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Date: October 30, 2013

LEGEND:
Taxpayer =

Partnership =
Parent =
Company A =
Company B =
Company C =
Company D =
Company E =
Company F =
Company G =

Complex =
Authority =
Process =
Licensor =
State A =
State B =
State C =
Date 1 =
Date 2 =
Additive 1 =
Additive 2 =
Center =

Test Rep 1 =

Test Rep 2 =

source region A =
x% =
y% =

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.

FACTS

Partnership is a calendar year taxpayer and employs the accrual method of accounting for both book and tax purposes.

Taxpayer is a wholly- owned, indirect subsidiary of Parent, a publicly traded State A corporation. Parent is the common parent of an affiliated group of corporations, including Investor, that join in the filing of a consolidated federal income tax return.

Taxpayer formed Company A to acquire a membership interest in Partnership. Company A is disregarded as a separate entity from Investor for federal tax purposes. It is located at the same address as Parent and Investor.

The members of Partnership are Taxpayer and Company B, a State A limited liability company.

Company B is a wholly-owned subsidiary of Company C, and Company B is a disregarded entity for federal tax purposes. Company C is a wholly-owned subsidiary of Company D and has elected to be taxable as a corporation for federal tax purposes. Company D is wholly-owned by Company E which is wholly-owned by Company F.

Company D is engaged in the business of developing and managing various energy-related projects through the U.S. Company F is the holding company for a number of operating companies engaged in energy-related businesses. Company F is also the parent company of Company G, the regulated public electric utility for a portion of State C.

General Description of the Facilities

Partnership constructed a facility consisting of two parallel, independent production lines each individually,(a Facility) and collectively, (the Facilities) that are designed to produce refined coal (the Product). The Facilities are located at the

Complex . The Authority, a governmental agency of the State B, body politic and corporate, owns and operates Complex. Complex is composed of two coal-fired generating units. Complex consumes approximately several million tons of coal a year. All of Product is used as a fuel at Complex to produce steam for the generation of electricity. Currently, only one of the two boilers at Complex is using refined coal for the production of steam for the generation of electricity. The other boiler at Complex is not using refined coal and currently is not expected to use refined coal, although circumstances could change in the future which would permit the use of refined coal.

Description of the Process

The process for production of refined coal currently employed at the Facilities involves the mixing of proprietary chemicals (additives) with feedstock coal in a crusher prior to combustion (the Process). The patent for the Process is owned by Licensor and is licensed to Partnership. Test results described herein have shown that when mixed with coal, the proprietary additives result in reduced NO_X, SO_2 and mercury emissions during combustion. Different chemicals are targeted at specific pollutants. Based on the characteristics of the feedstock coal burned at the CCC, Partnership has chosen a combination of additives that target the reduction of NO_X and mercury. In the case of NO_X, Partnership understands that Additive 1 is believed to cause a portion of the NO_X to adhere to, or react with, the additive so that it can be captured and is not emitted. In the case of mercury, Partnership understands that Additive 2 is believed to react with the elemental mercury in the feedstock coal so that it is converted into a chemical species of mercury (mercury oxide) that can be effectively captured by particulate control devices.

Emissions Reduction Testing

Partnership engaged the Center of a prominent university (the Center) to conduct tests on behalf of Partnership at its pilot-scale combustion test facility (CTF) to determine the emission reductions associated with burning the refined coal compared to the feedstock coal. Company E has been working with Center for several years in order to investigate and understand the ability of the additives to reduce emissions. The Center reports described below state:

> The CTF has been extensively used to research and investigate SO_X and NO_X emissions and the transformation of toxic trace metals (Hg [mercury], 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 Product produced at the Facilities, Center conducted pilot-scale combustion tests at its CTF. Specifically, in Date 1 and Date 2,

Center conducted tests on feedstock coals of the type typically burned at Complex. Center reports, from Test Report 1 and Test Report 2 (Test Reports), that it mixed the coal and additives in a manner consistent with the mixing that would occur at the Facilities.

The Test Reports explain that combustion gas analysis is provided by continuous emission monitors (CEMs) at two locations: the furnace exit, 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 the dilution caused by the inleakage. Flue gas NO_X analyses were obtained from the duct at the outlet of the electrostatic precipitator ("ESP"). 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. The Center conducted a series of tests on the feedstock and refined coal blends measuring the emissions with these devices.

Each Test Report states that the test results indicate that the refined coal samples achieved the required reductions in both NO_X and total mercury emissions to satisfy the requirements of at least 20% NO_X reduction and at least 40% mercury reduction. Each Test Report states that it is "expected that qualifying reductions would be achieved at full scale by using these treatment rates during the production of the refined coal."

Tested Coal

Complex currently burns subbituminous coal from a number of mines in source region A. Complex uses source region A coals to generate electricity and Taxpayer intends to produce the Product using source region A coals. The rank of the source region coal burned at Complex is classified by the American Society of Testing Materials as subbituminous coal.

Company E requested that Center test source region A coal that represents the coal to be used by Partnership to produce Product that will be burned to produce steam at Complex. The coal contains x% source region A coal from various mines. Accordingly, for purposes of this ruling request, the term Tested Coal refers to source region A coal from various mines. In each Test Report, Center states that the refined coal produced with source region A coal met the required emission reduction requirements when compared to the feedstock coal. Each Test Report states that it is "expected that qualifying reductions would be achieved at full scale by using these treatment rates during the production of the refined coal."

