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LEGEND:

Taxpayer

Company A =
Company B =
Company C =
Company D =
Company E =
Company F =
Company G =
City A =
City B =
State A =
State B =
Location a =
a =
b =
Generating Station =

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, a State A limited liability company, is treated as a partnership for federal income tax purposes. It is a joint venture among Company A, Company B and Company C.

Company A is a publicly-traded company that was formed to focus on ways to help power companies that use coal comply with federal and state pollution regulations. Company B is an affiliate of Company D, a privately-held company that invests in energy and natural resources businesses. Its businesses include buying and selling coal for utilities and arranging rail transportation from mines. Both companies are headquartered near City A. Company C is an indirect wholly-owned subsidiary of Company E in State B.

The Facility

Taxpayer owns a refined coal facility that it placed in service near a particular boiler at Generating Station in City B. Taxpayer owns the refined coal facility through a disregarded special-purpose subsidiary called Company F.

Technology

Taxpayer is the exclusive licensee of proprietary technology (Technology) owned by Company A and used to produce refined coal. Taxpayer has granted Company F a limited sublicense to use the Technology at its refined coal facility. The Technology involves treating the feedstock coal with two chemical additives that are metered on to feedstock coal at a rate proportional to the weight of coal, as measured by coal belt scales, as the coal is transported by coal belts into bunkers that feed the boiler. The first chemical additive -- Additive A -- is a granular iron oxide material that changes the chemistry of the coal ash in the cyclone burner, allowing for reduced NOx emissions. The second chemical additive -- Additive B -- is a liquid halogen salt that reacts with the mercury and increases mercury capture in the fly ash that is collected in the electrostatic precipitator.

The Technology was developed for cyclone-fired boilers that were originally designed for high-sulfur, high-BTU bituminous coal and subsequently converted to use low-sulfur, low-BTU Location a subbituminous coal. Generating Station currently burns 100% Location a subbituminous coal, but is considering moving to a blend of 90% Location a coal and 10% bituminous coal.

The refined coal facility is on a site that Company F uses under a license from Utility. Company F buys raw coal from Utility in Utility's coal yard at the “as delivered”

cost of the coal to the utility, treats the raw coal to convert it into refined coal, and then sells the refined coal back to the utility at the same price as the raw coal.

Testing

As part of placing the refined coal facility in service at Generating Station, Taxpayer conducted a full-scale continuous emissions monitoring system (CEMS) field test at the boiler to measure the reduction in nitrogen oxide and mercury emissions. NOx and mercury emissions were measured as required by the CEMS field testing procedures described in section 6.03(1) of Notice 2010-54. Emissions for both the feedstock coal and refined coal were measured under the same operating conditions, except for adjustments to secondary air directly attributable to the refined coal as allowed in section 6.03(1)(a)(iv) of Notice 2010-54, over a period of at least three hours during which the boiler operated at a steady state and at least 90% of full load. The CEMS devices for measuring nitrogen oxide and mercury are located in the stack downstream of the electrostatic precipitator. Particulate control device data was collected to ensure that the device was operating the same when the feedstock coal and refined coal were each tested. The tests were done with 100% Location a coal.

The CEMS field test demonstrated that burning the refined coal made from 100% Location a subbituminous coal led to a a reduction in Hg emissions and a b reduction in NOx emissions compared to the baseline measurements for the feedstock coal.

As for future determinations, Taxpayer may elect to use a laboratory analysis establishing that the sulfur and Hg contents of both the feedstock coal and the refined coal do not vary by more than 10% from the sulfur and Hg content of the feedstock coal and refined coal used in the most recent determination pursuant to section 6.04(2)(b) of Notice 2010-54.

Taxpayer indicates that samples will be taken for redetermination testing within six months after the last emissions test satisfying the qualifying emissions reduction requirement. Thereafter, within six months after such date, another set of samples will be taken for redetermination testing. All samples will be taken from the moving coal belts upstream and downstream of the refined coal facility. The samples will be taken using a collection device that reaches over the moving conveyor belt and collects a part-stream cut of the coal on the belt. Samples will be prepared for analysis using procedures for dividing samples as described in ASTM D2234. The samples will then be crushed and further prepared for analysis according to ASTM D2013. Standard laboratory techniques will be used to measure sulfur and mercury content of the coal samples.

However, Taxpayer has also indicated that it may decide to use EPA Method 30B when not using laboratory testing to test for Hg emissions. In that case, Taxpayer will also test for NO_x emissions using traditional CEMS testing methodology.

RULINGS REQUESTED

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

1. The refined coal produced and sold by using the Technology 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 feedstock test coal and provided further that the refined coal satisfies the qualified emission reduction test stated in §45(c)(7)(B) of the Code.

2. Increasing the amounts of chemical additives to the feedstock coal will not be construed as a change in process requiring a redetermination to establish qualified emissions reductions.

3. Provided that the feedstock coals used to produce refined coal during any redetermination period consist of a blend of Location a subbituminous coal and bituminous coal, any blend of such coal 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 and will not require a redetermination to establish qualified emissions reductions.

