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Dear Mr. Eisenberg:

This letter is EPA's determination of applicability under § 72.6(c) of the Acid Rain regulations for Central Power & Lime Inc.'s ("CP&L") cogeneration facility (Facility ID (ORISPL) 10333), in Brooksville, Florida. This determination is made in response to your letter of February 23, 2005 requesting a determination and supplemental information provided during the period January 18, 2005 through September 7, 2006.¹ As discussed below, EPA determines that the CP&L cogeneration facility (i.e., CP&L Boiler #1) is exempt from the Acid Rain Program under § 72.6(b)(5) through the period ending December 21, 2007.

Background

Sections 402(17)(C) and 405(g)(6)(A) of the Clean Air Act include provisions discussing in detail the conditions under which a cogeneration unit is exempt from the Acid Rain Program. See, e.g., 42 U.S.C. 7651a(17)(C) (stating that a cogeneration unit is not a utility unit if it meets certain requirements concerning the purpose of its construction and the amount of electricity that it sells) and 42 U.S.C. 7651d(g)(6)(A) (stating that Clean Air Act title IV does not apply to qualifying cogeneration facility that meets certain conditions as of enactment of title IV, i.e., November 15, 1990). EPA interprets these provisions, and §§ 72.2 and 72.6 of the Acid Rain Program regulations implementing these provisions, to provide that a cogeneration unit meeting the requirements for generator nameplate capacity and used to produce electricity for sale is a

¹ The delay in our response is due to EPA's consideration of this applicability determination in context of other applicability determinations being reviewed.



utility unit and thus subject to the Acid Rain Program, unless the unit meets the requirements for an exemption as set forth in § 72.6(b).

CP&L leases and operates the cogeneration facility, whose construction began in January, 1985 and which commenced commercial operation in July, 1988. According to CP&L, the CP&L facility is a qualifying facility consisting of a single coal-fired boiler (Boiler #1) with 1,542 mmBtu/hr maximum design heat input capacity that serves a generator with nameplate capacity of 125 MWe.² However, the facility can achieve a gross capacity of 150 MWe. Steam produced in the boiler flows to a steam turbine, after which process steam is extracted, and the remainder of the steam returns to the boiler reheater and then flows back to the turbine. The process steam is sold to Florida Crushed Stone Company for the production of cement pursuant to a steam sales agreement dated December 15, 1988. See June 28, 2005 supplemental information at 2 and 4.

Until November 2005, all electricity produced by the CP&L cogeneration facility was wheeled by Progress Energy Florida, Inc. ("Progress Energy") for sale to Florida Power & Light ("FP&L") pursuant to a power purchase agreement ("1984 agreement"). The agreement was entered into as of September 10, 1984, amended on December 10, 1990, and expired on October 31, 2005. Under the 1984 agreement, FP&L was required to pay monthly capacity charges calculated using specific formulas. Under the formulas, if the facility's capacity factor was at least 57.5%,³ the monthly capacity charges were generally calculated as the sum of a Base Capacity Credit (a fixed amount that increased annually through 2005) per MWe and an Operation and Maintenance credit (a fixed amount that increased annually through 2005), which sum was multiplied by Committed Capacity and a factor related to the facility's capacity factor.⁴ In addition, the 1984 agreement required that FP&L generally pay an energy charge per MWhr of 97.5% of the lesser of FP&L's as-available avoided energy cost or the average cost of coal burned at a specified FP&L facility.⁵

² The CP&L facility was certified as a qualifying cogeneration facility by the Federal Energy Regulatory Commission on November 15, 1982. Florida Crushed Stone Co., 21 FERC ¶ 62,258 (1982).

³ The monthly capacity factor was a percentage of the facility's Committed Capacity, which under the 1984 agreement could be set by CP&L between 100 MWe and 150 MWe. During the term of the 1984 agreement, Committed Capacity was generally 133 MWe but was increased to 136 MWe for February 2003-October 2005. See 1984 agreement at 6.

⁴ See id. at Appendices B and C. Under the price formulas, the capacity payment was higher when the capacity factor exceeded 82.5%.

⁵ See id. at 8-10. Whenever the energy charge was projected to be less than 97.5% of the average cost of coal at the specified FP&L facility, CP&L had the option of selling the energy to others or of not producing such energy, but never exercised that option.

On December 10, 1990, the 1984 agreement was amended to provide for higher energy payments for periods during October 1, 1990 through April 1, 1992 when the facility had an on-peak energy factor of at least 82.5%. According to CP&L, the on-peak energy factor was never met, and the provision never applied. See February 23, 2005 Petition at 7.

In anticipation of the October 31, 2005 expiration of the FP&L agreement, CP&L issued a request for proposal to nine utilities in August, 2003 and received two responses. According to CP&L, Progress Energy made the best offer, and CP&L entered into a new power sales agreement (“2005 agreement”) with Progress Energy effective on August 23, 2005 and terminating on December 31, 2010. See id.

Under the 2005 agreement, the Contract Capacity for the CP&L facility is XX MW, and Progress Energy is required to pay a monthly capacity charge of \$XX per KW, which will be offset by refunds when the facility is not available to produce electricity at specified percentages of contract capacity (except for excused outages).⁶ The monthly capacity charge is less than recent monthly capacity charges under the 1984 agreement. In addition, the 2005 agreement provides that Progress Energy pay an energy charge of \$XX per MWhr delivered to Progress Energy, which will increase about XX% per year during 2007 through 2010 and which is higher than recent energy charges under the 1984 agreement.⁷ According to CP&L, the energy charges are intended to cover the cost of fuel (coal and start-up oil) and fuel transportation and variable operations and maintenance costs. Further, the 2005 agreement may be extended for five years if CP&L and Progress Energy agree on terms, conditions, and rates (which may differ from those applicable before the extension) for the extension period.⁸ The CP&L facility, which was shutdown starting October 31, 2005, recommenced operation, under the 2005 agreement, in early December 2005.

