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Person To Contact:
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Date:
May 03, 2012

LEGEND:

Taxpayer =

Investor =
Parent =
Company A =
Company B =
Company C =
Company D =
Individual A =
Individual B =
Licensor =
State A =
State B =
State C =
Date 1 =
Date 2 =
Date 3 =
Additive 1 =
Additive 2 =
Terminal =
Location =
a =
b =
Research Center =

Test Report =

Source Region A =

Dear :

This is in response to your request for rulings, submitted by your authorized representative, concerning the federal income tax consequences of the transaction described below:

BACKGROUND

Taxpayer is a State B limited liability company that was organized on Date 1 to develop five (5) facilities (the "facilities" and each a "facility") to produce refined coal that burns with reduced emissions. The 2 owners (members) of Taxpayer are Parent, a State B limited liability company ("Member A"); and Investor, a State C limited liability company ("Member B" and, collectively with Member A, the "Members"). Pursuant to the operating agreement for Taxpayer, Member A owns an a percent interest in Taxpayer, and Member B owns a b percent interest in Taxpayer.

Member A and Member B are affiliates of Company A, a State B corporation. Company A is owned and managed by Individual A, and Individual B. Company A conducts a significant portion of its business through its affiliate Company C, a State C limited liability company.

The Site

The facilities were constructed at Terminal on Location. Terminal, which is owned by Company B, a wholly owned subsidiary of Member B. Taxpayer entered into a Facility Operation Agreement dated Date 2 with Company B pursuant to which Taxpayer was permitted to construct and install the facilities at Terminal, to operate the facilities to produce refined coal at that location, to store coal feedstock and refined coal at the site, and to conduct other related activities. The Facility Operation Agreement provides that Terminal (Operator) would also operate and maintain the facilities for Taxpayer. The agreement requires Taxpayer to pay monthly rent and management fee to Terminal.

Although the facilities are each currently located at Terminal, the facilities were designed and constructed to be mobile so that they could be relocated to more efficiently or economically produce, sell and deliver refined coal to Company C's existing or new customers.

The Facilities

The facilities were constructed pursuant to a Construction and Installation Agreement dated Date 2, by and between Taxpayer and Company C. Each facility is designed to produce refined coal using technology under license from Licensor, an unrelated State A limited liability company. That technology (the "Process") involves the application of a proprietary blend of two separate chemical compounds to the coal feedstock: (1) Additive 1, a liquid composition; and (2) Additive 2, a powder composition. These compounds are applied at rates determined necessary to achieve the required emissions reductions in nitrogen oxide and mercury when the fuel is burned to produce steam. Test results described below have shown that when mixed with coal, these additives result in reduced nitrogen oxide and mercury emissions during combustion, increasing fuel efficiency and reducing boiler maintenance.

Taxpayer understands that the additives used in the Process provide the chemical structure to create a ceramic matrix using chemical bonds to capture emissions of certain pollutants. The interior corners of the matrix typically will pick up and include elements such as mercury, arsenic and lead. The structure also tends to pick up and include elements such as oxygen, chlorides and fluorides, which are freely available in a boiler's gas stream when they have been released from coal during combustion. As that gas stream begins to cool, the chemical bonds form into a very strong matrix, locking up the elements.

In the case of the powder additive, the information provided by Licensor indicates that the additive causes a portion of the nitrogen oxide to adhere to, or react with, the additive so that it can be captured and is not emitted. In the case of the liquid additive, the information provided by Licensor indicates that the additive reacts with the elemental mercury in the feedstock coal so that it is converted into a chemical species of mercury that can be effectively captured by particulate control devices. A by-product of the Process is a valuable fly ash that can be used in a diverse array of applications in the steel, mining and cement industries.

Each facility and related equipment used in the production of refined coal consists of a single production line that includes (i) a primary storage silo from which the powder composition is extracted, (ii) rotary feeders through which the powder composition is applied based on the weight of feedstock coal to be treated, and (iii) a primary storage tank that holds the liquid composition and pumps to deliver that composition to a conveyor belt upon which the feedstock coal passes and mixes with the two compositions through a static mixer attached to the conveyor belt housing. Each facility also includes equipment that monitors and controls the operation of the facility. Each facility was installed at the site to integrate with the existing coal feedstock conveying equipment; however, each facility was designed to adapt to different coal belt conveyors if relocated to a different site.

