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BEFORE THE PUCOOhio power siting board

Application of American Municipal Power,) Ohio, Inc. (AMP-Ohio) for a Certificate of) Environmental Compatibility and Public) Need For the American Municipal Power) Generating Station in Meigs County, Ohio)

FILE

Case No. 06-1358-EL-BGN

INITIAL POST-HEARING BRIEF OF THE NATURAL RESOURCES DEFENSE COUNCIL, INC., OHIO ENVIRONMENTAL COUNCIL, AND SIERRA CLUB

The Natural Resources Defense Council ("NRDC"), Ohio Environmental Council

("OEC"), and the Sierra Club hereby submit their initial post-hearing brief regarding American Municipal Power-Ohio's ("AMP") proposal to build a 960 megawatt ("MW") coal-fired power plant in Meigs County, Ohio ("AMP Coal Plant"). The record shows that AMP has failed to consider the "probable environmental impacts" of the proposed AMP Coal Plant or to demonstrate that the Plant represents "the minimum adverse environmental impact" given other alternatives, as required under Ohio law. O.R.C. §4906.10(A)(2), (3). Therefore, the Board must deny certification.

INTRODUCTION

AMP is proposing a 960MW pulverized coal-fired power plant that would cost at least \$2.912 billion to build and hundreds of millions of dollars per year to operate. For every year of its expected 50 year life, the proposed Plant would emit approximately 7.3 million tons of carbon

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dioxide ("CO2"), a primary cause of global warming. The Plant would also emit thousands of tons of sulfur dioxide, nitrogen oxide, and other air pollutants, and would require the mining and transport of at least 2.8 million tons of coal per year. Less environmentally damaging alternatives for satisfying energy needs exist, but AMP has either ignored or improperly rejected them.

Before AMP can lock Ohio into this expensive and polluting 50 year project, the Power Siting Statute requires a careful and thorough evaluation of the environmental impacts of the proposal and its alternatives. In particular, the Board is obligated to find that AMP has demonstrated that it has fully evaluated the "probable environmental impact" of the AMP Coal Plant, O.R.C. § 4906.10(A)(2), and that there are not less environmentally damaging alternatives for meeting the energy need that AMP has identified. O.R.C. § 4906.10(A)(3). Combined, these provisions require that energy decisions that will impact society for the next 50 years are made only with full information about their environmental impacts, and that our society's energy needs are met with the minimum adverse environmental impact possible.

Ohio law dictates that the Board must deny certification here because AMP has not met its burden of demonstrating compliance with these statutory requirements. O.R.C. § 4906.10(A) (providing that the Board "shall not grant a certificate" unless it "finds and determines" each of the certification criteria listed in the Statute). First, significant environmental impacts have been overlooked. Most obviously, the environmental impacts of the Plant's emission of 7.3 million tons of CO2 per year have not been evaluated or factored into the consideration of whether there are less damaging alternatives to the AMP Coal Plant. While it is clear that the AMP Coal Plant's emission of CO2 would exacerbate global warming and its resulting environmental impacts, both AMP and the Staff have ignored those impacts. The Board must require an

evaluation of such impacts and binding steps to reduce them before any certification can be granted.

Second, certification must be denied because AMP has not demonstrated that the objective evaluation of less environmentally damaging alternatives required by Ohio law has occurred. In particular, AMP has entirely ignored particular alternatives – such as energy efficiency – and failed to consider alternatives in combination. To the extent that AMP has considered alternatives, it skewed that consideration in favor of the proposed Coal Plant by underestimating CO2 and construction costs, and by failing to factor comparative environmental impacts into that consideration.

Third, certification must be denied because the record is clear that the proposed AMP Coal Plant does not represent the minimum adverse environmental impact possible. AMP can reduce the environmental impacts of its proposal by pursuing less polluting alternatives such as energy efficiency, renewable energy sources, and natural gas combined cycle. If it is shown that coal power is still needed after those alternatives are fully realized, the record demonstrates that the sub-critical pulverized coal plant proposed by AMP is the most polluting type of coal plant possible.