On December 21, 2006 CP&L exercised an option under the 2005 agreement and provided a 12-month notice of termination of the agreement, which became effective on December 21, 2007. Under these circumstances, EPA is limiting its applicability determination for CP&L Boiler #1 to the period ending December 21, 2007.

⁶ See 2005 Agreement at 12. For example, when the facility’s availability at contract capacity is between less than XX% and at least XX%, the refund amount is XX% of the capacity payments for each percentage point that facility availability is less than XX%. The refund amount is higher when facility availability is less than XX%.

⁷ See id. at 12 and Exhibit C. In addition, since the CP&L facility is directly connected to Progress Energy’s system, CP&L does not directly bear any cost of line loss with regard to sales under the 2005 agreement to Progress Energy. In contrast, under the 1984 agreement where CP&L sold to FP&L, CP&L directly bore the cost of line loss due to the transmission on Progress Energy’s system of the electricity sold to FP&L.

⁸ See id. at 11.

EPA Determination

Since CP&L Boiler #1 burns coal and serves a generator with nameplate capacity exceeding 25 MWe that produces electricity for sale, Boiler #1 is a "unit" and, unless otherwise exempt, is a "utility unit" and therefore subject to the Acid Rain Program. See 40 CFR 72.2 (definitions of "unit" and "utility unit"); and 40 CFR 72.6(b)(4) and (5) (exemptions for certain cogeneration units). Further, since CP&L Boiler #1 has equipment used to produce steam that is used sequentially (first in a steam turbine to produce electricity for sale to a utility, next in the steam turbine to produce process steam for Florida Crushed Stone Company for cement production, and then again in the steam turbine to produce more electricity for utility sale), CP&L Boiler #1 is also a "cogeneration unit." See 40 CFR 72.2 (definition of "cogeneration unit"). The maximum design heat input capacity of CP&L Boiler #1 is 1,542 mmBtu/hr, and, therefore, the potential electrical output capacity ("PEOC") of Boiler #1 is 150.6 MWe.⁹

Under § 72.6(b)(4)(i), a cogeneration unit constructed before November 15, 1990 is exempt from the Acid Rain Program if it meets certain conditions concerning electricity sales. The unit must have been constructed for the purpose of supplying annually no more than the greater of 219,000 MWh or one-third of its potential electrical output capacity to a utility power distribution system for sale. Further, the unit must supply such electricity, on a rolling three-year annual average basis, in an amount not exceeding the greater of 219,000 MWh or one-third of its potential electrical output. According to CP&L, electrical sales from the CP&L facility to FP&L have exceeded the MWe-hr electrical sales threshold (i.e., 150.6 MWe divided by 3 and multiplied by 8,760 hrs per year or 439,752 MWh) for qualifying for an exemption under § 72.6(b)(4)(i). See December 7, 2005 supplemental information at Attachment 2 (showing electricity sales 2002-2005). Therefore, CP&L Boiler #1 is not exempt under that provision of the Acid Rain Program regulations.

Section 72.6(b)(5) provides another exemption from the Acid Rain Program for certain cogeneration units. Under that provision, the unit must be a qualifying facility that has a qualifying power purchase commitment, effective as of November 15, 1990, to sell at least 15% of its total planned net output capacity and consists of one or more units with total installed net output capacity not exceeding 130% of total planned net output capacity. If the unit initially meets these requirements, but subsequently is no longer a qualifying facility or no longer has a qualifying power purchase commitment, it is no longer exempt under § 72.6(b)(5).

As noted above, CP&L Boiler #1 is a qualifying facility. The 1984 agreement, as of November 15, 1990, required FP&L to buy, at formula-based prices (in the form of capacity and energy charges), all electricity produced by CP&L Boiler #1. Since the 1984 agreement stated that it covered a facility with a generator designed to produce a maximum of 125 MWe and

⁹ PEOC for a unit is calculated by dividing the maximum design heat input capacity in Btu/hr of the unit by 3 (reflecting the assumed efficiency of the unit), dividing again by 3,413 (reflecting the assumed heat rate), and dividing by 1,000 (converting to MWe). See 40 CFR part 72, appendix D.

CP&L Boiler #1 meets that specification, the requirements concerning sale of at least 15% of total planned net output capacity and installation of not more than 130% of total planned net output capacity are met. U.S. EPA therefore determines that the unit initially met the requirements for an exemption from the Acid Rain Program under § 72.6(b)(5).

However, after November 15, 1990, the 1984 agreement was amended (in December 1990) and then replaced (in November 2005). Under the Acid Rain Program regulations, a “qualifying power purchase commitment” is defined as a “power purchase commitment” as effective on November 15, 1990 (e.g., a power sales agreement such as the 1984 agreement) “without regard to changes to that commitment” so long as: (1) either the identity of the electricity purchaser remains unchanged or the identity of the steam purchaser and location of the facility remain unchanged, as of the commencement of commercial operation; and (2) the “terms and conditions of the power purchase commitment are not changed in such a way as to allow the costs of compliance with the Acid Rain Program to be shifted to the purchaser.” 40 CFR 72.2 (definition of “qualifying power purchase commitment”). The 1990 amendment and the 2005 replacement of the 1984 agreement must be considered in light of that definition. CP&L Boiler #1 is still a qualifying facility, and, if the unit continues to have a qualifying power purchase commitment, the unit will continue to be exempt under § 72.6(b)(5).

