

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF AIR AND RADIATION

Catherine C. Powell Sr. Vice-President Cleco Corporation 2030 Donahue Ferry Road P.O. Box 5000 Pineville, LA 71361-5000

Dear Ms. Powell:

This letter represents U.S. EPA's formal determination of applicability under 40 CFR 72.6(c) of the Acid Rain Program for Central Louisiana Electric Company ("Cleco") and Columbian Chemicals Corporation ("CCC") proposed cogeneration project ("the project") near Franklin, Louisiana. This formal determination is made in response to your letter of September 23, 1998, requesting that a formal determination be made by U.S. EPA under 40 CFR 72.6(c).

According to the descriptions in your letter and supporting information, CCC currently owns and operates the North Bend carbon black plant ("carbon black plant"), in which a tail gas incinerator is operated as a means of controlling hazardous air pollutants present in tail gas exhausted from the production of carbon black. CCC and Cleco are considering a joint venture in which the waste heat from the incinerator will be converted by a heat recovery steam generator (HRSG) into steam, which will in turn be used to produce electricity at a steam turbine with a nameplate capacity of about 38 MWe. The HRSG, steam turbine, and related equipment such as ductwork and transmission lines (also referred to as "the project") will be wholly owned by CCC and Cleco and held, for financial and tax purposes, through a limited liability company.

It is EPA's understanding that it is Cleco's intention, and the Agency will assume for purposes of this letter, that the limited liability company will have the following characteristics: CCC and Cleco will be the only members or owners of the limited liability company; termination of one member's membership will cause dissolution of the company unless that member otherwise consents; and the company will be taxed for federal income tax purposes as a partnership (i.e., the company's profit and loss will flow through to the members without federal income taxation at

the company level). In addition, EPA understands and assumes that the sole purpose of the limited liability company will be to own and operate the project, and the project will be its only asset. Based on these factors, EPA finds that CCC and Cleco will control the project, that this is not altered by the form (i.e., the limited liability company) through which they will exert control, and that, for purposes of this applicability determination, CCC and Cleco will be the owners of the project and the electrical output capacity of and electricity generated by the project.

EPA also understands and assumes the following with regard to their ownership. CCC will own 35-40% of the company and the project and will finance and be entitled to 13 MWe of the project's electrical output capacity for use at the carbon black plant. Cleco will own the remaining 60-65% of the company and the project and will finance and be entitled to the project's remaining electrical output capacity for transmission to the grid for sale. Although CCC and Cleco have not yet determined exactly what the capacity of the steam turbine will be, CCC's ownership share will equal the percentage that its 13 MWe entitlement is of the project's electrical output capacity. Further, CCC and Cleco will each own a percentage of the electricity generated by the project at any time equal to their respective percentage ownership shares in the project.

The tail gas incinerator combusts natural gas and the residue resulting from the production of carbon black, a byproduct of low grade oil. The tail gas incinerator is therefore a unit as defined under 40 CFR 72.2 ("fossil-fuel fired combustion device"). Further, because the heat generated by the tail gas incinerator removes pollutants from the tail gas stream and that heat will in turn be used to produce electricity, the tail gas incinerator (along with the HRSG and the steam turbine) will also be a cogeneration unit. The tail gas incinerator, HRSG, and steam turbine will "produce electric energy and forms of useful thermal energy...for industrial, commercial, heating or cooling purposes [in this case, heat for removal of pollutants from production of an industrial product], through the sequential use of energy." 40 CFR 72.2 ("cogeneration unit"). The use of the energy is "sequential," as that term is applied in the definition of "cogeneration unit," since some of the heat used first to remove the pollutants from the tail gas stream is then used to produce steam that is in turn used to produce electricity.

Under 40 CFR 72.6(b)(4)(ii), a cogeneration unit for which construction commenced after November 15, 1990 that supplies an annual average of no more than 219,000 MWe-hours of actual electric output <u>or</u> no more than one-third of its potential electrical output capacity to a utility power distribution system on an annual basis is not a utility unit and is therefore not considered an affected unit under the Acid Rain Program.

<sup>&</sup>lt;sup>1</sup> Obviously, EPA makes this assumption concerning federal income taxation for purposes of this applicability determination and is not making any finding that the limited liability company or the members will actually qualify for such tax treatment.

Construction is expected to commence in November, 1999 to add, to the existing tail gas incinerator, the new equipment in the project. The unit will have a potential electrical output capacity (PEOC) of 38.3 MWe. <sup>2</sup> Since one-third of the unit's PEOC (111,836 MWe-hrs <sup>3</sup>) is less than 219,000 MWe-hrs, under 40 CFR 72.6(b)(4)(ii) the unit may provide up to 219,000 MWe-hrs of electrical output capacity for sale to a utility power distribution system on an annual basis and not be considered an affected unit under the Acid Rain Program. Conversely, if, in the first year of operation, or for any three year calendar period on an annual basis thereafter, the unit provides more than 219,000 MWe-hrs of actual electrical output to a utility power distribution system for sale, then the unit will become an affected unit. The unit will then have to comply with all applicable requirements under the Acid Rain Program. This includes the requirements to apply for and receive an acid rain permit (under 40 CFR part 72), to hold allowances to cover sulfur dioxide emissions (under 40 CFR parts 72 and 73), and to monitor and report emissions (under 40 CFR part 75).

Only electricity <u>sales</u> are counted against the 219,000 MWe-hr ceiling for the unit. As discussed above, CCC and Cleco will be the owners of the limited liability company and the project and will each own a percentage of the electricity generated by the project at any time equal to their respective percentage ownership shares in the company and the project. Under these circumstances, project-generated electricity that is within CCC's percentage share and transmitted to and used by CCC at its carbon black plant will be considered self-generation by CCC, not sales. If at any time CCC takes more electricity from the project than its percentage share, the difference between the amount taken and that percentage share constitutes sales. Further, any amount of electricity taken by Cleco from the project is for transmission to the grid for sales and so constitutes sales.

EPA's applicability determination in this letter is based on the representations made in your letters of June 8, July 16, and September 23, 1998 and in your submission in March 1999 concerning limited liability companies and on conversations on January 25 and 28 and April 2, 1999 with Robbie LaBorde, Director of Environmental Projects for Cleco, or William Bumpers, an attorney representing Cleco. EPA makes this determination in reliance on the accuracy and completeness of those representations. The determination is appealable under 40 CFR part 78. The applicable regulations require you to send copies of this letter to each owner or operator of

<sup>&</sup>lt;sup>2</sup> PEOC for the combined cycle unit was calculated by adding the maximum design heat input capacities of 450.6 x 10<sup>6</sup> Btu/hr. for the steam turbine, multiplying by 29% (the efficiency of the unit as asserted by Cleco), dividing by 3413 and again by 1000 to arrive at figure above in MWe. See 40 CFR part 72 appendix D and February 1994 U.S. EPA guidance "Do the Acid Rain SO<sub>2</sub> Regulations Apply to You" for explanation of how to calculate PEOC.

<sup>&</sup>lt;sup>3</sup> This figure is calculated by multiplying the PEOC by 8760, the number of hours in a year, and then dividing by 3. <u>See</u> 40 CFR 72.6(b)(4)(ii).

the project (40 CFR 72.6(c)(1)). If you have further questions regarding the Acid Rain Program, please contact Robert Miller at (202) 564-9077.

Sincerely,

/s/ (April 16, 1999)

Brian J. McLean, Director Acid Rain Division

cc: Cathy Lu, State of Louisiana Joe Winkler, U.S. EPA Region 6