LEGAL BACKGROUND

In order to build an "electric generating plant," a company must, among other things, obtain a certificate of environmental compatibility and public need ("certificate") from the Board. O.R.C. § 4906.04. Pursuant to the Power Siting Statute, O.R.C. § 4906 *et seq.*, the Board "shall not grant a certificate for the construction, operation, and maintenance" of an electric generating plant "unless it finds and determines [that] all of the" elements set forth in the Statute

have been satisfied. O.R.C. § 4906.10(A). While the Statute sets forth seven standards that must be satisfied before any certification can be issued, the two most relevant to the proceeding here are:

- The nature of the probable environmental impact
- That the facility represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations

O.R.C. § 4906.10(A)(2), (3).¹

The Board has well recognized authority to deny certification where the statutory standards for certification have not been satisfied. O.R.C. § 4906.03(D); *Ohio Edison Co. v. Power Siting Commission*, 56 Ohio St. 2d 212, 214-215 (1978) (upholding denial of certification due to adverse recreational impacts). The Board also has the authority to modify an applicant's proposal in order to minimize its environmental impact. O.R.C. § 4906.10(A). In order to protect environmental and public health interests, it is proper for the Board to require an evaluation of the environmental impacts of the proposed AMP Coal Plant, and to deny certification or modify the proposal if the identified need could be satisfied with fewer adverse environmental impacts. *City of Columbus v. Ohio Power Siting Commission*, 58 Ohio St. 2d 435 (1979); *City of Columbus v. Teater*, 53 Ohio St. 2d 253, 260-61 (1978).

It is also critical to note that under the Board's rules, AMP bears the burden of proving that the statutory criteria for certification have been satisfied. O.A.C. § 4906-7-09(F). Therefore, if AMP has failed to evaluate environmental impacts or alternatives, the Board must deny certification.

¹ The concerns about climate change and other environmental impacts, cost, and alternatives raised in this proceeding also demonstrate that the proposed AMP Coal Plant will not "serve the public interest, convenience, and necessity." O.R.C. § 4906.10(A)(6).

<u>ARGUMENT</u>

I. Certification Must be Denied Because the Impacts of the AMP Coal Plant's CO2 Emissions Have Not Been Evaluated or Factored Into the Consideration of Alternatives

The Board cannot grant certification to the AMP Coal Plant because AMP has not evaluated the environmental impacts of the Plant's CO2 emissions and the resulting global warming. The evidence and the law demonstrate that: (1) Ohio law requires the evaluation of the climate change impacts of the proposed AMP Coal Plant as set forth in the Power Siting Statute, (2) AMP and the Board Staff have not evaluated those impacts as required by Ohio law, and (3) the Plant's emission of more than 7.3 million tons of CO2 (AMP Ex. 11, Attachment ES-1, p. 1 at line 13; Citizen Groups' Ex. 6, p. 50 at lines 13-14) would significantly impact the environment by exacerbating climate change. As such, the evaluation of the environmental impacts of the AMP Coal Plant and alternatives required by the Statute has not occurred here.

With regards to CO2 emissions and climate change, AMP is apparently trying to have it both ways. The applicant has ignored and repeatedly sought to exclude evidence regarding the impacts of CO2 emissions and climate change on the erroneous ground that such impacts are irrelevant to this proceeding. Yet AMP also seeks credit for its non-binding suggestion that it might someday decide to capture CO2 emissions using a technology that has yet to be tested outside of preliminary laboratory tests for that purpose. Such an approach is plainly inadequate. Before this Board can permit AMP to build a coal plant that would emit more than 7.3 million tons of CO2 per year for the next 50 years, the law requires a careful evaluation of the impacts of those CO2 emissions and a binding commitment to alternatives that would minimize those impacts. Such alternatives include pursuit of energy resources that emit less CO2, binding CO2 capture and sequestration requirements, co-firing with natural gas or biomass, and requiring a

more efficient power plant. Certification must be denied unless those impacts are evaluated and minimized.

A. The Power Siting Statute Requires an Evaluation of CO2 Emissions and Climate Change Impacts.

As the Administrative Law Judges ("ALJs") stated, that global warming is happening and is being caused by CO2 emissions is not in dispute in this proceeding. (Jan. 4 Tr. p. 99, lines 4-11). What is in dispute is whether such impacts must be evaluated as part of this proceeding. The answer to that question is unequivocally yes.

The Power Siting Statute requires a thorough evaluation of the nature of all probable environmental impacts of the proposed AMP Coal Plant, which includes the global warming or climate change impacts of the Plant's CO2 emissions. The Statute provides that certification can be granted only if: (1) "the nature of the probable environmental impact" has been determined, and (2) the Plant "represents the minimum adverse environmental impact" in light of alternatives. O.R.C. 4906.10(A)(2), (3). The Board cannot determine either the nature of the environmental impact or accurately conclude that such impact is the minimum possible if a major environmental impact of a proposal is ignored. As such, an analysis of the environmental impacts of the AMP Coal Plant that leaves out the impacts of the Plant's CO2 emissions cannot form the basis for certification under the Statute.

