

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

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| In the Matter of the Application of Ohio |) | Case No. 10-911-EL-REN |
| Power Company for Certification as an |) | |
| Eligible Ohio Renewable Energy Resource |) | |
| Facility |) | |

**MOTION FOR LEAVE TO FILE COMMENTS OUT OF TIME AND COMMENTS
BY
THE OHIO ENVIRONMENTAL COUNCIL, BUCKEYE FOREST COUNCIL AND THE
OFFICE OF THE OHIO CONSUMERS' COUNSEL**

I. INTRODUCTION AND REQUEST FOR LEAVE TO FILE COMMENTS OUT OF TIME.

The Ohio Environmental Council ("OEC"), Buckeye Forest Council ("BFC") and the Office of the Ohio Consumers' Counsel ("OCC") (collectively "The Ohio Consumer and Environmental Advocates" or "OCEA") respectfully move the Public Utilities Commission of Ohio ("PUCO" or "Commission") for Leave to file Comments out of time. On June 29, 2010, Ohio Power Company ("AEP Ohio" or "Company") filed an Application with the Commission seeking certification of its Muskingum River facility as an Eligible Ohio Renewable Energy Resource Generating Facility utilizing a biomass fuel type. On July 7, 2010, the OEC filed a Motion to Intervene with Memorandum in Support. No party objected to OEC's Motion to Intervene. On July 23, 2010, BFC filed a Motion to Intervene. On July 27, 2010, the OCC filed a Motion to Intervene.

The Commission's rules provide that "Any interested person may file a motion to intervene and file comments and objections" to an application for biomass certification. Ohio Adm. Code 4901:1-40-04(F)(1). However, 4901:1-40-04(F)(1), which became effective on

December 10, 2009, limits the comment period to twenty days from the filing of the application. Because AEP Ohio's application was filed on June 29, 2010, the new rules were in effect, and the expiration of the comment period was July 19, 2009.

The undersigned members of OCEA, therefore, request leave to file comments out of time. The Commission's rules provide for extensions of time to file pleadings or other papers for "good cause" shown.¹ The Commission should grant OCEA's request for several reasons. Importantly, the undersigned members of OCEA are not filing these comments to object to the application, but rather to address AEP Ohio's commitment to environmental sustainability and forest sustainability protocols. OCEA has not requested a hearing and is not pursuing discovery on this application. Further, OCEA members are not seeking any additional action from the Commission or AEP Ohio regarding the application. Thus, the filing of these comments will not cause a delay in the proceedings. Finally, these comments are meant to detail for the PUCO's consideration the amount of material the Company's stated "environmental sustainability" commitment will entail in practice, and provide real estimates of how this and other biomass applications will affect Ohio's forests, Ohio's air, Ohio utility consumers, and Ohio's citizens. Therefore, the undersigned members of OCEA respectfully request the PUCO grant their request to file these comments out of time.

OCEA's Comments are offered to acknowledge the Company's efforts to file an application for renewable certification that includes a discussion of sustainability as a criterion for consideration in a biomass case. The undersigned members of OCEA also have advocated that source sustainability and environmental sustainability as acknowledged by AEP are crucial criteria in the Commission's evaluation of whether a biomass energy project should be certifiable

¹ O.A.C. 4901-1-13.

as a renewable energy facility.² Thus, these comments are meant to explore more fully AEP Ohio's stated commitment to procure an "environmentally sustainable biomass fuel supply."³ While acknowledging the Company's effort in this Application to address interested parties' concerns, these comments also present an estimate of the amount of resources that will be required for Muskingum to employ biomass as a fuel. These estimates were calculated using the information supplied by the Company's proposal. Further, these comments note the estimated amount of carbon dioxide that will be generated if AEP Ohio's proposal is implemented.

AEP Ohio's Application for certification of its Muskingum River Plant, while a step in the right direction, must still be reviewed within the context of all approved and currently pending biomass applications in Ohio. The undersigned members of OCEA encourage the Commission to adopt the position that the review process in each of these cases must include an environmental sustainability review. The undersigned members of OCEA, therefore, respectfully request the PUCO grant this Motion for Leave to file comments out of time and include these Comments as part of the public docket in this case.