CP&L claims that CP&L Boiler #1 continues to be exempt from the Acid Rain Program under § 72.6(b)(5). CP&L supports this claim with two grounds. First, according to CP&L, once a unit qualifies for such an exemption, the unit retains that exemption permanently, whether or not it continues to have a power purchase commitment, so long as the unit continues to be a qualifying facility. Second, according to CP&L, the replacement of the 1984 agreement covering CP&L Boiler #1 by the 2005 agreement should be treated as having essentially the same effect as an amendment of the 1984 agreement, and the 2005 agreement, treated as an amendment, meets the requirements for continuation of the unit’s exemption under § 72.6(b)(5).

I.

To begin with CP&L’s first ground, CP&L essentially claims that the “qualifying facility” criterion is a continuing requirement for the exemption under § 72.6(b)(5), but that the “qualifying power purchase commitment” criterion § 72.6(b)(5) is a one-time requirement that need only be met on November 15, 1990. As discussed in detail below, EPA rejects this position for several reasons.

According to CP&L, the treatment of “qualifying power purchase commitment” criterion § 72.6(b)(5) as a continuing requirement (rather than a one-time requirement that need only be met on November 15, 1990) is inconsistent with the Clean Air Act, the legislative history, and U.S. EPA’s Acid Rain Program regulations. EPA rejects this argument based on a review of the statute and legislative history, as well as the regulations and regulatory history.

Section 405(g)(6)(A) of the Clean Air Act provides that, unless the Administrator approves a facility as an opt-in unit under Section 410:

the provisions of this title [IV] shall not apply to a “qualifying small power production facility” or “qualifying cogeneration facility” (within the meaning of section 3(17)(C) or 3(18)(B) of the Federal Power Act)...if, as of the date of enactment,

(i) an applicable power sales agreement has been executed; or

(ii) the facility is the subject of a State regulatory authority order requiring an electric utility to enter into a power sales agreement with, purchase capacity from, or (for purposes of establishing terms and conditions of the electric utility’s purchase of power) enter into arbitration concerning, the facility;

(iii) an electric utility has issued a letter of intent or similar instrument committing to purchase power from the facility at a previously offered or lower price and an power sales agreement is executed within a reasonable period of time; or

(iv) the facility has been selected as a winning bidder in a utility competitive bid solicitation. 42 U.S.C. 7651d(g)(6)(A).

Language creating a similar exemption for qualifying facilities under contract as of a specified date originated in an amendment offered by Senator Wirth to S. 1630 on the floor of the Senate on March 22, 1990. S. 1630 was further amended and eventually became the Clean Air Act Amendments of 1990. S. 1630, as amended, exempted, from the sulfur dioxide (SO₂) allowance trading program, any qualifying facility that “has commenced operation as of December 31, 1989” or “entered into a power sales contract prior to December 31, 1989.” Cong. Rec. S3027 (Mar. 22, 1990); Legis. Hist. of CAA Amendments of 1990, S. Prt.103-38, 103d Cong, 1st Sess., Vol. IV at 6294. As Senator Wirth explained in introducing his amendment to S. 1630,

This amendment would classify IPPs with contracts or accepted competitive bids as of December 31, 1989, to be classified as an existing unit...Grandfathering these units is fair because these units are under contract or have accepted price bids. Any [sic] they cannot pass on extra costs of allowances the way a regulated utility can. Cong. Rec. S3027-28; S. Prt.103-38, Vol. IV at 6296.

A similar exemption for qualifying facilities was introduced in an amendment offered by Representative Sharp to H.R. 3030 in committee on April 5, 1990 and was included in the House bill, H.R. 3030. H.R. 3030 exempted, from the SO₂ allowance trading program, qualifying facilities “that sell power pursuant to a long-term contract executed on or before December 31, 1989” or that have an order on or before that date requiring a utility to execute such a contract. Report of Committee on Energy and Commerce, U.S. House of Representatives on H.R. 3030, H. Rept. 101-490, 101st Cong., 2d Sess. at 370 (May 17, 1990); S. Prt.103-38, Vol. II at 3394.¹⁰

¹⁰ CP&L notes that the House report states that this exemption conforms with EPA’s calculation of the cap on utility sources and of expected industrial source emissions because “[a]lmost all” of the sources covered by this exemption “were included in EPA’s industrial inventory, and thus are not counted as part of the 8.9 million ton cap that applies to the utility sector.” H. Rept. 101-490 at 370; S. Prt.103-38, Vol. II at 3394. According to CP&L, terminating the qualifying-facilities exemption when the qualifying power purchase commitment terminates would be inconsistent

CAA section 405(g)(5) is ambiguous in that it does not state whether a qualifying facility that was subject to a power sales agreement (or other arrangement described in section 405(g)(6)(A) that limits the electricity price that the facility may charge) as of the date of enactment of title IV (November 15, 1990) continues to be exempt once the facility is no longer subject to that power sales agreement. However, since -- as explained by Senator Wirth -- the provision was intended to address the fact that such qualifying facilities were unable to pass through the costs of allowances (or emission controls) under the Acid Rain Program, EPA maintains that it is reasonable to interpret the statutory language to make the effectiveness of such a power sales agreement a continuing requirement and to end the exemption once the qualifying facility can pass through costs to the same extent as other electric generating units that are not subject to such an agreement.¹¹