4. Pursuant to section 6.04(2)(b) of Notice 2010-54, the redetermination requirement of section 6.04 of Notice 2010-54 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% 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 the refined coal used in the most recent determination pursuant to section 6.03 of Notice 2010-54. As a result, (i) Taxpayer will not be required to test for nitrogen oxide; and (ii) Taxpayer will not be required to test for baseline emissions so long as there has not been a change in the process for producing refined coal.

5. The use of EPA Method 30B is an acceptable alternative to the use of CEMS field testing for measuring mercury emissions reductions under section 6.03 of Notice 2010-54. As a corollary, EPA Method 30B should also qualify as an acceptable method for satisfying the redetermination requirement under section 6.04 of Notice 2010-54 when doing CEMS field testing for redeterminations.

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 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 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 two issues, the Technology starts with two 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 (a) the refined coal produced by using the Technology constitutes a “refined coal” within the meaning of §45(c)(7) of the Code, provided that the refined coal (i) is produced 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 and (b) increasing the amounts of chemical additives to the feedstock coal will not be construed as a change in process requiring additional testing for qualified emissions reductions.

With respect to the third 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.

We have determined that the blending of subbituminous coal and bituminous coal may be permissible, under certain circumstances, not requiring emissions reductions testing so long as the average blend range, over the period of up to six months since the most recent determination or redetermination, does not vary by more than 5 percentage points (for a total of 10 percentage points) each for the subbituminous coal and the bituminous coal from the most recent determination. In the instant case, Taxpayer's most recent CEMs determination involved 100% Location a subbituminous coal. Therefore, Taxpayer can blend 95% Location a subbituminous coal with 5% bituminous coal without additional qualified emissions reductions testing. On the other hand, if Taxpayer desires to refine coal including a blend range of, for example, 70% to 100% Location a subbituminous coal and up to 30% bituminous coal it would have to conduct redetermination testing at 90% Location a subbituminous coal and 10% bituminous coal, 80% Location a subbituminous coal and 20% bituminous coal and 70% (or 65%) Location a subbituminous coal and 30% (or 35%) bituminous coal. However, any change of blend within that blend range would be treated as comparable coal and would not require additional testing for qualified emissions reductions.

With respect to the fourth issue, section 6.04(2) of Notice 2010-54 provides that, where a redetermination is required because of a change in the process of producing refined coal, the redetermination must use one of the general methods for satisfying the emissions reduction requirements listed in section 6.03 of the Notice. However, in any other case section 6.04(2) of the Notice provides that 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% from the sulfur and mercury content of the feedstock coal and the refined coal used in the most recent determination (which may be the original CEMs test) that meets the requirements of Notice 2010-54. In the instant case, periodic laboratory analysis will be performed to confirm that the average sulfur and mercury content of the feedstock for input into the Facility (as well as the average sulfur and mercury content of the refined coal output from the Facility), regardless of the actual blend of ranks of coal or the source of the coal will not vary by more than 10% below the bottom range for sulfur and mercury or

ten percent above the top of the range of these chemicals in the tested feedstock coals. Accordingly, we conclude that pursuant to section 6.04(2) of Notice 2010-54, the redetermination requirement of section 6.04 of Notice 2010-54 may be satisfied by laboratory analysis establishing that the average sulfur and mercury contents of both the feedstock coal and the refined coal, do not vary by more than 10% from the range of sulfur and mercury content of the feedstock coal and the refined coal used in the most recent determination that meets the requirements of section 6.03 of Notice 2010-54. As a result, Taxpayer (i) will not be required to test for nitrogen oxide emissions; and (ii) will not be required to test for baseline emissions so long as there has not been a change in the process for producing refined coal.

With respect to the fifth ruling request, Taxpayer has also indicated that it may decide to use EPA Method 30B when not using laboratory testing to test for Hg emissions. EPA Method 30B is an EPA approved method for measuring mercury emissions from coal-fired boilers. The method involves use of a sorbent trap that collects mercury in flue gas as the gas exits the stack downstream from the scrubber or other pollution control devices. The collected mercury is then analyzed to determine the mercury emissions. EPA Method 30B is a form of CEMS testing. Based on the foregoing we conclude that the use of EPA Method 30B is an acceptable alternative to the use of a continuous emissions monitoring system during CEMS field testing for measuring mercury emissions reductions under section 6.03 of Notice 2010-54. As a corollary, EPA Method 30B should also qualify as an acceptable method for satisfying the redetermination requirement under section 6.04 of Notice 2010-54 when doing CEMS field testing for redeterminations. However, Taxpayer may not “mix and match” in the sense of using CEMS field testing to satisfy part of the redetermination requirement while using the laboratory analysis described in section 6.04(2) to satisfy the remainder. In addition, if Taxpayer elects to use EPA Method 30B it will also have to (i) test for NO_x emissions using conventional CEMS methodology; and (ii) baseline emissions in the manner contemplated by section 6.03 of Notice 2010-54.

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 or any of its affiliates 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; (3) when the Facility was, in fact, placed in service; or (4) the subchapter K issues relating to the subsequent formation of a partnership for federal income tax purposes (including whether the formation of such entity constitutes a partnership for federal income tax purposes).

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