II. COMMENTS

A. AEP Ohio's Muskingum River Plant Application Provides Some Detail Regarding the Type of Biomass it Intends to Use, the Geographic Sources of the Material, and Acknowledges that an Environmentally Sustainable Biomass Fuel Supply is an Important Consideration

AEP Ohio's Application for certification of its Muskingum River Plant provides some detail regarding the anticipated source and sustainability of its biomass fuel.⁴ The Application

² See, for example, *In the matter of the application of Conesville Generating Station Unit 3 for certification as an eligible Ohio Renewable Energy Resource Generating Facility*, Case No. 09-1860-EL-REN, OCC Motion to Intervene and Comments at 5 (December 30, 2009).

³ Application at Section G.10a, 6th unnumbered paragraph (June 29, 2010).

⁴ Application at pp. 8-10.

includes a description of the type of biomass that will be utilized, the anticipated blend of woody biomass and biodiesel, the anticipated heat content, and the expected sulfur dioxide emissions rate.⁵ The Application also states that AEP Ohio is investigating the Sustainable Forestry

Initiative's Protocols:

AEP is committed to ensure long-term procurement of environmentally sustainable biomass fuel supply. AEP requires in the commercial agreements that the Seller represents that the Biomass fuel is in compliance with the "Biomass Energy" definition contained in paragraph E of Chapter 4901:1-40-01 of the Public Utility Commission of Ohio meets the definition of Biomass as defined above and is in compliance with all Federal and State laws and regulations. In addition, AEP is working with the internal and external experts in the forestry industry to properly monitor the biofuels Sustainable Forestry Initia[t]ive (SFI) protocols.⁶ (Citation deleted).

The assurances made by AEP Ohio appear aimed at satisfying the Commission's rules regarding eligible renewable biomass. Ohio Adm. Code 4901:1-40-01(E) provides the following definition of renewable biomass energy:

"Biomass energy" means energy produced from organic material derived from plants or animals and available on a renewable basis, including but not limited to: agricultural crops, tree crops, crop by-products and residues; wood and paper manufacturing waste, including nontreated by-products of the wood manufacturing or pulping process, such as bark, wood chips, sawdust, and lignin in spent pulping liquors; forestry waste and residues; other vegetation waste, including landscape or right-of-way trimmings; algae; food waste; animal wastes and by-products (including fats, oils, greases and manure); biodegradable solid waste; and biologically derived methane gas. (Emphasis added).

Thus, the definition requires that an application for renewable certification must not only demonstrate that organic material will be used, but also that the material will be "available on a renewable basis."

⁵ Id.

⁶ Id at 9.

AEP Ohio generally describes the type of biomass material it will use and the anticipated geographic sources of that material. The Company also mentions that it intends to procure long-term contracts that satisfy a sustainability protocol such as the Sustainable Forestry Initiative (“SFI”) Standards. The information and assurances regarding the “long-term procurement of environmentally sustainable biomass fuel supply” are markedly different from the previous application submitted by AEP Ohio for its Conesville plant.⁷ The Conesville application did not provide geographic sources of the biomass fuel and did not describe how the fuel would be procured. In this Application, the Company’s inclusion and commitment to environmentally sustainable procurement is an important step towards ensuring that the fuel employed in a biomass facility satisfies the rule requirement of being available on a renewable basis. This is the type of information that must be provided by the applicant and evaluated by the Commission prior to certification for a facility proposing to generate electricity using biomass fuel.

B. The Commission Must Explore the Environmental Sustainability of AEP Ohio’s Plan to Obtain Biomass Material from “Ohio and Surrounding States.”

1. AEP Ohio’s Stated Commitment to Environmental Sustainability Could Involve Additional Annual Timber Harvests that Double the Size of Ohio’s 2006 Timber Harvest.

AEP Ohio, in order to comply with Ohio Adm. Code 4901:1-40-01(E), must demonstrate, as noted above, that the “organic material” it proposes to use is “available on a renewable basis.” In the Application, the Company states that it plans to “ensure long-term procurement of environmentally sustainable biomass fuel supply”⁸ and properly monitor SFI protocols.⁹ Using

⁷ *In the matter of the application of Conesville Generating Station Unit 3 for certification as an eligible Ohio Renewable Energy Resource Generating Facility*, Case No. 09-1860-EL-REN (November 30, 2009). This Application contains no mention of sustainability.

⁸ Application at pages 8-10.