Partnership expects to continue to operate with source region coal A and the additive levels discussed in the Test Reports, which would be consistent with long-term

patterns for coal consumed by Complex. If so, samples will be taken for redetermination testing within six months after the last samples were collected for the last emissions test satisfying the qualified emission reduction requirement. Thereafter, within six months after such sample collection date, another set of samples will be taken for redetermination testing. In each case, Partnership plans to obtain samples of feedstock and samples of refined coal from the Facilities using mechanical samplers. Initially, Partnership will collect and test samples from each Facility and test each set of samples separately. Given that the Facilities share the same feedstock coal and will apply the additive in the same proportion to the coal, if the testing results from both samples demonstrate satisfaction of the qualified emission reduction requirement and substantially similar results, Partnership plans to collect samples for redetermination testing alternating between the two Facilities. Alternatively, Partnership may request that Center prepare samples of refined coal for redetermination testing by mixing feedstock coal and additives in a manner consistent with the mixing that would occur at the Facilities.

Although Partnership does not currently anticipate making changes to its coal feedstock or additive levels, additional testing will be conducted prior to (i) adding coal from any coal source region other than source region A to the Facilities' coal feedstock mix (i.e., using less than x% PRB coal), or (ii) changing the minimum levels of additives. Such testing will include testing of samples at the endpoints of the new coal feedstock blend and at intermediate blends between the endpoints at y% intervals. In the case of a change in additive levels, tests will also be run at the new minimum levels of additive as the qualified expert advises is necessary to conclude that a qualified emissions reduction will be expected for the new levels of additive.

In addition, in the future, Partnership may collect and test weekly samples of feedstock and Product to determine their sulfur and mercury content. If such samples are collected, a rolling six-month average of the sulfur and mercury content would be computed and compared to the mercury and sulfur content of the feedstock and Product used in the most recent pilot-scale combustion test, to determine whether there has been a change of the sulfur or mercury content by more than ten percent. This sampling and testing procedure is intended to satisfy the six-month redetermination requirement set forth in section 6.04 of Notice 2010-54.

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) of the Code.

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. Pilot scale testing conducted at Center (and subsequent permitted laboratory testing as required for a redetermination described in section 6.04(2)(a) or (b) of Notice 2010-54) may be relied upon to satisfy the qualified emission reduction test of §45(c)(7)(B) of the Code.

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 ten 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 the refined coal used in the most recent determination that meets the requirements of section 6.03 of Notice 2010-54.

5. The results set forth by the Center in a redetermination test report for production may be relied upon after the date of the testing even if the report is not received until after the six month period specified in section 6.04(1)(i) of Notice 2010-54.

6. Provided the facility was “placed in service” prior to January 1, 2012, within the meaning of §45(d)(8), relocation of the facility to a different location after December 31, 2011, or replacement of part of a facility after that date, will not result in a new placed in service date for the facility for purposes of §45 provided the fair market value of the used property is more than twenty percent of the total fair market value of the relocated facility at the time of relocation or replacement.

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.

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."

Finally, section 45(d)(8) of the Code provides that a refined coal production facility must be placed in service within certain timeframes. For purposes of the refined coal credit allowable with respect to refined coal other than steel industry fuel, the facility must be placed in service after October 22, 2004 and before January 1, 2012. Section 3.07 of Notice 2010-54 provides that the year in which property is placed in service is determined under the principles of § 1.46-3(d) of the regulations; i.e., when the property is placed in a condition or state of readiness and availability for a specifically assigned function. Section 5.02 of Notice 2010-54 provides that a refined coal production facility will not be treated a placed in service after October 22, 2004 if more than 20 percent of the facility's total value (the cost of the new property plus the value of the used property) is attributable to property placed in service on or before October 22, 2004. Notice 2010-54 also states that the IRS will not issue private letter rulings relating to when a refined coal production facility has been placed in service.

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 result 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 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.

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 mines 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 for, and there will be no reliance 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 and Test Rep 2. 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 (including interim reports) satisfies the requirements of Notice 2010-54. Qualified emissions reduction through testing by the Center at its combustion research facility or similar pilot-scale combustion testing facilities under Notice 2010-54 may be relied upon.

With respect to the fourth issue, section 6.04(2) of Notice 2010-54 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 ten 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 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 ten 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 that meets the requirements of section 6.03 of Notice 2010-54.

With respect to the fifth issue, it is intended that redetermination testing will occur every six months or more frequently if required pursuant to Notice 2010-54. However, the Center is not always able to issue the written report required by section 6.03(2)(a) of Notice 2010-54 within the six month period. Thus, although redetermination testing is completed within the six month period, the report may be received after the six month period. Nonetheless, the Center informed the interested parties of the results of the test on the day of the tests so that it was able to take into account the results of the redetermination within the six month period. Nevertheless, the delay by the Center in issuing its report cannot be indefinite. Accordingly, we conclude that the results set forth by the Center in a redetermination test report for production may be relied upon after the date of testing even if the report is not received until after the six-month period specified in section 6.04(1)(i) of Notice 2010-54, so long as the written report is received within 90 days from the date of testing. The new six month period will begin on the date the redetermination was completed not the date of receipt of the report.

With respect to the sixth issue, we understand that the facility may be relocated to another location in the future. In that case, all of the essential components of the facility will be relocated and retained. Similarly, during the life of the facility, it may be necessary to replace certain major components. In the event of relocation or replacement of a component, there should be no change in the placed in service date of the facility as long as the test described in section 5.02 of Notice 2010-54 has been met. Based on the foregoing, we conclude that provided the facility was “placed in service” prior to January 1, 2012, within the meaning of §45(d)(8), relocation of the facility to a different location after December 31, 2011, or replacement of part of the facility after that date, will not result in a new placed in service date for the facility for purposes of §45 provided the fair market value of the used property is more than 20 percent of the facility’s total fair market value at the time of relocation or replacement.

This ruling expresses no opinion about 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 the Taxpayer has sufficient risks and 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, leases or sales 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 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)