Pursuant to the license agreement, Taxpayer is required to make royalty payments to Licensor based on the aggregate tonnage of coal feedstock subjected to the Process

Coal Purchase and Refined Coal Sales Agreements

Pursuant to the Coal Supply Agreement between Taxpayer Company C, Taxpayer will acquire coal feedstock from Company C in quantities and prices as agreed to between the parties at the time of purchase. Title and risk of loss to the feedstock coal passes to Taxpayer at the delivery point prior to the coal conveyor for the facilities or, if requested by Taxpayer, at the coal inventory stockpile. The Coal Supply Agreement with Company C does not limit Taxpayer from purchasing coal feedstock from other suppliers, and also allows Taxpayer to purchase coal feedstock to store as inventory.

Pursuant to the Sales Agency Agreement, Company C is the sales agent for Taxpayer sale and marketing of refined coal produced by Taxpayer at the site. The agreement provides that agent is to obtain the best available price for the sale of refined coal on behalf of Taxpayer. Taxpayer intends to market and sell refined coal predominately to industrial customers burning coal to produce steam who are subject to recent emission standards. The agreement does not limit Taxpayer from entering into sales of refined coal to any customer provided Company C arranges the sale and receives a commission. In exchange for its services, Taxpayer pays Company C a commission.

Testing Procedures

Pursuant to the Operations Agreement, Operator will operate, repair and maintain the facilities in accordance with the agreed operating plan, will make arrangements to coordinate delivery of spare parts and supplies, will coordinate deliveries of coal feedstock purchases and sales of refined coal, and will perform certain administrative functions in support thereof. In addition, Operator will arrange for testing of feedstock coal and refined coal as specified in the Operating Protocols.

The operating protocols attached to the Operations Agreement detail the procedures that will be followed in the operation of each facility to produce refined coal. The feedstock coal expected to be used by Taxpayer to produce refined coal is classified by the American Society of Testing Materials (“ASTM”) as bituminous coal with a gross calorific value of 11,000 to 13,000 btu/lb, which coal is obtained from numerous mines located within Source Region A.

Pursuant to its operating protocols, Taxpayer has arranged with Research Center to conduct tests at its pilot-scale combustion test facility, which is designed to replicate the types and configurations of full-scale pulverized coal-fired boilers used by domestic utilities to generate electricity from steam (the “CTF”) to determine the emissions reductions associated with burning the refined coal produced in the facility compared to the feedstock coal used to produce such refined coal.

Taxpayer has been working with the Research Center to investigate and understand the ability of the additives used in the Process to reduce emissions. The Test Report issued by the Research Center states that:

> The CTF has been extensively used to research and investigate SO_x and NO_x emissions and the transformation of toxic trace metals (Hg, As, and Pb) during the combustion of coal and other fuels or waste materials. The CTF is capable of producing gas and particulate samples that are representative of those produced in industrial and full-scale pulverized coal-fired boilers.

For purposes of qualifying the refined coal to be produced by the facilities for sale to customers, the Research Center conducted pilot-scale combustion tests at its CTF on Date 3 on the blend of feedstock typically used by Taxpayer to produce refined coal in the facilities.

The Test Report explains that combustion gas analysis is provided by continuous emission monitors (CEMs) at two locations: the furnace exhaust, which is used to monitor and maintain a specified excess air level for all test periods, and the outlet of the particulate control device, which is used to assess any air inleakage that may have occurred so that emissions of interest sampled at the back end of the system can be corrected for dilution caused by the inleakage. Flue gas analyses were obtained from the duct at the outlet of the electrostatic precipitator ("ESP"); separate measurements were taken of oxygen, carbon dioxide, carbon monoxide, sulfur dioxide and nitrogen oxide. Flue gas mercury measurements were obtained separately by a continuous mercury monitor located at the flue gas ducting at the exit of the particulate control device. For its report, the Research Center conducted a series of tests on the feedstock and refined coal measuring the emissions with these devices. Because the Research Center is able to monitor conditions closely and is able to ensure that the only variable between the two tests was the fuel burned in each test, it is able to confirm that the changes noted in its report are due to the differences between the fuels burned in the test.

The Test Report issued by the Research Center states that the test results indicate that the blend of coal and additives achieved the required reductions in both nitrogen oxide and total mercury emissions (both determined on a lb/Btu basis) to satisfy the requirements of at least a 20 percent nitrogen oxide reduction and at least a 40 percent mercury reduction. Although the Research Center adjusts its CTF to attempt to replicate the conditions anticipated at a typical power plant, due to the numerous variables that can impact combustion effects in a commercial power station, it is not possible to exactly replicate what will be observed in the commercial setting. Nonetheless, the Test Report concludes that the Research Center expects that similar emissions reductions would be achieved at full scale using the additive levels used.