⁹ *Id.*

the information contained in the Application, calculations show that obtaining this supply in a sustainable manner will be a formidable task. For example, a recent report from the Environmental Working Group indicates that there may be as many as 5,830 MW and 118 new wood burning and biomass co-firing operations proposed across the country requiring 71 million green tons annually to supply the raw wood, chips, and pellets needed for fuel.¹⁰ At the same time, accelerated rates of cutting are diminishing prospects for additional reforestation and net forest gain in the Eastern United States.¹¹

The Application states that AEP will likely be looking for biomass sources in Ohio or close to Ohio due to high transportation costs.¹² If AEP Ohio intends to burn primarily woody biomass from the region, the amount of fuel needed for this proposal alone could require a significant increase in Ohio's timber harvest. To supply Muskingum with enough wood to generate 125 MW,¹³ 13,000 tons of wood per MW per year would be required.¹⁴ This translates into 1,625,000 tons of green wood per year to generate enough pellets to sustain the proposal on an annual basis.¹⁵ This is the equivalent of 706,522 cords of wood, or 90,434,816 cubic feet of wood.¹⁶

¹⁰ Booth, Mary S., Wiles, Richard, *Clearcut Disaster: Carbon Loophole Threatens U.S. Forests*, Environmental Working Group, at 20 (June 2010); available at <http://www.ewg.org/clearcut-disaster>.

¹¹ Drummand, Mark A., Loveland, Thomas R., *Land-use Pressure and a Transition to Forest- cover Loss in the Eastern United States*. BIOSCIENCE, April 2010 Vol.60 No. 4, page 287.

¹² Application, at pages 8-10.

¹³ Application at Section I.1, calculations made by using the values presented in the Table in that Section.

¹⁴ $125 \text{ MW} * (13,000 \text{ ton/MW}) = 1,625,000 \text{ tons of green wood per year to generate pellets.}$

¹⁵ Please see *In the Matter of R E Burger Units 4 & 5 for Certification as an Eligible Ohio Renewable Energy Resource Generating Facility*, Case No. 09-1940-EL-REN, OCEA comments at pp. 18-19, for a detailed description of the sources from which the elements of these calculations are derived (April 12, 2010).

¹⁶ $1,625,000 \text{ green tons} / 2.3 \text{ tons in one stacked cord} = 706,522 \text{ cords. } 706,522 \text{ cords} * 128 \text{ cubic feet per cord} = 90,434,816 \text{ cubic feet.}$

92 million cubic feet of wood was harvested from Ohio for Timber Products in 2006.¹⁷ If the wood supply is “likely”¹⁸ to be harvested from Ohio, this means that Ohio’s timber harvest will be required to increase by 198%.¹⁹ Although AEP Ohio stated that the fuel procurement plan has not been “determined” at this time,²⁰ the Company notes that the most likely scenario, due to transportation costs, is that the biomass supply will come from “Ohio or the surrounding states.”²¹

The undersigned OCEA members appreciate AEP Ohio’s stated commitment to “environmental sustainability.” However, as demonstrated above, this will be a tall order. Sustainability must also be evaluated in light of the fact that there are currently up to 2000 MW of biomass energy currently pending or approved before the PUCO.²² Cost concerns will no doubt be a serious consideration in the supply of these other facilities as well. Thus, the Commission must not only consider environmental sustainability for this proposal, but must consider it within the context of the other facility applications currently pending or approved in Ohio.

2. Sustainable Forestry Initiative (SFI) Standards Must Be Viewed In Context When Evaluating Sustainability.

AEP Ohio’s intended commitment to “environmental sustainability” and the company’s statement that it is investigating the Sustainable Forestry Initiative’s protocols are appreciated.

¹⁷ Ohio Forests 2006, U.S. National Forest Service, Sept. 2009, http://www.nrs.fs.fed.us/pubs/rb/rb_nrs36.pdf.

¹⁸ Application at 9.

¹⁹ New harvest as % of existing = (existing + new)/(existing) additional green tons harvested. (92,000,000 existing + 90,434,816 cubic ft. to supply Muskingum)/ 92,000,000 = 198% increase in Ohio forest harvest to supply Muskingum.

²⁰ Application at 9.

²¹ Id.

²² *In the Matter of R E Burger Units 4 & 5 for Certification as an Eligible OhioRenewable Energy Resource Generating Facility*, Case No. 09-1940-EL-REN, OCEA comments at pp. 20-21 (April 12, 2010).

