (15) of § 48(l) (as in effect on the day before the date of enactment of the Revenue Reconciliation Act of 1990) and is a qualifying small power production facility within the meaning of § 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)), as in effect on September 1, 1986.

Former § 48(l)(15) defines the term "biomass property." The definition incorporates by reference part of former § 48(l)(3)(A), as modified by former § 48(l)(15)(B). The following items comprise biomass property:

(a) A boiler, the primary fuel for which will be an alternate substance. Section 1.48-9(c)(3)(ii) of the Income Tax Regulations provides that a boiler is a device for producing vapor from a liquid and that boilers, in general, have a burner in which fuel is burned. Section 1.48-9(c)(3)(ii) further provides that a boiler includes a fire box, boiler tubes, the containment shell, pumps, pressure and operating controls and safety equipment, but not pollution control equipment (as defined in § 1.48-9(c)(8)).

(b) A burner (including necessary on-site equipment to bring the alternate substance to the burner) for a combustor other than a boiler if the primary fuel for such burner will be an alternate substance. Section 1.48-9(c)(4)(iii) provides that a burner includes equipment (such as, conveyors, flame control devices, and safety monitoring devices) located at the site of the burner and necessary to bring the alternate substance to the burner.

(c) Equipment for converting an alternate substance into a qualified fuel.

(d) Pollution control equipment required (by Federal, State, or local regulations) to be installed on or in connection with equipment described in paragraphs (a), (b), or (c) above.

(e) Equipment used for the unloading, transfer, storage, reclaiming from storage, and preparation (including, but not limited to, washing, crushing, drying and weighing) at the point of use of an alternate substance for use in equipment described in paragraphs (a), (b), (c), or (d) above. This equipment includes equipment used for the storage of fuel derived from garbage at the site to which such fuel was produced from garbage.

With respect to biomass, under former § 48(l)(15)(B), the term “alternate substance” means any organic substance other than oil, natural gas, coal (including lignite), or any product thereof.

Section 1.48-9(c)(3)(iii) provides that the term “primary fuel” is a fuel comprising more than 50 percent of the fuel requirement of an item of equipment, measured in terms of Btus, for the remainder of the taxable year from the date the equipment is placed in service and for each taxable year thereafter. Electricity and waste heat are not fuels.

The legislative history of the Crude Oil Windfall Profit Tax of 1990, which added former § 48(l)(15) to the Code, states that biomass property is property to convert biomass into a synthetic solid fuel, or to burn this fuel or biomass. Conf. Rep. No. 817, 96<sup>th</sup> Cong., 2d Sess. 132 (1980), 1980-3 C.B. 292. This Conference Report further states that “biomass is generally any organic substance other than oil, natural gas, or coal, or a product of oil or natural gas or coal. For this purpose, biomass includes waste, sewage, sludge, grain, wood, oceanic and terrestrial crops and crop residues and includes waste products which have a market value. The conferees also intend that the definition of biomass does not exclude waste materials such as municipal and industrial waste, which include such processed products of oil, natural gas or coal such as used in plastic containers and asphalt shingles.” Id.

In this case, the Plant is comprised of a boiler as defined in former § 48(l)(3)(A)(i) and associated equipment as defined in former § 48(l)(3)(A)(vi) and (viii). Prior to sorting, the waste contains both organic and inorganic matter. However, based on Taxpayer’s representations, the waste that makes it through sorting is the primary fuel for the Plant, will be organic matter, and comprises more than 50 percent of the fuel requirements (in terms of Btus) of the Plant. Consequently, the provisions of former § 48(l)(15)(B) and § 1.48-9(c)(3)(iii) are met. Furthermore, the waste in this case is municipal solid waste and open-loop biomass (construction and demolition debris) thereby meeting the language included in the previously mentioned Conference Report.

Thus, the equipment at the Plant (excluding the equipment in the shaded area in Exhibit A) is biomass property under former § 48(l)(15). Moreover, Taxpayer represents that the Plant will be a “qualifying small power production facility” within the meaning of § 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)), as in effect on September 1, 1986.

### **RULING 3**

Finally, in Notice 2006-88 the Service announced that it will not rule on any issues under Subchapter K for partnerships claiming the § 45 credit. For this reason,

the Service will not make a determination in response to Taxpayer's inquiry whether a termination of Taxpayer under § 708(b)(1)(B) will prevent the reconstituted partnership, or the sole partner if Taxpayer turns into a disregarded entity, from continuing to rely on the rulings.

Based solely on the facts and representations provided and the relevant law and regulations set forth above, we conclude as follows:

1. Assuming that the Plant is a "qualified facility" under § 45(d) that produces electricity from a "qualified energy resource" as defined by § 45(c), if the Plant is placed in service by the deadline provided in § 45(d) to qualify for production tax credits under § 45, such credits may be claimed on the electricity generated at the Plant and sold to unrelated persons, net of any electricity supplied from the grid for use in the Plant.

2. The equipment at the Plant, as illustrated in Exhibit A, excluding the equipment in the shaded area in Exhibit A and excluding any building and any other § 1250 property, qualifies as 5-year property under § 168(e)(3)(B)(vi)(II). This ruling is conditioned on (a) the primary fuel for the Plant comprising more than 50 percent of the fuel requirements of the items of equipment of the Plant, measured in terms of Btus, for the remainder of the taxable year from the date the equipment is placed in service and for each taxable year thereafter, and (b) the Plant being a "qualifying small power production facility" within the meaning of § 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)), as in effect on September 1, 1986.

3. Pursuant to the "no rule" position announced by Notice 2006-88, the Service will not determine whether a termination of the Taxpayer under § 708(b)(1)(B) will prevent the reconstituted partnership, or the sole partner if the Taxpayer turns into a disregarded entity, from continuing to rely on the rulings.

Except as specifically set forth above, no opinion is expressed or implied concerning the Federal income tax consequences of the above described facts under any other provision of the Code or regulations. We express no opinion as to whether § 45(b), regarding credit reductions for grants, tax-exempt bonds, subsidized energy financing, and other credits, is applicable in this case.

This ruling is directed only to the Taxpayer who requested it. Section 6110(k)(3) of the Code provides it may not be used or cited as precedent. In accordance with the power of attorney on file with this office, a copy of this letter is being sent to your authorized representatives.

Sincerely,

Peter C. Friedman  
Senior Technician Reviewer, Branch 6  
(Passthroughs & Special Industries)

cc: