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Department of the Treasury
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Person To Contact:
, ID No.

Telephone Number:

Refer Reply To:

PLR-128565-14

Date:
December 10, 2014

Legend

LEGEND

Taxpayer	=
Parent	=
Corp A	=
Corp B	=
Corp C	=
Corp D	=
Corp E	=
State	=
Facility	=
Power Plant	=
Location 1	=
Date 1	=
Date 2	=
A	=
a	=
b	=
c	=
d	=
e	=
Process	=
Process A	=
Process B	=

Dear :

This is in response to your request, submitted by your authorized representative on Date 7, to supplement ruling PLR-116599-12 dated February 20, 2013, concerning the federal income tax consequences of the transaction described below. The most salient facts are as follows:

FACTS
Taxpayer Information

Taxpayer is a State limited liability company that is a wholly owned subsidiary of Corp A. Taxpayer was formed to lease and operate the Facility. Because Taxpayer has not elected to be classified as an association taxable as a corporation for federal income tax purposes, it is disregarded as an entity separate from Corp A for such purposes. Corp A, a State corporation, is wholly owned by Parent, a State corporation that is the common parent of a consolidated group of companies whose members include Corp A. Parent uses the accrual method of accounting and has adopted the calendar year as its annual accounting period.

The Refined Coal Production Process

Taxpayer has entered into an agreement to lease the Facility from Corp B for a term ending on Date 2. Corp B is owned by Corp C. The Facility was designed and constructed by Corp C to produce a refined coal product that reduces emissions of nitrous oxide (NOx) and mercury (Hg) when burned as fuel in a coal-fired power plant.

The Facility was placed in service in Date 1, and it is currently located at the Power Plant located in Location 1, on land owned by Corp D. The Power Plant is a coal-fired and steam-producing power plant in regular commercial operation. Taxpayer has entered into a contract with Corp D for the sale of refined coal produced by the Facility to Corp D for use as feedstock in the Power Plant. The Facility can be moved and reassembled at other power plant locations.

2. The Process

The technology employed to produce refined coal in the Facility is known as the Process, a proprietary process which is designed to reduce NOx and Hg emissions in cyclone coal-fired boilers. The rights to the technology are licensed by Corp E to Corp C, and have been sublicensed from Corp C to Taxpayer for the full term of the lease of the Facility from Corp B.

The Process involves the use of two separate inorganic chemicals (Chemical Reagents) which are applied to feedstock consisting of a A coal or a combination of A coal and B coal. The first Chemical Reagent, referred to as Process A, is a solid material that mixes evenly with coal's native ash in power plant boilers and affects the melting properties of coal's native ash during combustion in power plant boilers. This allows adjustment of the air-fuel ratio in the boiler which reduces oxygen in the boiler and provides more favorable conditions for reduction of NOx emissions.

The second Chemical Reagent, referred to as Process B, is an inorganic liquid solution which reacts with the mercury in coal, resulting in changes to the chemical form of the mercury, oxidizing more of it. As a result, more of the mercury is captured with the fly-ash in the particulate control equipment, resulting in a higher degree of removal.

The Facility's equipment transports the Chemical Reagents to a coal conveyor belt, where they are applied evenly to the coal feedstock. The Chemical Reagents are combined with the coal at a rate proportional to the coal flow rate. The application of each Chemical Reagent is controlled separately by computer equipment which determines the rate of application based on the flow rate of the coal on the conveyor belt. The minimum proportion of each Chemical Reagent to be applied per ton of feedstock coal is set based on previously verified emissions test results. The amount of each Chemical Reagent applied per ton of feedstock coal may be increased above, but will not be decreased below, the per-ton amounts used to produce the refined coal used in the most recent emissions testing.

3. CEMS Field Testing

On Date 1, Corp C conducted full-scale emissions tests, using continuous emission monitoring (CEMS) field testing, at the Power Plant using 100% percent A coal feedstock, and refined coal produced in the Facility from the same coal feedstock. Since the Date 1 emissions tests, Taxpayer has conducted periodic emissions tests using CEMS field testing at the Power Plant. The emissions tests were conducted in the following manner: To establish a baseline for NOx and mercury emissions, one unit of the Power Plant was operated for a three-hour period at or above a percent of full load using A coal feedstock. The same Power Plant unit was operated for a second three-hour period under the same operating conditions (except for adjustments to primary or secondary air in accordance with good air pollution control practices), using refined coal produced in the Facility using the Process from the same coal feedstock and the Chemical Reagents, applied at a predetermined proportion.

During both the baseline tests and the tests using refined coal, NOx and mercury emissions were measured using CEMS equipment that conforms to applicable United States EPA standards. The NOx CEMS device was located upstream of the scrubber

and electrostatic precipitator. The mercury CEMS device is located in the stack downstream of Hg and NOx emission controls, which were operated under the same conditions throughout the testing period. Each CEMS field test indicated that burning refined coal produced using the Process in the boilers at the Power Plant results in a reduction of NOx emissions in excess of b percent and a reduction of mercury emissions in excess of c percent (excluding dilution caused by materials combined or added during the production process) when compared to emissions resulting from burning coal feedstock to produce the same amount of useful thermal energy. The emission reductions demonstrated in each CEMS field test have been verified by an independent licensed professional engineer experienced in combustion and environmental engineering, as required by Notice 2010-54, 2010-40 I.R.B. 403 (Notice), including verification that any post-combustion Hg controls were operated under the same conditions throughout the test period.

4. Additional Emissions Testing

Taxpayer will conduct additional emissions tests on or before the first to occur of (i) a change in the Process used to produce refined coal at the Facility, (ii) a change in the source or rank of the feedstock coal used to produce refined coal, or (iii) the expiration of six months since the most recent redetermination test. If additional testing is conducted due to a change in the Process, Taxpayer will conduct a CEMS field test or other test permitted by Section 6.03 of the Notice. Taxpayer anticipates that where there has been no change in the Process, it will ordinarily conduct redetermination testing using laboratory analysis establishing that the sulfur and mercury content of both the feedstock coal and the refined coal, on average, do not vary by more than 10 percent below the bottom (nor by more than 10 percent above the top) of the range of the sulfur content and range of the mercury content of the feedstock coal and refined coal used in the most recent Section 6.03 test period.

Taxpayer plans to use the following protocol to collect samples for laboratory analysis: During the CEMS field test, Taxpayer will collect coal samples from the moving conveyor belt during the period that refined coal for the CEMS test is being fed to the coal bunkers in the Power Plant and will collect refined coal samples from the moving conveyor belt during the same period. A minimum of d samples will be collected. Taxpayer will submit the samples to an independent laboratory, which will conduct a separate analysis of the sulfur and Hg content of each sample using standard laboratory techniques. This analysis will establish a range of sulfur content and Hg content for the coal and refined coal burned during the CEMS field test.

During each six-month redetermination period, samples of both feedstock coal and refined coal will be collected on a regular basis from a moving conveyor belt, both

before and after the Facility. Using this protocol, it is expected that during normal operation of the Facility, at least e samples of feedstock coal and at least e samples of refined coal will be collected each day. After a specified number of samples of feedstock coal and refined coal have been collected, those samples will be sent to an independent laboratory, which will combine each set of samples into a single gross sample for preparation and analysis of sulfur and Hg content. The testing results for sulfur and Hg content for the gross samples of feedstock coal and refined coal, respectively, collected during the six-month redetermination period will then be averaged. The average sulfur and mercury content of the coal and refined coal will be acceptable if it does not vary by more than 10 percent below the bottom (nor by more than 10 percent above the top) of the range of sulfur and Hg content of the samples taken during the CEMS test period.

RULING REQUESTED

Based on the foregoing, Taxpayer has requested that we rule that the redetermination requirement of Section 6.04 of the Notice may be satisfied by laboratory analysis establishing that the sulfur and mercury content of both the feedstock coal and the refined coal, on average, do not vary by more than 10 percent below the bottom, or by more than 10 percent above the top, of the range of the sulfur content and the range of mercury content of the feedstock coal and the refined coal used in the most recent test conducted in accordance with Section 6.03 of the Notice.

LAW AND ANALYSIS

Section 45(a) of the Code generally provides a credit against federal income tax for the use of renewable or alternative resources to produce electricity or fuel for the generation of steam. Section 45I(8) provides that, in the case of a producer of "refined coal," the credit available under § 45(a) for any taxable year shall be increased by an amount equal to $4.375 per ton of qualified refined coal (i) produced by the taxpayer at a "refined coal production facility" during the 10-year period beginning on the date that the facility was originally placed in service, and which is (ii) sold by the taxpayer to an unrelated person during such 10-year period and such taxable year.

For purposes of § 45, section 3.01 of the Notice provides that the term "refined coal" means a fuel which – (i) is a liquid, gaseous, or solid fuel (including feedstock coal mixed with an additive or additives) produced from coal (including lignite) or high carbon fly ash, including such fuel used as a feedstock, (ii) is sold by the taxpayer with the reasonable expectation that it will be used for the purpose of producing steam, and (iii) is certified by the taxpayer as resulting (when used in the production of steam) in a qualified emission reduction. Section 45I(7) and section 3.04 of the Notice provide that the term "qualified emission reduction" means (1) in the case of refined coal produced at a facility placed in service after December 31, 2008, a reduction of at least twenty percent (20%) of the emissions of nitrogen oxide and at least forty percent (40%) of the

emissions of either sulfur dioxide (SO2) or Hg released when burning the refined coal (excluding any dilution caused by materials combined or added during the production process), as compared to the emissions released when burning the feedstock coal or comparable coal predominantly available in the marketplace as of January 1, 2003; and (2) in the case of production at a facility placed in service before January 1, 2009, a reduction of at least 20 percent of the emissions of Nox and at least 20 percent of the emissions of either SO_2 or Hg released when burning the refined coal (excluding any dilution caused by materials combined or added during the production process), as compared to the emissions released when burning the feedstock coal or comparable coal predominantly available in the marketplace as of January 1, 2003.

Section 45(d)(8) generally provides that the term “refined coal production facility” means a facility which is placed in service after October 22, 2004 and before January 1, 2012.

Section 5.01 of the Notice provides that the refined coal credit is allowed for qualified refined coal produced and sold to an unrelated person by the taxpayer, without regard to whether the taxpayer owns the refined coal production facility in which the refined coal is produced. Accordingly, a taxpayer that leases or operates a facility owned by another person may claim the credit for refined coal that the taxpayer produces in the facility.

Section 5.02 of the Notice provides that a refined coal production facility will not be considered to have been placed in service after October 22, 2004, if more than 20 percent of the total fair market value of the facility (the cost of the new property plus the value of the used property) is attributable to property that was placed in service on or before October 22, 2004.

Section 6.01 of the Notice generally provides that a qualified emissions reduction does not include any reduction attributable to mining processes or processes that would be treated as mining (as defined in § 613I(2), (3), (4)(A), (4)(C), or (4)(I)) if performed by the mine owner or operator. Accordingly, in determining whether a qualified emission reduction has been achieved, the emissions released when burning the refined coal must be compared to the emissions that would be released when burning the feedstock coal. Feedstock coal is the product resulting from processes that are treated as mining and are actually applied by a taxpayer in any part of the taxpayer’s process of producing refined coal from coal.

Section 613I(5) describes treatment processes that are not considered as mining unless they are provided for in § 613I(4) or any necessary or incidental to a process provided for in § 613I(4). Any cleaning process, such as a process that uses ash separation, dewatering, scrubbing through a centrifugal pump, spiral concentration, gravity concentration, flotation, application of liquid hydrocarbons or alcohol to the surface of the fuel particles or to feed slurry provided such cleaning does not change the physical or chemical structure of the coal, and drying to remove free water, provided

such drying does not change the physical or chemical identity of the coal, will be considered as mining.

Section 6.03(1) of the Notice provides, in part, that emissions reduction may be determined using continuous emission monitoring system (CEMS) field testing. Section 6.03(1)(a) provides, in part, that CEMS field testing is testing that meets all the following requirements: (i) the boiler used to conduct the test is coal-fired and steam-producing and is of a size and type commonly used in commercial operations; (ii) emissions are measured using a CEMS; (iii) if EPA has promulgated a performance standard that applies at the time of the test to the pollutant emission being measured, the CEMS must conform to that standard; (iv) emissions for both the feedstock coal and the refined coal are measured at the same operating conditions and over a period of at least 3 hours during which the boiler is operating at a steady state at least 90 percent of full load; (v) a qualified individual verifies the test results in a manner that satisfies the requirements of section 6.03(1)(b).

Section 6.03(2) of the Notice provides that methods other than CEMS field testing may be used to determine the emissions reduction. If a method other than CEMS field testing is used, the Service may require the taxpayer to provide additional proof that the emission reduction has been achieved. The permissible methods include (a) testing using a demonstration pilot-scale combustion furnace if it established that the method accurately measures the emission reduction that would be achieved in a boiler described in section 6.03(a)(a)(i) and a qualified individual verifies the test results in a manner that satisfies the requirements of sections 6.031)(c)(i), (ii), (v), and (vi) of the Notice; and (b) a laboratory analysis of the feedstock coal and the refined coal that complies with a currently applicable EPA or ASTM standard and is permitted under section 6.03(2)(b)(i) or (ii) of the Notice.

Section 6.04(1) of the Notice provides that a taxpayer may establish that a qualified emission reduction determined under section 6.03 applies to production from a facility by a determination or redetermination that is valid at the time the production occurs. A determination or redetermination is valid for the period beginning on the date of the determination or redetermination and ending with the occurrence of the earliest of the following events: (i) the lapse of six months from the date of such determination or redetermination; (ii) a change in the source or rank of feedstock coal that occurs after the date of such determination; or (iii) a change in the process of producing refined coal from the feedstock coal that occurs after the date of such determination or redetermination.

Section 6.04(2) of the Notice provides that in the case of a redetermination required because of a change in the process of producing refined coal from the feedstock coal, the redetermination required under section 6.04 must use a method that meets the requirements of section 6.03. In any other case, the redetermination requirement may be satisfied by laboratory analysis establishing that – (a) the sulfur (S) or mercury (Hg) content of the amount of refined coal necessary to produce an amount

of useful energy has been reduced by at least 20 percent (40 percent in the case of facilities placed in service after December 31, 2008) in comparison to the S or Hg content of the amount of feedstock coal necessary to produce the same amount of useful energy, excluding any dilution caused by materials combined or added during the production process; or (b) the S or Hg content of both the feedstock coal and the refined coal do not vary by more than 10 percent from the S and Hg content of the feedstock coal and refined coal used in the most recent determination that meets the requirements of section 6.03 of the Notice.

Section 6.05 of the Notice provides that the certification requirement of section 3.01(1)I is satisfied with respect to fuel for which the refined coal credit is claimed only if the taxpayer attached to its tax return on which the credit is claimed a certification that contains the following: (1) a statement that the fuel will result in a qualified emissions reduction when used in the production of steam; (2) a statement indicating whether CEMS field testing was used to determine the emissions reduction; (3) if CEMS field testing was not used to determine the emissions reduction, a description of the method used; (4) a statement that the emissions reduction was determined or redetermined within the six months preceding the production of the fuel and that there have been no changes in the source or rank of feedstock coal used or in the process of producing refined coal from the feedstock coal since the emissions reduction was determined or was most recently determined; and (5) a declaration signed by the taxpayer in the following form: “Under penalties of perjury, I declare that I have examined this certification and to the best of my knowledge and belief, it is true, correct, and complete.”

Section 6.04(2) of the Notice provides, in part, that in the case of a redetermination required because of a change in the process of producing refined coal from the feedstock coal, the redetermination required under section 6.04 must use a method that meets the requirements of section 6.03. In any other case, the redetermination requirement may be satisfied by laboratory analysis establishing that the sulfur and mercury content of both the feedstock coal and the refined coal do not vary by more than 10 percent from the sulfur and mercury content of the feedstock coal and refined coal used in the most recent redetermination that meets the requirements of the Notice. Accordingly, we conclude the redetermination requirement of section 6.04 of the Notice may be satisfied by laboratory analysis establishing that the sulfur and mercury content of both the feedstock coal and the refined coal, on average, do not vary by more than 10 percent below the bottom of (nor more than ten percent above the top of) the range of the sulfur and mercury content of the feedstock coal and refined coal used in the most recent determination test that meets the requirements of section 6.03 of the Notice.

This ruling expresses no opinion regarding any issue not specifically addressed in this ruling letter, including (1) whether any person has sold refined coal to an unrelated person, or (2) when the facility was “placed in service.” In particular, we express or imply no opinion that Taxpayer has sufficient risk or rewards of the

production activity to qualify as the producer of the refined coal. The Service may challenge an attempt to transfer the credit to a taxpayer who does not qualify as a producer, including transfers structured as partnerships, sales or leases that do not also transfer sufficient risks and rewards of the production activity.

In accordance with the Power of Attorney on file with this office, we are sending a copy of this letter to your authorized representative. A copy of this ruling must be attached to any income tax return to which it is relevant. Alternatively, taxpayers filing their returns electronically may satisfy this requirement by attaching a statement to their return that provides the date and control number of the letter ruling.

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. We are sending a copy of this letter ruling to the Industry Director.

Sincerely,

Peter C. Friedman
Senior Technician Reviewer, Branch 6
Office of Associate Chief Counsel (Passthroughs & Special Industries)

cc: