BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the matter of the Adoption of Rules for Alternative and Renewable Energy Technologies and Resources, and Emission Control Reporting Requirements, and Amendment of Chapters 4901:5-1, 4901:5-3, 4901: 5-5, and 4901:5-7 of the Ohio Administrative Code, pursuant to Chapter 4928, Revised Code, to Implement Senate Bill No. 221	))))))))	**Case No. 08-888-EL-ORD**

REPLY RULEMAKING COMMENTS OF AMERICAN MUNICIPAL POWER – OHIO, INC.

American Municipal Power – Ohio, Inc. ("AMP-Ohio") is a not-for-profit corporation organized in 1971. AMP-Ohio owns or operates electric generating facilities; provides wholesale generation, transmission, and distribution services; and coordinates, negotiates, and develops power supply options and interconnection agreements for its 123 member municipal electric systems in six states ("Members"). Over 80 of AMP-Ohio's Members are located in the state of Ohio, and it is on their behalf that AMP-Ohio files these reply comments.

On July 6, 1999, the governor of the state of Ohio signed Amended Substitute Senate Bill No. 3 ("SB3"). SB3 established a starting date for competitive retail generation electric service in the state of Ohio and provided for the establishment of a market development period ("MDP") to aid the transition between the prior regulatory regime and the new competitive environment. The transition to full retail competition (for generation service) was originally envisioned to have been completed by December 31, 2005.

Slow progress in the development of wholesale and retail competition subsequently led the Public Utilities Commission of Ohio ("PUCO" or "Commission") to

postpone the original end date for the MDP through the utilization of Rate Stabilization Plans ("RSP") by the state's investor-owned utilities ("IOUs"). The rate stabilization period for Ohio's three largest IOUs was scheduled to end on December 31, 2008. Continued slow progress in the development of wholesale and retail competition led to new legislative action. This process culminated in Amended Substitute Senate Bill No. 221 ("SB221") which was signed by the governor on May 1, 2008 and amends various provisions of SB3.

On August 20, 2008, the PUCO issued an Entry in the above captioned proceeding ("Entry") which contained the PUCO Staff's ("Staff") proposed rules designed to address various aspects of SB221. Specifically, the Staff proposed various modifications to the forecast rules contained in Chapters 4901:5-1, 4901:5-3, 4901:5-5, and 4901:5-7 of the Ohio Administrative Code ("OAC") and the creation of three new utilities division chapters including OAC Chapters: 4901:1-39 Energy Efficiency and Demand Reduction Benchmarks; 4901:1-40 Alternative Energy Portfolio Standard; and, 4901:1-41 Greenhouse Gas Reporting and Carbon Dioxide Control Planning (Entry, p.1).

AMP-Ohio and various other parties ("Parties") in this proceeding submitted initial rulemaking comments on September 9, 2008. The initial rulemaking comments of AMP-Ohio focused on certain aspects of all three of the proposed new utilities division chapters. Specifically, AMP-Ohio sought to:

- amend the definition of "fully aggregated" in proposed 4901:1-39-01(F) to better reflect the "carbon credit" portion of the attribute;
- clarify the definition of "double counting" in proposed 4901:1-40-01(M) to assure that the term did not refer to the practice of combining energy and RECs into a bundled energy product;
- amend the definition of renewable energy credits ("RECs") in proposed 4901:1-40-01(DD) to ensure that non-fully aggregated RECs (i.e., derived from technologies that generate electricity using landfill gas, other biogas, and any other renewable energy resource that contains methane or other green house gases ("GHGs")) are included;

- broaden the definition of "solar thermal" contained in 4901:1-40-01(HH);
- ensure that "qualifying hydroelectric facilities" are included in the phrase "generated by facilities located in this state" in proposed 4901:1-40-03(A)(2)(a);
- clarify that RECs themselves need to be tracked (i.e., versus registration of the electric utility or electric service company) in proposed 4901:1-40-04;
- clarify that RECs from renewable energy resources in service prior to January 1, 1998 are not excluded by R.C. 4928.65, and this possibility should be reflected in the proposed rules;
- clarify that application of the cost cap contained in proposed 4901:1-40-07 does not free an electric utility or electric service company from its contractual obligations relating to REC purchases; and
- clarify that non-jurisdictional entities are not subject to GHG reporting requirements in proposed 4901:1-41.