However, it is unclear which SFI standards the Company is investigating.²³ According to SFI's website, SFI Inc. "is an independent, non-profit organization responsible for maintaining, overseeing and improving a sustainable forestry certification program."²⁴ Currently, a review of SFI's Certification Database reveals that there is not a single acre of SFI-certified forestland in Ohio.²⁵

3. Carbon Dioxide Emissions May Increase by 41% as a Result of Using Woody Biomass Feedstock at the Muskingum Plant.

An evaluation of environmental sustainability should also include a consideration of potential greenhouse gas emissions, including carbon dioxide ("CO₂") emissions. 125 MW from biomass, as proposed by AEP Ohio at the Muskingum plant, would generate 1,526,347 tons of greenhouse gases per year.²⁶ In addition, scientific research suggests that timbered forestlands emit significant amounts CO₂ after harvesting due to factors such as soil and habitat disturbance.²⁷ OCEA urges the Commission to consider the potential increased output of CO₂.

²³ Whichever certification practice AEP, or for that matter any utility, chooses, however, should contain components to protect forest ecosystem health. Forest ecosystem health in the sustainability context includes impacts on forest-dependent species, watershed protection, and carbon storage potential. For more information, see Pimm, Stuart L. and Raven, Peter - *Biodiversity; Extinction by Numbers*, Nature* *403*, 843-845 (24 February 2000); and Johnson, Sherri L; Jones, Julia A.- *Stream temperature responses to forest harvest and debris flows in the western Cascades*, Oregon Canadian Journal of Fisheries and Aquatic Sciences *57*(S2): 30-39 (2000).

²⁴ Sustainable Forestry Initiative, "Basics of SFI"; available at <http://www.sfiprogram.org/sustainable-forestry-initiative/basics-of-sfi.php> (Last visited July 27, 2010).

²⁵ Sustainable Forestry Initiative Certification Database; available at <http://64.34.105.23/PublicSearch/SearchSFIForests.aspx> (last visited July 27, 2010).

²⁶ 946,083 tons biomass (at 7,456 btu/lb) (1-12% moisture content) (x) 0.5 moisture content of wood (x) (44/12) = 1,526,347 tons of CO₂ from 125MW biomass. To convert carbon dioxide to carbon units, divide by 44/12. For reference, see Department of Energy U.S. Environmental Protection Agency, *Carbon Dioxide Emissions from the Generation of Electric Power in the United States*, (July 2000).

Online at: <http://www.epa.gov/cleanenergy/energy-resources/egrid/index.html#download>. (eGRID2007V1_1year05_plant.xls, Version 1.1).

²⁷ See, e.g., Nunery, Jared S., Keeton, William S., *Forest carbon storage in the northeastern United States: Net effects of harvesting frequency, post-harvest retention, and wood products*, FOREST ECOLOGY AND MANAGEMENT at 12 (2010, article in press); available at <http://www.maforests.org/Keeton.pdf>.

OCEA has argued in past filings that it is logical for the Commission to consider CO₂ emissions when evaluating an application for renewable certification for several reasons.²⁸ First, carbon neutrality is implicit in the common understanding of “renewable energy,” which is a contrast to traditional forms of fossil-fuel-based generation. Second, several of the Commission’s rules regarding alternative energy sources specifically mention greenhouse gas reductions as being an essential element.²⁹ It would be illogical to assume that the General Assembly or the Commission did not intend for all forms of alternative energy, including renewable facilities, to result in greenhouse gas reductions. Finally, if the Commission does not consider CO₂ output now, it could jeopardize a facility’s status under a federal carbon policy. Approving applications for renewable certification without considering CO₂ emissions would be a shortsighted and potentially damaging policy for Ohio.

4. The Commonwealth of Massachusetts’s Recent Suspension of Biomass Certification Pending the Issuance of a Sustainability Requirement Echoes the Concerns of OCEA and Verifies that Environmental Sustainability Must Be a Significant Criterion in the Approval of these Cases.

Without information regarding sustainability, it would be impossible for the Commission or interested parties to determine the environmental impacts of a biomass energy facility. We note that the Commonwealth of Massachusetts, concerned about the consequences of biomass power, temporarily suspended all applications for certification pursuant to the state’s renewable portfolio standard.³⁰ Massachusetts commissioned a study of the potential adverse impacts of

²⁸ See, e.g., OCEA’s Comments, 09-1940-EL-EEC.

²⁹ See, e.g., O.A.C. 4901:40-01(F); 4901:40-01(B)(1); 4901:40-01(B)(6).