EPA implemented this interpretation in § 72.6 of the Acid Rain Program regulations. When initially promulgated on January 11, 1993, § 72.6 addressed some, but not all, of the criteria for determining whether a unit was subject to the Acid Rain Program. For example,

with the exclusion, from the utility emissions inventory, of facilities initially meeting that exemption. However, the applicability of title IV is not rigidly tied to, or determined by, EPA's utility and industrial inventories at the time of title IV's enactment. On the contrary, units that were in EPA's industrial inventory and were not initially subject to title IV (e.g., because they are exempt simple combustion turbines, cogeneration facilities, qualifying facilities, independent power production facilities, or solid waste incineration units) can subsequently become subject to title IV. See 40 CFR § 72.6(a)(3)(ii) through (vii). For example, a unit exempt under section 405(g)(6)(A) that later no longer meets the requirements to be a "qualifying facility" (e.g., becomes owned more than 50% by a public utility) loses its exemption and becomes an affected unit. As a further example, under CAA section 408, units in EPA's industrial inventory can become affected units by opting into the Acid Rain Program.

¹¹ CP&L argues that interpreting section 405(g)(6)(A) to provide for termination of the qualifying-facilities exemption when the qualifying power purchase commitment terminates is inconsistent with Congressional intent. CP&L claims that a unit initially covered by this exemption would have been allocated allowances under title IV but received no allocation because of the exemption. Allegedly, the loss of the exemption "substantially harms" the unit because the unit must then purchase allowances. The argument that a provision intended to "benefit" such a unit cannot be interpreted to "harm" such a unit ignores the fact that the unit has been exempt from, and avoided all costs associated with, the Acid Rain Program for a significant period of time and that, once the exemption terminates, the unit is treated like any new unit, which also must purchase allowances to cover its SO₂ emissions. In the instant case, CP&L's unit would have otherwise been required to begin monitoring and reporting emissions in 1995 (see 40 CFR 75.4(a)(3)) and would have been required to surrender allowances covering emissions since 2000 (see 40 CFR 72.9(c)(3)(iii)). In short, under EPA's interpretation, such units are benefited by the section 405(g)(6)(A) exemption, although the benefit is not necessarily for the entire life of the unit.

certain subparagraphs of the section were reserved for future rulemakings to address the exemption from the Acid Rain Program under CAA section 405(g)(6)(A) for qualifying facilities.

On March 23, 1993, EPA finalized provisions to implement that exemption. In the preamble of the March 23, 1993 rule, EPA cited the above-discussed statement by Senator Wirth and explained that "the basic requirement of [section 405(g)(6)] is that the source has already committed to generate electricity at a fixed price and is unable to pass through to the purchaser the costs of compliance with title IV." 58 FR 15634, 15638 (1993). Noting that commenters in the rulemaking had requested clarification of what changes regarding a facility would cause the facility to become an affected unit, EPA further explained that:

EPA's primary concern in developing factors that may change or not change is that there be a commonality between the facility exempted and the facility as installed. Based on the legislative history, EPA believes that changes that would allow compliance costs to be passed through should result in forfeiture of the exemption...EPA believes that the key principle is the continuity of the agreement. 58 FR 15640.

In the preamble, EPA listed some specific factors that could not change without affecting the continuity of the power purchase agreement, e.g., with regard to electricity sales, the identity of the electricity purchaser as of the commencement of commercial operation and, with regard to steam sales, the identity of the steam purchaser and location of the facility as of the commencement of commercial operation. EPA also listed in the preamble some specific factors that could change, i.e., the amount of electricity generation capacity (subject to a limit on the excess of net installed capacity over net planned capacity), the location or name of the source, the identity of the project owners or developers (subject to a limit on ownership by public utilities), the configuration and operation of the source, and the commencement of commercial operation. Further, EPA added that:

In general, terms and conditions of the power purchase commitment may change, so long as such changes do not affect the ability of the facility to pass through the costs of compliance with the Acid Rain Program. Because of the wide variety of potential changes that may be made, EPA is choosing not to list permissible changes to projects in the regulation. Id.

In summary, EPA explained that a power purchase agreement initially qualifying a facility for the exemption under section 405(g)(6)(A) could change in ways that would result in loss of the exemption under that section from the Acid Rain Program. Further, EPA did not limit the changes that could have that result to those occurring on or before November 15, 1990 (the enactment date for title IV). On the contrary, EPA stressed that the "continuity" of the power purchase agreement was crucial and did not state that the "continuity" requirement discontinues after November 15, 1990. 58 FR 15640. In short, continuation of the exemption depends on continuation after November 15, 1990 of the factors (e.g., the inability to pass through Acid Rain Program compliance costs on November 15, 1990) that must be unchanged.

EPA's adoption of a continuity requirement is reflected in the text of § 72.6(a) and (b), as well as in the preamble of the March 23, 1993 rule. Under § 72.6(a), several categories of units are affected units, which are subject to the Acid Rain Program. Under § 72.6(a)(1) and (2), any unit listed in table 1 or 2 of § 73.10, and "any other existing unit" (i.e., a unit that commenced commercial operation before November 15, 1990 and on or after that date serves a generator with a nameplate capacity exceeding 25 MWe) "except a unit under paragraph (b)" of § 72.6, is an affected unit. 40 CFR 72.6(a)(2) (emphasis added). Under § 72.6(a)(3) and (3)(i), any "new unit" (i.e., a unit commencing commercial operation on or after November 15, 1990) "except a unit under paragraph (b)" of § 72.6 is also an affected unit. 40 CFR 72.6(a)(3) and (a)(3)(i) (emphasis added).

In § 72.6(a)(3)(ii) through (vii), EPA listed additional categories of units that are affected units, which categories describe units that had, but lost for a specified reason, an exemption under § 72.6(b). For example, § 72.6(a)(3)(v) lists, as an affected unit, a qualifying facility exempt under § 72.6(b)(5) that after November 15, 1990 fails to qualify as a "qualifying facility." The list in § 72.6(a)(3)(ii) through (vii) does not include a reference to qualifying facilities under § 72.6(b)(5) that after November 15, 1990 do not have qualifying power purchase commitments. However, the above-cited language in § 72.6(a)(2), (a)(3), and (a)(3)(i) -- stating that any existing or new unit not covered by § 72.6 (b) is an affected unit -- supports EPA's interpretation that the list in § 72.6(a)(3)(ii) through (iv) of categories of units that lost their § 72.6(b) exemption is not an exclusive list.¹² That language provides that any unit that loses its exemption under § 72.6(b) becomes an affected under § 72.6(a)(2) or (3). For example, CP&L Boiler #1, having commenced commercial operation before November 15, 1990, is an existing unit and, if it loses its exemption under § 72.6(b), becomes an affected unit under § 72.6(a)(2).

Section 72.6(b) lists all the categories of existing or new units that are exempt from all Acid Rain Program requirements. (Two additional categories of units, i.e., units under the new units exemption in § 72.7 and units under the retired units exemption in § 72.8, are exempt from most, but not all, of such requirements.) Section 72.6(b)(5) describes the requirements for the qualifying-facilities exemption under CAA section 405(g)(6)(A) as follows:

(5) A qualifying facility that:

- (i) Has, as of November 15, 1990, one or more qualifying power purchase commitments to sell at least 15 percent of this total planned net output capacity; and
- (ii) Consists of one or more units designated by the owner or operator with total installed output capacity not exceeding 130 percent of the total planned net output capacity. If the emission rates of the units are not the same, the Administrator may exercise discretion to designate which units are exempt. 40 CFR 72.6(b)(5).

¹² EPA therefore rejects CP&L's argument that the absence in the list in § 72.6(a)(3) of qualifying facilities losing their qualifying power purchase commitments after November 15, 1990 means that the qualifying-power-purchase-commitment requirement is not a continuing requirement.

In § 72.2, EPA defined the operative terms of the exemption described in § 72.7(b)(5). In particular, “power purchase commitment” is defined as including, among other things, a “power sales agreement”, which in turn is defined as a “legally binding agreement between a [qualifying facility]...and a regulated electric utility that establishes the terms and conditions for the sale of power from the facility to the utility.” 40 CFR 72.2 (definition of “power purchase commitment”).¹³ Further, “qualifying power purchase commitment” is defined as a “power purchase agreement” that is:

in effect as of November 15, 1990 without regard to changes to that commitment so long as:

- (1) The identity of the electric output purchaser; or
- (2) The identity of the steam purchaser and the location of the facility, remain unchanged as of the date the facility commences commercial operation; and
- (3) The terms and conditions of the power purchase commitment are not changed in such a way as to allow the costs of compliance with the Acid Rain Program to be shifted to the purchaser. 40 CFR 72.2 (definition of “qualifying power purchase agreement”).

Consistent with EPA’s interpretation of CAA section 405(g)(6)(A), this definition imposes limitations on the changes to the power purchase agreement in order ensure the continuity of the power purchase agreement and does not state that these limitations apply only before and on November 15, 1990 and have no applicability after that date. Indeed, under paragraphs (1) and (2) of the definition, the factors that cannot be changed are the status of the facility with regard to the electricity or steam purchaser and the location of the project as of the facility’s date of commencement of commercial operation, which could be a date after November 15, 1990. Moreover, under paragraph (3) of the definition, it is the terms and conditions of the facility’s power purchase commitment “as of November 15, 1990” preventing pass-through of Acid Rain Program compliance costs that cannot be “changed” so as to allow such pass-through. Under CP&L’s interpretation, paragraph (3) of the “qualifying power purchase commitment” definition would only bar cost-shifting changes occurring before November 15, 1990, even though the introductory text of the definition addresses only the terms and conditions “in effect as of November 15, 1990” and so makes any changes before that date irrelevant. In summary, all the limitations on changes set forth in the “qualifying power purchase commitment” definition are reasonably interpreted as continuing requirements, and an alternative interpretation that the limitations do not continue after November 15, 1990 is inconsistent with paragraphs (1) and (2) of the definition and would make paragraph (3) of the definition superfluous.

Finally, EPA’s adoption and application of this interpretation of the qualifying facilities exemption have been consistent and are long-standing. Under § 72.6(c), a certifying official for a unit owner or operator may petition the Administrator for a determination of whether the unit is an affected unit under § 72.6(a) and (b). EPA has issued several applicability determinations applying the exemption criteria in § 72.6(b)(5), in which EPA consistently treated the limitations

¹³ While not relevant to the instant case, the “power sale agreement” definition also includes such a legally binding agreement between certain other entities, e.g., independent power producers and a regulated electric utility.

on changes in the power purchase commitment as continuing after November 15, 1990. See, e.g., Carthage and South Glens Falls at p. 2-3 (July 5, 2000) (holding that facilities that lost power purchase contracts in 1998 are no longer exempt under § 72.6(b)(5)); Beaver Falls, Niagara Falls, and Syracuse at p. 2 and 6-7 and n.2 (June 4, 2001) (holding that facilities that lost power purchase contracts in 1997 are no longer exempt under § 72.6(b)(5)); Pepperell Power Plant at 2-3 and n.3 (November 13, 2001) (holding that facility that lost power purchase contract and qualifying facility status in 1995 is no longer exempt under § 72.6(b)(5)); Lowell Power Plant at 2-3 and n.3 (October 4, 2002) (holding that facility that lost power purchase contract and qualifying facility status in 1999 is no longer exempt under § 72.6(b)(5)); and UAE Mecklenburg Cogeneration LP at 3 (applying limitation on changes in power purchase commitment to changes after November 15, 1990) (May 26, 2003). See also Rensselaer at 5 (May 26, 2003) (applying limitation on changes in power purchase commitment to changes after November 15, 1990 and holding that facility that lost power purchase contract in 2001 is no longer exempt under § 72.6(b)(6), an exemption for independent power producers that is analogous to § 72.6(b)(5)). EPA concludes that its interpretation that the qualifying-facilities exemption includes a continuing requirement to have a qualifying power purchase commitment is a reasonable interpretation of CAA section 405(g)(6)(A) and § 72.6(b)(5) and is consistent with the other relevant Acid Rain Program regulations and long-standing EPA precedent.

EPA also notes that this interpretation is consistent with EPA's interpretation of requirements for other exemptions under § 72.6(b) as being continuing requirements. See 58 FR 15637-38 (explaining that requirement to meet limitation on electricity sales to qualify for cogeneration exemption under § 72.6(b)(4) is a continuing requirement).

II.

Having rejected CP&L's argument that the qualifying-power-purchase-commitment requirement need only be met on November 15, 1990 and not thereafter, EPA considered whether, in light of the changes to CP&L's original commitment (i.e., the 1984 agreement), the CP&L facility continues to have a qualifying power purchase commitment. The 1984 agreement was first changed in 1990. The 1990 amendment increased the energy payments through March 1992 from those under 2005 agreement, but with an equivalent decrease in the capacity payments starting in April 1992. Moreover, the increased energy payments never were implemented because they were contingent on achievement of an on-peak energy factor that the facility did not achieve. Consequently, even with the 1990 amendment, CP&L Boiler #1 continued to have a qualifying power purchase commitment.

After the 1990 amendment and before the expiration of the 1984 agreement, CP&L began negotiating for a replacement power purchase agreement and, before the 1984 agreement's expiration, entered into a replacement agreement (i.e., the 2005 agreement). CP&L requests that U.S. EPA find that, even with the replacement of the 1984 agreement by the 2005 agreement, CP&L Boiler #1 still has a qualifying power purchase commitment and so is still exempt from the Acid Rain Program under § 72.6(b)(5). For the following reasons, U.S. EPA agrees that, under the unique circumstances of this case, the 2005 agreement should be treated as making

changes in the 1984 agreement that fall within the bounds of changes allowed under the definition of “qualifying power purchase commitment.”

As discussed above, a power purchase commitment that is in effect as of November 15, 1990, but that is subsequently changed, continues to be a “qualifying power purchase commitment” if certain criteria are met. First, either the identity of the electricity purchaser or the identity of the steam purchaser and location of the facility, as of the commencement of commercial operation, must remain unchanged. Second, terms and conditions must not be changed in a way that allows the costs of compliance with the Acid Rain Program to be shifted to the purchaser.

A question that underlies the application of these criteria in CP&L’s case is whether a distinction should be made between an agreement that amends the agreement in place as of November 15, 1990 (i.e., 1984 agreement) and one that instead replaces the 1984 agreement. EPA maintains that no such distinction should be made in the specific circumstances of this case.

First, the 1984 agreement governed the actual construction and operation of the CP&L facility, which was constructed and operated, and charged electricity rates, under that agreement. In short, the CP&L facility had, as of November 15, 1990, a “power purchase commitment” (40 CFR 72.2 (defining “power purchased commitment”) and thus had a “qualifying power purchase commitment” (40 CFR 72.2 (defining “qualifying power purchase commitment” initially as the commitment in place on November 15, 1990)). Second, the 1984 agreement expired on October 31, 2005, and the 2005 agreement became effective on August 23, 2005. After October 2005, the CP&L facility stopped producing electricity until December 2005, when sales under the 2005 Agreement began. Thus, there was no gap between the two agreements and no period when the electricity was produced for sale outside of the agreements.¹⁴ Third, like the 1984 agreement, the 2005 agreement sets the capacity and energy charges electricity purchases from the CP&L facility, rather than allowing for capacity and energy to be sold on an on-going basis at current market prices (or, to the extent applicable, at prices as currently set by the State public utility commission). Consequently, the CP&L facility has never produced electricity that could be sold on an on-going basis at current market prices or current regulated prices and has not had the same ability to pass through costs to the purchaser as a unit lacking a power purchase commitment. Compare Rensselaer at 3-4 and 5 (describing facility’s ability to sell electricity on an on-going basis at current market price through NYISO and holding that facility therefore has ability to shift Acid Rain Program compliance costs to purchaser). In summary, since the CP&L facility had in place on November 15, 1990 a qualifying power purchase commitment (the 1984 agreement) with terms and conditions setting the price for the facility’s actual electricity sales and the facility stopped operating when the 1984 agreement expired and restarted under the 2005 agreement with new terms and conditions setting the electricity price, there seems to be no substantive difference between changing the 1984 agreement through an amendment that revises the terms and

¹⁴ These factors distinguish this case from Las Vegas Cogeneration at 6-7 (Feb. 6, 2008), where the facility involved was not constructed or operated under the original agreement in effect on November 15, 1990 and a subsequent agreement under which the unit was built and operated was signed over a year after the original agreement expired.

conditions and changing the 1984 agreement through replacement by the 2005 agreement that makes such revisions.

In support of this view, EPA notes that the definition of “qualifying power purchase commitment” allows for extensive, albeit not unlimited, changes to the original commitment. As in this case, the electricity purchaser can be changed (here the change is from FP&L to Progress Energy) so long as the steam purchaser and facility location do not change (here they have not changed). Moreover, under the definition, the scope of terms and conditions that are changed and the degree of these changes are limited only by the requirement that these changes must not allow (i.e., provide an opportunity) for pass-through, to the electricity purchase, of costs of complying with the Acid Rain Program. If these substantive criteria are met, EPA believes that whether the changes to the original commitment are styled as an “amendment” of the commitment or a “replacement” of the commitment should not be determinative. Indeed, since the language of the “qualifying power purchase commitment” definition allows the original commitment to be completely changed so long as the limits on electricity/steam purchaser changes and cost pass-through are observed, EPA believes that the language of the definition is flexible enough to bear EPA’s approach concerning replacement agreements.

Having concluded that the fact that CP&L replaced its 1984 agreement is not alone determinative of whether the CP&L facility still has a qualifying power purchase commitment, EPA applied the limit on electricity/steam purchaser changes (which, as discussed below, was met) and the limit on cost pass-through (which is discussed below) to determine whether the facility continues to have such a commitment and therefore to be exempt from the Acid Rain Program under § 72.6(b)(5).

As discussed above, the 1984 agreement set price formulas for the capacity and energy provided by the CP&L facility for July 1988 through October 2005, and the 2005 agreement sets different prices for such capacity and energy for November 2005 through December 2010. In evaluating these price changes, EPA considered how gross revenues from electricity sales under the 2005 agreement compare with gross revenues from electricity sales under the 1984 agreement. First, CP&L presented a comparison of the annual gross revenues that the facility realized under the 1984 agreement during January 1, 2002-October 31, 2005 and the gross revenues that the facility would have realized under the 2005 agreement if the latter agreement had been in effect during that period. This analysis showed that the 2005 agreement would have resulted in annual gross revenues ranging from 32% to 50%, and averaging about 40%, lower than under the 1984 agreement.¹⁵

In order to look at a more recent period reflecting operation under the 2005 agreement, EPA also considered how gross revenues from electricity sales under the 1984 agreement and the 2005 agreement would have compared for the first half of 2006, when the CP&L facility produced and sold 465,688 MWhr (which, according to CP&L, reflects operation at greater than

¹⁵ See December 7, 2005 supplemental information, Attachment 2.

85% of available capacity taking into account scheduled outages).¹⁶ EPA's analysis estimating the gross revenues that the CP&L facility would have realized under the two agreements during that period showed that the 2005 agreement would have resulted in about 34% lower gross revenues than the 1984 agreement.¹⁷ See Attachment 1.

EPA also looked at the effect, on this gross-revenues comparison, of possible future increases in sales under both agreements and of future increases in the energy charge under the 2005 agreement. Specifically, in order to account for the possibility of increased electricity sales, EPA also estimated what gross revenues would be under the two agreements if electricity sales for the first half of 2006 were assumed to be larger and reflect an 85% capacity factor assuming

¹⁶ See May 1, 2006, May 18, 2006 and August 1, 2006 supplemental information (2006 monthly invoices and 2006 pro forma). For purposes of comparing gross revenues under the two agreements, EPA made certain simplifying assumptions that do not significantly affect the comparison, e.g., that Committed Capacity (XX MWe) and amount of electricity sold for the first half of 2006 would be the same under both agreements. Treating the Committed Capacity under the 1984 agreement as 136 MWe, as it was for February 2003-October 2005, would have increased estimated gross revenues under the 1984 agreement by less than 2%. Taking account of the 3% line loss that CP&L had to absorb under the 1984 agreement, but not under the 2005 agreement, would have reduced estimated gross revenues under the 1984 agreement by less than 1%. Because the net effect would have been to increase gross revenues under the 1984 agreement, EPA's estimates of gross revenues under that agreement are conservative (i.e., on the low side). See also n.17.