AMP-Ohio commends the PUCO Staff for their efforts to develop the proposed rules under a very aggressive time frame. The issues that are addressed are, in many respects, entirely new to both regulators and industry alike. AMP-Ohio appreciates this opportunity to file reply rulemaking comments in an effort to further clarify our initial positions and express our concerns regarding a number of the initial positions offered by other Parties in this proceeding. AMP-Ohio is presenting its reply rulemaking comments in the following general categories: 1) renewable energy credits ("RECs") and REC markets; 2) clean coal technology; 3) greenhouse gas ("GHG") reporting; and, 4) miscellaneous provisions.

Renewable Energy Credits (RECs) and REC Markets

Numerous Parties provided additional information on, and interpretation of, the proposed definitions of what assets should qualify as a renewable energy resource and thus be eligible to serve as a source for RECs under the proposed rules. In general, AMP-Ohio opposes any effort that would inhibit the development of Ohio's REC market. This

opposition would include any arbitrary effort to lessen REC market values by rewarding one renewable technology at the expense of others. Based on its actual experience with REC markets (both historical and current), AMP-Ohio offers the following observations on the initial comments of various Parties:

- **Rule 4901:1-40-01(E)** --- The proposed definitions of "biomass" offered by the American Wind Energy Association, et al. ("Joint Commenters") and the Ohio Consumer and Environmental Advocates ("OCEA") would effectively exclude certain energy crops that could make a substantial contribution towards meeting renewable energy objectives. *OCEA Comments* pp. 39-41; *Joint Commenters Comments* pp. 3-4. Energy crops used for creating biomass energy are generally crops that are *grown specifically for energy production purposes* such as switchgrass and fast-growing tree species (e.g., hybrid poplars). These crops are *selectively* planted to maximize energy production while minimizing the problems (i.e., including diversion from food to fuel use) that have been attributed to other crops used *incidentally* as fuels, such as corn. Therefore, OCEA and Joint Commenters concerns about encouraging undeveloped land to be used for producing biomass energy are largely unwarranted. OCEA's and Joint Commenters changes should not be adopted and the proposed rules should continue to allow such energy crops to qualify as a "biomass" resource and thus as a renewable resource.

- **Rule 4901:1-40-01(U)** --- The proposed definition of "fully aggregated" offered by Dayton Power & Light Company ("DPL"), while well intentioned, fails to recognize that not all environmental attributes of a specific generation technology should be grouped together under the renewable energy credit banner, particularly those associated with the creation of certain carbon credits. *DP&L Comments* p. 19. AMP-Ohio reiterates our previously filed initial comment that the definition of "fully aggregated" should be amended to ensure that RECs that are derived from technologies that generate electricity using landfill gas, other biogas, and any other renewable energy resource that contains methane or GHGs may be

divided so as to separate the portion of the attribute that is derived from GHG *destruction* (via flaring or combustion), which can then be counted as a "carbon credit," from the portion of the attribute that is derived from the *generation of renewable electricity*, which can be counted as a REC. Additionally, the definition of "fully aggregated" should specifically not include any nitrogen oxides ("NOx") set-aside allowances that may have been awarded by the Ohio Environmental Protection Agency ("OEPA") to any renewable energy generating facility in recognition of that facility's offsetting of NOx emissions from other facilities.

- **Rule 4901:1-40-03(B)(4)** --- The proposed rule revision offered by OCEA that would require adjusting the value of RECs to account for transmission and distribution line losses should be rejected as impractical and unenforceable. *OCEA Comments* p. 43. Line losses vary greatly depending on the location of the lines, seasonal temperature changes, load characteristics, age of the lines, etc. AMP-Ohio knows of no other REC market that attempts to adjust RECs in such a manner.

- **Rule 4901:1-40-04(D)(3)** --- The proposed language offered by Columbus Southern Power Company and Ohio Power Company ("AEP Ohio") regarding the life of a REC does not adequately address the problem associated with RECs that have a five-year life "following the date of its *initial* purchase of acquisition." (Emphasis added). *AEP Ohio Comments* pp. 14-15. Under the language proposed by AEP Ohio, RECs could be resold from one entity to another without penalty, further depressing the value of credits in the Ohio REC market. AMP-Ohio instead recommends that the language proposed by the Joint Commenters, which stipulates that the life of the REC commences with its actual generation, be adopted. Specifically, the language proposed by the Joint Commenters reads:

> "A REC may be used for compliance any time in the five calendar years following the date of its initial purchase or acquisition. FOR PURPOSES OF THIS RULE, A REC IS "ACQUIRED" BY ITS OWNER

IMMEDIATELY UPON THE GENERATION OF THE RENEWABLE ENERGY AND THEREFORE EXPIRES FIVE YEARS FROM THAT DATE."