³⁰ Letter from Secretary of Energy, available at http://www.mass.gov/Eoeea/docs/eea/biomass/070710_biomass_sustainability_carbon_regs_letter.pdf.

biomass power,³¹ which revealed that many of the environmental benefits of biomass power are contingent upon a sustainable process. For example, the study revealed that greenhouse gas reductions are not an inherent byproduct of biomass power, but are contingent upon years—or decades—of sustainable fuel harvesting.³²

Following the release of this report, the Massachusetts Governor's Office sent a letter to the state's Department of Energy instructing the Department of Energy to begin revising its rules regarding biomass certification. The new rules will require an applicant to demonstrate that the source of the biomass material can be obtained in an environmentally sustainable manner:

The fuel source used by the RPS-eligible biomass facilities (e.g. wood, wood by-products, and energy crops, including energy crops used for the production of biofuels and biodiesel used in a qualifying renewable energy generating source) must be grown, harvested, or otherwise produced sustainably and in a manner consistent with the Commonwealth's forestry and environmental goals.³³

This must become a consideration in Ohio, as advocated by OCEA and underscored by the language in AEP Ohio's Muskingum Application. Massachusetts's new rules will also require generating sources to be “designed, constructed, and operated to achieve maximum practicable efficiency as determined by [the Department of Energy Resources].”³⁴ Requiring maximum efficiency will increase the energy produced and minimize the greenhouse gases emitted, as recommended by the commissioned biomass study. These are concerns that should be addressed by applicants for certification as an eligible renewable energy resource generating

³¹ Manomet Center for Conservation Sciences, *Biomass Sustainability and Carbon Policy Study*, at page 6 (June 2010).

³² Id. at page 12, passim.

³³ Letter from Secretary of Energy, at page 3, available at http://www.mass.gov/Eoeea/docs/eea/biomass/070710_biomass_sustainability_carbon_regs_letter.pdf.

³⁴ Id. at page 2.

facility using biomass fuel, and concerns that the Commission should contemplate when analyzing such applications.

III. CONCLUSION.

The undersigned OCEA members respectfully request the PUCO to grant their Motion for Leave to file Comments out of time in this case, in order to provide further consideration and description of AEP Ohio's commitment to "environmental sustainability" in this docket. In its Muskingum Application, AEP Ohio presents, along with a plant description and fuel description a commitment to "environmental sustainability." This has been a part of the OCEA advocacy in these applications, and the fact that the Company acknowledged this as a criterion is a step forward. This commitment must be taken seriously by the Commission. Such commitments should be required of all applicants and should be reviewed by the Commission. Finally, the Commission's review of biomass applications must not take place in a vacuum, but must be considered in the context of the other 2000 MW of biomass energy currently approved or pending in Ohio.

Respectfully Submitted,

/s/ Will Reisinger
Will Reisinger, Counsel of Record
Nolan Moser
Trent A. Dougherty
Megan De Lisi

Ohio Environmental Council
1207 Grandview Avenue, Suite 201
Columbus, Ohio 43212-3449
(614) 487-7506 - Telephone
(614) 487-7510 - Fax
will@theoec.org
nolan@theoec.org

trent@theoec.org
megan@theoec.org

Attorneys for the OEC

/s/ Nathan G. Johnson (WR)
Counsel of Record
5474 Foxhound Lane
Westerville, Ohio 43081
(614) 949-6622
ngj660@gmail.com

Attorney for Buckeye Forest Council

JANINE L. MIGDEN-OSTRANDER
OHIO CONSUMERS' COUNSEL

/s/ Christopher J. Allwein (WR)
Christopher J. Allwein, Counsel of Record
Assistant Consumers' Counsel

Office of The Ohio Consumers' Counsel
10 West Broad Street, Suite 1800
Columbus, Ohio 43215-3485
Telephone: 614-466-8574
allwein@occ.state.oh.us

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing has been served upon the following parties by first class and electronic mail this 27th day of July, 2010.

/s/ Will Reisinger

SERVICE LIST

Steven T. Nourse
American Electric Power Service Corporation
1 Riverside Plaza, 29th Floor
Columbus OH 43215
Phone: (614) 716-1608
Fax: (614) 716-2950
stnourse@aep.com

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Summary: Motion Motion for leave to file comments out of time by the Ohio Environmental Council, the Buckeye Forest Council, and the Office of the Ohio Consumers' Counsel electronically filed by Mr. Will Reisinger on behalf of Ohio Environmental Council