Taxpayer intends to arrange for periodic testing at the Research Center or another similar center qualified to perform testing using a pilot-scale combustion furnace at least once every six months. This periodic testing will be performed on composite samples of the coal blend typically used to produce refined coal by the Partnership in the facilities. Specifically, the Partnership will prepare a composite sample from the feedstock inventory stockpile at the site. Pursuant to the Partnership's operating protocols, such samples will be collected and prepared in accordance with ASTM guidelines for sampling coal. The Partnership will divide the composite into two parts, one of which will be retained and one of which will be sent to the Research Center for testing (such sample being referred to herein as the "Tested Coal"). At the Research Center, the sample will be subdivided into two representative samples, one of which will be burned untreated to establish a baseline, and the other to be mixed with the liquid and powder compounds used in the Process and then burned to measure the emission reductions. Based on the results of those test burns, the Research Center will advise the Partnership of the minimum application rates to be used for the liquid and powder compounds during its operation of the facility in order to achieve at least a 40 percent reduction in mercury emissions and at least a 20 percent reduction in nitrogen oxide emissions. The retained sample will be maintained by the Partnership until receipt of the Research Center's final report for each test.

The Partnership expects to continue to operate with the blends and additive levels discussed in the Research Center reports, which would be consistent with the long-term patterns for the fuels commonly fired at its customers' power plants. If so, samples will be taken for redetermination testing within six months after the last emissions test satisfying the qualified emissions reduction requirement. However, if coal feedstock is acquired from a different coal source region or of a different rank than reflected in the Tested Coal, then the Partnership would arrange for a new redetermination test.

Although the Partnership intends to obtain reports of any redetermination tests from the Research Center every six months to confirm the requisite emission reductions, due to delays at the Research Center, it is not certain that the Partnership will always be able to receive a final written report from the Research Center before the six month anniversary of its previous test. When this happens, the Partnership expects that the Research Center will issue a letter in which the Research Center advises the Partnership of the results of its redetermination testing, confirms that a detailed report written report will be provided upon completion, and attests that the determinations were conducted in compliance with sections 6.01 and 6.02 of Notice 2010-54.

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RULINGS REQUESTED

Based on the foregoing, you have requested that we rule as follows:

1. The refined coal produced by using the Process constitutes "refined coal" within the meaning of §45(c)(7) of the Code, provided that such refined coal is produced from feedstock coal that is the same source or rank as the "Tested Coal" and provided further that the refined coal satisfies the qualified emission reduction test stated in §45(c)(7)(B) .

2. Provided that the feedstock coals used to produce refined coal during any determination period are from the same coal source region and of the same rank as the Tested Coal, all feedstock coal that satisfies that criteria shall be treated as feedstock coal of the same source and rank for purposes of section 6.04 of Notice 2010-54, regardless of the mine from which such feedstock coal is purchased.

3. Testing by Center for qualified emissions reduction as set forth in its test reports satisfies the requirements of Notice 2010-54. Testing conducted at Center may be relied upon to satisfy the qualified emission reduction test of §45(c)(7)(B) regardless of subsequent normal fluctuations in operating conditions and emissions at the Plant.

LAW AND RATIONALE

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 45(e)(8) of the Code provides that, in the case of a producer of "refined coal", the credit available under §45(a) of the Code 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 of the Code, section 3.01 of Notice 2010-54 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 3.04 of the Notice provides that the term "qualified emission reduction" means, 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 or mercury 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) of the Code 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 6.01 of Notice 2010-54 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 §613(c)(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 achieve, 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 613(c)(5) of the Code describes treatment processes that are not considered as mining unless they are provided for in §613(c)(4) or are necessary or incidental to a process provided for in §613(c)(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 the 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(a)(1) 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; and (v) a qualified individual verifies the test results in a manner that satisfies the requirement 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 emission reduction. The permissible methods include (a) testing using a demonstration pilot-scale combustion furnace if it establishes that the method accurately measures the emission reduction that would be achieved in a boiler described in section 6.03(1)(a)(i) and a qualified individual verifies the test results in a manner that satisfies the requirements of section 6.03(1)(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).

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 the feedstock coal that occurs after the date of such determination or redetermination; 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 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 mercury 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; (b) the S or mercury content of both the feedstock coal and the refined coal do not vary by more than 10 percent from the S and mercury content of the feedstock coal and refined coal used in the most recent determination that meets the requirements of the Notice.