Joint Commenters Comments p.13

- **Rule 4901:1-40-04(D)** --- The Duke Energy Ohio, Inc. ("Duke") proposed revision to the rule would require REC sources / providers to be registered members of a REC tracking system fails to recognize that RECs themselves need to be registered with the tracking systems in order to provide necessary transparency to the REC markets. *Duke Comments* pp. 10-11. Duke's rule is unnecessary because registering either the purchaser or provider will do nothing to track actual REC transactions. The only important element for tracking RECs is whether the RECs themselves are registered. Therefore, AMP-Ohio recommends that the Commission does not adopt Duke's proposed rule.

- **Rule 4901:1-40-04(F)** --- OCEA asks the Commission to consider the impacts of any new technology on GHG emissions, water quality, and water quantity when making a determination that any new technology is a renewable energy resource. *OCEA Comments* p. 49. SB221 does not envision this sort of analysis by the Commission. Therefore, AMP Ohio recommends that OCEA's proposed rule not be adopted.

- **No proposed rule currently** --- The Joint Commenters and OCEA ask the Commission to create a new rule that provides for a fixed public price (or "standard offer") for RECs resulting from small customer-sited renewable installations. *OCEA Comments* pp. 60-61; *Joint Commenters* pp. 23-24. This proposal is problematic for several reasons. First, this proposal is specifically not supported in SB221 (which the advocates themselves concede). Second, the price to be offered under said standard offer bears no relationship to the actual costs of the small customer-sited installations. The proposed price also bears no relationship to the actual benefits conferred on either the utility or its retail

customers. Such an action represents a subsidy of potentially uneconomic projects and would subsequently inhibit the development of a free and open REC marketplace in Ohio. Third, this entire practice could be viewed as subjecting REC sales by non-jurisdictional entities to PUCO pricing limitations. For the above reasons, AMP-Ohio recommends that OCEA's and Joint Commenters' proposed rules not be adopted. It should also be noted that should electric utilities and electric service companies wish, they could achieve the same goals (as this mandatory "standard offer" system) through the voluntary creation of "standard offers" for certain REC types and/or REC volumes.

Clean Coal Technology

AMP-Ohio is troubled by the initial comments of various Parties relative to the definition and use of clean coal technology as a qualifying resource under the Alternative Energy Portfolio Standard ("AEPS"). Promoting the use of clean coal technologies is specifically included as a legislative focus in the plain language of SB221. Yet, a number of Parties appear to be attempting to limit the intent of the statute to a very narrow set of clean coal technologies based on narrow environmental criteria. Such approaches are not envisioned in SB221. The following revisions to the proposed rules should be rejected so that the broadest array of clean coal technologies will continue to qualify under the AEPS as dictated by SB221 and as consistent with legislative intent:

- **Rule 4901:1-40-01(F) ---** Global Energy proposes a definition of "clean coal technology" which could allow technologies that do not even use coal to qualify as clean coal technology. Their proposed definition reads:

  "Clean Coal Technology means *any technology that uses any carbon based material*, including biomass, as a fuel or feedstock in an electric generating facility…"

(Emphasis added) *Global Energy Comments* p. 3. In addition to biomass combustion, this proposed definition would include, for example, natural gas or other fossil fuel combustion as a clean coal technology.

- Greenfield Steam & Electric Co. ("Greenfield") proposes to replace the words "clean coal" with "processed coal," without defining the latter term. *Greenfield Comments* p. 1. At a minimum, "processed coal" implies that only pre-combustion technologies would qualify as "clean coal" and thus would improperly eliminate all post-combustion technologies from the definition.

- Vertus Technologies Industrial LLC ("Vertus") proposes to include specific standards for the reduction of criteria pollutants. *Vertus Comments* pp. 4-6. First, CO2 (as noted elsewhere in this document) is not a regulated or criteria pollutant subject to regulation by the Clean Air Act. Second, this proposal seemingly removes post-combustion clean coal technologies in their entirety from the eligible list. Post-combustion clean coal technologies may be some of the most cost-effective and technologically feasible methodologies available (i.e., particularly for the retrofitting of existing units). Therefore, post-combustion (as well as pre-combustion) clean coal technologies should be explicitly included in the definition of "clean coal technology."