¹⁷ In estimating gross revenues under the 1984 agreement if the agreement had applied in 2006, EPA used the average monthly capacity and energy charges under the agreement for 2000-2005. According to information provided by CP&L, the monthly capacity charge under the 1984 agreement averaged \$33.60 per KW of Committed Capacity in 2002-2005. (The monthly per KW charges were calculated by dividing each monthly capacity payment by the applicable Committed Capacity (in MWe) multiplied by 1,000 KW per MWe and dividing the result by the number of months per year.) See May 1, 2006 supplemental information (original PPA, capacity payment). EPA notes that this did not take into account increased capacity charges that might have applied in 2006 under the 1984 agreement, e.g., because of the facility's capacity factor exceeding 82.5%. Further, according to information provided by CP&L, the monthly energy charge under the 1984 agreement averaged \$16.86 per MWhr in 2002-2005. (The monthly per MWhr charges were calculated by dividing the monthly energy payment by the average monthly MWhr produced.) See id. (original PPA vs. replacement PPA). EPA notes that the monthly energy charge per MWhr (which, under the 1984 agreement, reflected actual fuel costs at a FP&L plant and FP&L's as-available avoided energy cost) was generally increasing during 2002-2005 and that there is no basis for assuming that this trend would reverse after 2005. See, e.g., FP&L's Thirty-Third Revised Sheet No. 10.101 (effective January 7, 2008) (projecting generally increasing as-available avoided energy cost during October 1, 2007-September 30, 2009). Consequently, use of the 2002-2005 monthly average capacity and energy charges in EPA's analysis resulted in conservative estimates of gross revenues under the 1984 agreement.

no scheduled outages, i.e., were increased to 990,318 MWhr (i.e., 133 MW multiplied by 8,760 hours/year multiplied by 0.85) per year or 495,159 MWhr for six months. Under this assumed level of operation, the 2005 agreement would have resulted in about 32% lower gross revenues than the 1984 agreement (without taking into account increased capacity charges under the 1984 agreement because of the facility's capacity factor exceeding 82.5%). Further, even taking into account the fact that the 2005 agreement provides for about a XX% increase in the energy charge for each of the four years during 2007 through 2010, total gross revenues under the 2005 agreement would still be significantly lower than under the 1984 agreement.¹⁸

Because gross revenues, i.e., total payments by the purchaser, are highly likely to be significantly lower under the 2005 agreement than under the 1984 agreement, it is difficult to see how the provisions of the 2005 agreement could provide the opportunity for increased pass-through of any costs to the purchaser.¹⁹ In these circumstances, EPA finds that the 2005 agreement does not change the terms and conditions of the 1984 agreement in a way that allows Acid Rain Program compliance costs to be passed through to the electricity purchaser. EPA therefore concludes that the 2005 agreement is a qualifying power purchase commitment and that CP&L Boiler #1 continues to be exempt from the Acid Rain Program under § 72.6(b)(5) through the period ending December 21, 2007.

If CP&L Boiler #1 loses its exemption in the future, it will have to comply with all applicable requirements under the Acid Rain Program, including the requirement to apply for and receive an Acid Rain Permit (under Part 72), to monitor and report sulfur dioxide, nitrogen oxide, and carbon dioxide emissions and heat input (under Part 75) within the earlier of 90 unit operating days or 180 calendar days of the loss of the exemption under 40 CFR 72.6(b)(5),²⁰ and to hold allowances to cover sulfur dioxide emissions (under Parts 72 and 73) starting as of the monitoring and reporting deadline.

¹⁸ For example, assuming, for the first half of 2006, a level of operation at the 85% capacity factor and an increase in the energy charge of 4% (i.e., \$XX) under the 2005 agreement, gross revenues under the agreement would increase to \$XX, which would still be about 30% lower than under the 1984 agreement for the same period and under the same assumed level of operation.


¹⁹ Although CP&L provided information showing that some of the facility's underlying costs (e.g., rent and coal costs) have changed significantly since 2005, these cost changes do not reflect any assumption of costs by the electricity purchaser, Progress Energy, and so do not evidence any shifting of costs to the purchaser. See May 1, 2006, May 18, 2006, June 29, 2006, and August 1, 2006 supplemental information (concerning rent and coal costs).

²⁰ See 40 CFR 75.4(c). EPA notes that it inadvertently misstated the deadline for monitor certification in some prior applicability determination under § 72.6(c) as the "later" of these dates. See Rensselaer at 5 (May 26, 2003), Mecklenburg at 4 (November 25, 2003), and Trigen at 6 (May 13, 2004).

III.

This determination relies, and is contingent, on the accuracy and completeness of the representations²¹ in CP&L's February 23, 2005 petition for an applicability determination and the supplemental information provided by CP&L²² and is appealable under 40 CFR part 78. The applicable regulations require you to send copies of this letter to each owner or operator of CP&L Boiler #1 (40 CFR 72.6(c)(1)). If you have further questions regarding the Acid Rain Program, please contact Robert Miller (at (202) 343-9077) of EPA's Clean Air Markets Division.

Sincerely,



Sam Napolitano, Director
Clean Air Markets Division

cc. Dave McNeal, EPA Region IV
Errin Pichard, Florida DEP

²¹ Obviously, this refers to both the accuracy and completeness of the representations when they were originally made and their continued accuracy and completeness despite the delay in the issuance of this applicability determination.

²² CP&L provided the following supplemental information: September 10, 1984 power purchase agreement and amendment (1/18/05); responses to questions (6/28/05); August 23, 2005 power purchase agreement and spreadsheet comparing gross revenues under 1984 and 2005 agreements (12/7/05); information on spreadsheets comparing gross revenues under 1984 and 2005 agreements and electricity sales invoices (5/1/06); income statements and electricity sales invoice (5/18/06); information on December 15, 1988 lease agreement and related agreements and December 21, 2005 coal supply agreement (6/29/06); November 29, 2005 lease agreement, electricity sales invoices, and fuel cost information (8/1/06); and information on November 29, 2005 lease agreement (9/7/06).

