UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
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ATLANTA, GEORGIA 30303-8960

May 26, 2011

Ms. Stephanie Strength
Project Manager
USDA, Rural Development, Utilities Programs
1400 Independent Avenue SW, Rm 2244 mail Stop 1571
Washington, D.C. 20250-1571

Subject: 100 MW Proposed Biomass Power Plant Draft Environmental Impact Statement (DEIS).

Dear Ms Strength:

Pursuant to Section 309 of the Clean Air Act (CAA) and Section 102(2)(C) of the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA) Region 4 has reviewed the U. S. Department of Agriculture's Draft Environmental Impact Statement (draft EIS) for the proposed 100-megawatt (MW) biomass plant as associated facilities in Warren County, Georgia. Under Section 309 of the CAA, EPA is responsible for reviewing and commenting on major federal actions significantly affecting the quality of the human environment. In addition, EPA is a cooperating agency under NEPA for this project. Oglethorpe Power Corporation will need to apply for a National Pollutant Discharge Elimination System (NPDES) and Clean Air Act (CAA) approvals to construct and operate this facility. EPA's review of the draft EIS also includes comments pursuant to EPA's regulatory roles.

Oglethorpe Power Corporation (Oglethorpe) has applied for financing assistance from RUS to construct a 100-megawatt (MW) net biomass-fired electric generating plant and related facilities at a site in Warren County, Georgia. The purpose of the Proposal is to provide a reliable, long-term supply of renewable and sustainable energy at a reasonable cost to meet part of Oglethorpe's contractual obligations to provide electric energy to its Members. This EIS considers other alternatives to meet the identified purpose and need for action. Alternatives were evaluated in terms of cost-effectiveness, technical feasibility, and environmental soundness. Alternatives evaluated in detail in the EIS include the Proposal, a similar facility at a different site (Alternate) and the no action alternative. The EIS discloses potential adverse impacts of the Proposal including those on air, soils, surface water, farmland, Waters of the United States, wildlife, and noise. This EIS identifies measures incorporated into the Proposal to minimize these impacts and considers additional potential mitigation measures that would further reduce adverse impacts.

It is EPA's understanding that Oglethorpe had initially applied for financing assistance for two plants at two different sites in Georgia, one in Warren County and one in Appling County.

Currently Oglethorpe has specific plans to proceed with only one plant (the Proposal), while the other plant at the Appling site has been deferred for the foreseeable future. In this EIS the Appling site is evaluated as an alternative to the Proposal (Alternate). This draft EIS discusses Oglethorpe's Proposal and alternatives and analyzes the potential effects of the Proposal and the Alternate on the environment. As an electric generation cooperative, Oglethorpe, headquartered in Tucker, Georgia, is a non-profit utility owned by its members. As such, it provides wholesale electricity and related services to 39 Electric Member Corporations (EMCs), which collectively provide electricity to more than 4.1 million Georgia citizens. Oglethorpe's EMCs serve most of Georgia outside of urban areas. After considering various ways to meet part of its future electricity needs with renewable energy, Oglethorpe identified the construction of a new biomass-fired unit in Warren County as its best course of action.

The proposed Biomass Plant will receive the fuel by truck mainly as chipped wood. The chipped wood is then ground to a finer size and conveyed to the boiler building where it is burned to heat water to produce steam. The steam is used to drive a turbine inside the turbine building, which connected to a generator. The electricity produced by the generator is sent to the transformers where the voltage is transformed to a level suitable for transmission. The boiler water is reused because of large quantities of water is needed for the condensation phase of the cooling cycle. Reclaimed gray water will also be used to supplement the high demand for water. Wastewater will be sent to the City of Warrenton's proposed Wastewater facility located approximately 5 miles away. Ash generated will be reused as soil amendment or sent to the local permitted landfill.

Alternative technologies were considered in the Draft EIS in addition to the proposed biomass plant. After considering the proposed action's size and scope, state of the technology, economic considerations, legal considerations, socioeconomic concerns, availability of resources and the timeframe in which the identified need must be fulfilled, the 100 mega-watt Biomass Plant was selected as the preferred alternative. EPA concurs with the selection of the Biomass Plant as the preferred alternative with the following comments:

Air Quality:
Page 149, The Air Toxics Modeling section states that this modeling analysis obtained results that are well below the acceptable ambient concentrations. The section goes on to say that the modeling demonstrates that there would be no unacceptable cancer risk associated with emissions from the Proposal. The DEIS should provide more detail concerning this modeling. For example, what sources of air toxics were considered; how were the toxics content and emissions estimated; what toxics were modeled; were the cumulative impacts from exposure to multiple toxics evaluated, what potential risks were identified, and were any of the potentially elevated risks in areas that are frequented by people, especially sensitive populations? Once this information is available, the need for mitigation for toxics can be better evaluated.