- Joint Commenters propose to revise the definition of "clean coal facility" to require the Commission to adopt specific design capability standards. The Joint Commenters state further (in a footnote) that they encourage the Commission to consider the definition offered by OCEA and as currently used in the state of Illinois. *Joint Commenters Comments* pp. 4-5. Both proposed definitions would require facilities to meet specific environmental thresholds for operation – provisions that historically have been subject to Ohio Environmental Protection Agency jurisdiction. Specifically, the proposed OCEA definition for "clean coal facility" reads:

"CLEAN COAL FACILITY" MEANS AN ELECTRIC GENERATING FACILITY THAT USES PRIMARILY COAL AS A FEEDSTOCK AND THAT CAPTURES AND SEQUESTERS CARBON EMISSIONS AT THE FOLLOWING LEVELS: AT LEAST 65% OF THE TOTAL CARBON EMISSIONS THAT THE FACILITY WOULD OTHERWISE EMIT IF, AT THE TIME CONSTRUCTION COMMENCES, THE FACILITY IS SCHEDULED TO COMMENCE OPERATION BEFORE 2016, AT LEAST 75% OF THE TOTAL CARBON EMISSIONS THAT WOULD OTHERWISE EMIT, IF AT THE TIME CONSTRUCTION COMMENCES, THE FACILITY IS SCHEDULED TO COME ON LINE DURING 2016 OR 2017, AND AT LEAST 90% OF THE TOTAL CARBON EMISSIONS THAT THE FACILILTY WOULD OTHERWISE EMIT IF, AT THE TIME CONSTRUCTION COMMENCES, THE FACILITY IS SCHEDULED TO COMMENCE OPERATION AFTER 2017. THE CLEAN COAL FACILITY SHALL NOT EXCEED ALLOWABLE EMISSION RATES FOR SULFUR DIOXIDE, NITROGEN OXIDES, CARBON MONOXIDE, PARTICULATES AND MERCURY FOR A NATURAL GAS-FIRED COMBINED-CYCLE FACILITY THE SAME SIZE AS AND IN THE SAME LOCATION AS THE CLEAN COAL FACILITY AT THE TIME THE CLEAN COAL FACILITY OBTAINS AN APPROVED AIR PERMIT.

OCEA Comments pp. 33-34

The proposed OCEA definition is problematic and unacceptable for a number of reasons. First, the arbitrary imposition of a standard adopted in another state, under a distinct and different statutory scheme, without a complete review to judge whether its application in Ohio is appropriate for our purposes is irresponsible at best. At worst, the imposition of such a performance standard would result in the elimination of all clean coal projects in Ohio – a result that runs counter to the expressed intent of the legislature in SB221. Second, this conclusion is predicated on further consideration of the strict and unrealistic carbon capture and sequestration ("CCS") requirements and timeline contained in the proposals from the Joint Commenters and OCEA.[1] CCS at the specified levels by the stated dates in the OCEA definition is not a requirement of SB221. OCEA's and Global Energy's sequestration proposals are impractical and

[1] Global Energy, Inc. also proposes to require carbon sequestration for any clean coal technology. *Global Energy Comments* p. 3

unrealistic given that CCS technology is not expected to be technologically proven and commercially available until at least the 2020-2030 timeframe, according to the National Energy Technology Laboratory of the U.S. Department of Energy. Finally, with respect to the referenced criteria pollutants and mercury, the language attempts override the federal Clean Air Act and Ohio R.C. 3704 with respect to air permitting, an area that is squarely in the jurisdiction of Ohio EPA.

As a participant in the Midwest Regional Carbon Sequestration Partnership, AMP-Ohio supports responsible and realistic development and commercialization of CCS and acknowledges that certain Ohio geologic formations appear to be suitable for carbon sequestration. However, injection tests of small amounts of CO2 into these strata are just beginning. To allege, as Joint Commenters and OCEA do, that carbon sequestration is commercially feasible now and thus mandatory based on "plans" and Ohio's past FutureGen modeling is simplistic at best, and disingenuous. Such proposals ignore the reality that CCS technology is still in an infancy stage and will not be ready for feasible commercial deployment for decades at the earliest. Therefore, the definition of a clean coal facility should not include a requirement that the facility capture and sequester carbon emissions as OCEA and Global Energy propose.