Finally, section 6.05 of the Notice provides that the certification requirement of section 3.01(1)(c) of the Notice is satisfied with respect to fuel for which the refined coal credit is claimed only if the taxpayer attaches 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 the feedstock coal used in the process of producing refined coal from feedstock coal since the emissions reduction was most recently determined or redetermined; 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.”

With respect to the first issue, the Process starts with several chemical additives being added to the feedstock coal prior to its combustion in a furnace. The additives provide the chemical structure that results in the reduction of emissions of nitrogen oxide and mercury during combustion. Section 6.01 of the Notice provides generally that a qualified emissions reduction does not include any reduction attributable to mining processes or processes that would be treated as mining if performed by the mine owner or operator. In the instant case, the Process is not a mining process. Further, section 3.01 of the Notice clarifies §45(c)(7) of the Code and specifically provides that refined coal includes feedstock coal mixed with additives. Thus, additive processes that mix certain chemicals or other additives with the coal in order to achieve emissions reductions may qualify for the refined coal production tax credit. Additionally, section 3.03 defines comparable coal as coal that is of the same rank as the feedstock coal and that has an emissions profile comparable to the emissions profile of the feedstock coal. Accordingly, we conclude that the coal produced by using the Process constitutes a "refined coal" within the meaning of §45(c)(7) of the Code, provided that the refined coal (i) is from feedstock coal that is the same source or rank as the "Tested Coal" and (ii) satisfies the qualified emission reduction test stated in §45(c)(7)(B) of the Code.

With respect to the second issue, the emissions profile of the refined coal product is compared to the emissions profile of either the feedstock coal or a comparable coal predominantly available in the marketplace as of January 1, 2003. Section 3.03 of the Notice provides that a "comparable coal" is defined as coal that is of the same rank as the feedstock coal and that has an emissions profile comparable to the emissions profile of the feedstock coal. Section 6.04 of provides that a determination or redetermination of a qualified emissions reduction is valid until 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 the feedstock coal that occurs after the date of such determination or redetermination; 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. Accordingly, we conclude that provided that the feedstock coals during any determination period are from the same coal source regions and of the same rank as the Tested Coal, all feedstock coal that satisfies that criteria shall be treated as feedstock coal of the same source and rank for purposes of section 6.04 of Notice 2010-54, regardless of the mine from which such feedstock coal is purchased.

With respect to the third issue, section 6.03(3) of the Notice provides that any permissible testing method provided for in the Notice can be used in emission testing for any pollutant. That is, a taxpayer can use different testing methods for each of nitrogen oxide, sulfur dioxide or mercury, provided the method used for any pollutant is a permissible method. Section 6.04(1) provides that an emission test establishing a "qualified emission reduction" qualifies the refined coal for a six-month period provided there is no change in the process for producing the refined coal or in the source or rank

of the feedstock coal. Therefore, a taxpayer must "redetermine" the emission reductions to qualify for the succeeding six-month period using one or more approved methods. In the instant case, pilot-scale combustion testing will be arranged, and will not rely on any continuous emissions monitoring system or other field testing, which is permitted under section 6.03 of the Notice. Specifically, the Center will conduct testing (including redetermination testing) at its CTF to determine the emissions reductions associated with burning the refined coal product compared to the feedstock. For purposes of qualifying the refined coal produced at the facilities, the Center has conducted pilot-scale combustion tests at its CTF as documented in Test Rep 1. In conducting such tests, the Center conducted tests on the feedstock, and then mixed a separate sample of the feedstock with the additives so that it could conduct tests on the refined coal product. In each of its reports, the Center reported that the test results indicated that the blend of coal and additives achieved the required emissions reductions. Based on the foregoing, we conclude that testing by the Center for qualified emissions reductions as set forth in its test reports satisfies the requirements of Notice 2010-54. Qualified emissions reduction may be established through testing by the Center at its combustion research facility or similar pilot-scale combustion testing facilities under Notice 2010-54, regardless of subsequent normal fluctuations in operating conditions and emissions at the power plants where the refined coal is burned.

No opinion is expressed regarding any other issue not specifically addressed in this ruling letter. In particular, no opinion is expressed with respect to (1) whether Taxpayer, any of its affiliates, or any other party is the Producer of the refined coal for purposes of § 45(e)(8) of the Code; (2) whether there has been a sale of refined coal to an unrelated person; or (3) when the Facility was, in fact, placed in service.

In accordance with the Power of Attorney on file with this office, we are sending a copy of this letter to your authorized representatives. 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)