Page 150, Footnote 36, notes that actual mercury emissions will depend on the mercury content of the fuel, and that the content can vary widely depending on the source of the fuel. Can Oglethorpe Power Corporation anticipate where it will obtain the fuel and thereby narrow the content and emission assumptions for mercury, and possibly other toxics?

Page 151-152 The EIS should consider the impacts of the local mercury deposition (estimated 0.7 lbs/year) on the local water bodies, especially in regard to the possibility of causing an impairment that leads to a 303(d) listing or additional fish advisories in the Warren County area.

Wetlands/Floodplains
It appears that there are several small open water ponds, intermittent streams and potential wetlands associated with these ponds located on the property. Oglethorpe Power will be required to obtain a permit under Section 404 of Clean Water Act (CWA) and Section 401 water quality certification for any impacted Waters of the United States, including jurisdictional wetlands, streams, and open waters.

In summary, EPA has environmental concerns regarding this project, as proposed, and rates this draft EIS as "EC-2" ***(i.e.,*** environmental concerns with additional information requested in the final EIS). Our primary concern relates to air quality modeling based on Oglethorpe Power's proposed fuel sources and appropriate compliance under §404 of CWA.

Thank you for the opportunity to review and comment on this draft EIS. We recommend that these issues be more fully addressed in the final EIS. We look forward to working with you, the USDA staff and the Oglethorpe Power Corporation to adequately address these remaining concerns. We encourage open communication between our technical staffs to achieve this goal. If you wish to discuss EPA's comments, please contact me at 404-562-9611 or Larry Gissentanna of my staff at 404-562-8248 (gissentanna.larry@epa.gov)

Sincerely,

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

Enclosures: EPA Rating System Description

U.S. ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL IMPACT STATEMENT (EIS) RATING SYSTEM CRITERIA

EPA has developed a set of criteria for rating Draft EISs. The rating system provides a basis upon which EPA makes recommendations to the lead agency for improving the draft.

RATING THE ENVIRONMENTAL IMPACT OF THE ACTION

- LO (Lack of Objections): The review has not identified any potential environmental impacts requiring substantive changes to the preferred alternative. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposed action.

- EC (Environmental Concerns): The review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact.

- EO (Environmental Objections): The review has identified significant environmental impacts that should be avoided in order to adequately protect the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). The basis for environmental objections can include situations:

  1. Where an action might violate or be inconsistent with achievement or maintenance of a national environmental standard;
  2. Where the Federal agency violates its own substantive environmental requirements that relate to EPA's areas of jurisdiction or expertise;
  3. Where there is a violation of an EPA policy declaration;
  4. Where there are no applicable standards or where applicable standards will not be violated but there is potential for significant environmental degradation that could be corrected by project modification or other feasible alternatives; or
  5. Where proceeding with the proposed action would set a precedent for future actions that collectively could result in significant environmental impacts.

- EU (Environmentally Unsatisfactory): The review has identified adverse environmental impacts that are of sufficient magnitude that EPA believes the proposed action must not proceed as proposed. The basis for an environmentally unsatisfactory determination consists of identification of environmentally objectionable impacts as defined above and one or more of the following conditions:

  1. The potential violation of or inconsistency with a national environmental standard is substantive and/or will occur on a long-term basis;
  2. There are no applicable standards but the severity, duration, or geographical scope of the impacts associated with the proposed action warrant special attention; or
  3. The potential environmental impacts resulting from the proposed action are of national importance because of the threat to national environmental resources or to environmental policies.

RATING THE ADEQUACY OF THE ENVIRONMENTAL IMPACT STATEMENT (EIS)

- 1 (Adequate): The Draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

- 2 (Insufficient Information): The Draft EIS does not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the Draft EIS, which could reduce the environmental impacts of the proposal. The identified additional information, data, analyses, or discussion should be included in the Final EIS.

- 3 (Inadequate): The Draft EIS does not adequately assess the potentially significant environmental impacts of the proposal, or the reviewer has identified new, reasonably available, alternatives, that are outside of the spectrum of alternatives analyzed in the Draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. The identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. This rating indicates EPA's belief that the Draft EIS does not meet the purposes of NEPA and/or the Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised Draft EIS.