Greenhouse Gas (GHG) Reporting

- **Rule 4901:1-41** --- AMP-Ohio wishes to reiterate its previously filed comments that this section needs to be amended to clarify that non-jurisdictional entities are not covered by this section. R.C. 4928.68 specifically states that the GHG reporting requirements are applicable to "each electric generating facility that is located in this state, is owned and operated by a public utility that is subject to the commission's jurisdiction, and emits greenhouse gases…" While AMP-Ohio does not believe that the Commission intended for this provision to apply to non-jurisdictional entities, we nonetheless want to correct the record on this matter. In addition, AMP-Ohio wishes to comment on a number of other issues on this topic

raised by OCEA in particular.

- **Rule 4901:1-41-01(A)** --- OCEA supports a revised definition of "carbon dioxide control planning". Specifically, OCEA maintains that "there are many cost-effective measures to reduce carbon dioxide, such as energy efficiency, combined heat and power and renewable energy generation…" Subsequently, OCEA proposes to add these identified control options to the definition. *OCEA Comments* pp. 61-62. While AMP-Ohio believes that all these control options can be employed as part of a CO2 planning effort, they cannot always be assumed to be cost-effective, and therefore these control options should not be included in the definition of "carbon dioxide control planning".

- **Rule 4901:1-41-01(E)** --- OCEA proposes to alter the proposed definition of "greenhouse gas" to include an open-ended reference to "current and future science and greenhouse gases." *OCEA Comments* p. 64. The intent of such a recommendation is to ultimately add substances such as "soot" and a myriad of yet to be identified substances to a regulatory definition now. This proposed addition is counter to current national and international definitions and should be rejected.

Rule 4901:1-41-02(C) --- OCEA further alleges that "Carbon dioxide is now a regulated pollutant under the Clean Air Act…" in its discussion regarding the scope of the "environmental control plan". *OCEA Comments* pp. 66-67. This assertion is incorrect. The status of carbon dioxide is currently the subject of both litigation and a major regulatory action at the U.S. Environmental Protection Agency. OCEA's proposal to add a specific requirement for "best available control technology" – a term with specific implications for facilities under the Clean Air Act an Ohio R.C. 3704 – is a back-door attempt to fundamentally override existing environmental statutes and impose new regulation on electric generation facilities with no statutory basis. The provision should be rejected.

Miscellaneous Provisions

- **Rule 4901:1-40-07(D)** --- Joint Commenters, OCEA, and Greenfield imply that environmental externalities need to be included in the calculated cost of generating conventional energy in order to facilitate an "apples-to-apples" comparison of that type of generation with the cost of adding renewable generation. *OCEA Comments* pp. 61-62; *Greenfield Comments* p. 1. This comparison is a part of the consideration relating to the potential imposition of any cost cap. While the "cost cap" section of the proposed rules does not directly apply to AMP-Ohio, we view the OCEA proposal as potentially troublesome. First, SB221 did not mandate the inclusion of environmental externalities relating to traditional generation. The legislation did not even specify that the PUCO shall consider such costs. Second, the inclusion of such costs may add to the cost of RECs needed to meet the AEPS. Therefore, the proposals to include environmental externalities in the calculation of costs of generating conventional energy should be rejected.

- Joint Commenters, OCEA, and LS Power suggest that utilities use a prescriptive request-for-proposals ("RFP") process when contracting for renewables or RECs. *LS Power Comments* p. 6; *OCEA Comments* p. 56. While RFPs may be appropriate for assessing available resources to meet certain needs, they are not suited to all needs or entities and may act to restrict the REC market in Ohio. This proposed requirement should be rejected.

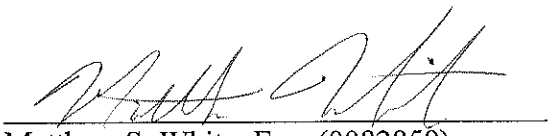
- **Rule 4901:1-39-01(H)** --- Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company (the "Companies") propose a new provision to create a new commodity entitled an "energy efficiency credit". *Companies Comments* p. 5. The concept and the Companies' rationale deserve additional attention. AMP-Ohio would note the inclusion of a similar concept in legislation awaiting the Governor's signature in the state of Michigan. However, AMP-Ohio does not believe that this new provision should be included

in the rules at this time and requests that the Commission consider the topic through a separate docket.

CONCLUSION

AMP-Ohio respectfully requests that the Commission consider these reply comments and incorporate the revisions discussed herein into the proposed rules.

Respectfully submitted,



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Summary: Comments electronically filed by Mr. Matt S White on behalf of American Municipal Power, Inc. and Mr. Matthew S White