That the analysis required by the Power Siting Statute extends to CO2 emissions and their climate change impacts is also shown by *Ohio Edison Co. v. Power Siting Commission*, 56 Ohio St. 2d 212 (1978). In that case, the Ohio Supreme Court, in interpreting the Statute's use of the term "environmental impact," noted that the dictionary definition of "environment" includes "the whole complex of <u>climatic</u>, edaphic, and biotic factors that act upon an organism or an ecological

community and ultimately determine its form and survival." *Id.* at 215 n. 1 (emphasis added). As such, the Statute requires that the climate change impacts of the AMP Coal Plant's CO2 emissions be evaluated as part of the certification process.

This plain reading of the Statute is also supported by case law interpreting similar provisions of the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4332 et seq. NEPA requires, among other things, an evaluation of the "environmental impact of the proposed action" and "alternatives." Id. In order to fulfill these requirements, an agency proposing a major action that would significantly affect the environment is required to provide a "specific analysis as to all facets of the project's effects on the environment." Stop the Pipeline v. White, 233 F.Supp. 2d 957, 963 n. 6 (S.D. Ohio 2002). A number of courts have held that CO2 emissions have impacts that must be evaluated in such a NEPA analysis. See, e.g., Center for Biological Diversity v. National Highway Traffic Safety Administration, 508 F.3d 508, 552-58 (9th Cir. 2007) (reversing automobile fuel mileage standards because agency had failed to evaluate impacts of CO2 emissions); Mid States Coalition for Progress v. Surface Transp. Bd.; 345 F.3d 520, 548-50 (8th Cir. 2003) (requiring evaluation of emissions of CO2 and other pollutants from increased coal consumption that would result from approval of new and upgraded rail lines); Border Power Plant Working Group v. Dept. of Energy, 260 F.Supp. 2d 997, 1028-29 (S.D. Cal. 2003) (requiring evaluation of CO2 emissions from power plants that would result from approval of transmission line project).

Ignoring the plain language of the Power Siting Statute, AMP apparently believes that the impacts of its CO2 emissions can be ignored because they are purportedly not otherwise regulated. (Tr. Vol. II at p. 87 line 21 to p. 88 line 24, p. 122 lines 3-7) While AMP's claim that

CO2 emissions are not otherwise regulated is legally incorrect,² it is also irrelevant in determining whether the statutory requirements are met here. Nowhere does the Power Siting Statute state that the Board is restricted to environmental impacts from pollutants that are otherwise regulated. Instead, the Board must find that the proposed facility complies with Ohio's air pollution control statute and other regulations, O.R.C. § 4906.10(A)(5), <u>and</u> determine the facility's probable environmental impact, O.R.C. § 4906.10(A)(2), <u>and</u> find that the facility represents the minimum adverse environmental impact in light of alternatives. O.R.C. § 4906.10(A) (3). In other words, the Statute mandates an evaluation of all the environmental impacts of the coal plant, not simply of those impacts that are regulated by other laws. Therefore, whether CO₂ emissions are otherwise regulated in no way changes the fact that this Board must evaluate the impacts of those emissions as part of the environmental impacts and alternatives analyses required by the Statute.

B. Neither AMP nor the Staff Have Evaluated the Impacts of the AMP Coal Plant's CO2 Emissions.

The hearing record in this proceeding makes abundantly clear that neither AMP nor the Board Staff evaluated the environmental impacts of the CO2 emission from the AMP Coal Plant. Three of AMP's witnesses testified that they had evaluated the probable environmental impacts of the proposed Plant and/or that they had determined that the AMP Coal Plant represented the minimum adverse environmental impact. (Kiesewetter Test. at Q 27; Meyer Test. at Q 25, 30,

² CO₂ emissions are subject to regulation under the federal Clean Air Act and Ohio's air pollution control statute. Both federal and state law prohibits the construction of a new major stationary source of air pollutants unless, among other things, the plant applies "best available control technology for each regulated NSR pollutant that it would have the potential to emit in significant amounts." 42 U.S.C. § 7475(a); 40 C.F.R. § 52.21(j)(1); O.A.C. §§ 3745-31-02(A)(1); 3745-31-15(C); 3745-31-13(A). "Regulated NSR pollutant" is defined as including "any pollutant that otherwise is subject to regulation under the Act." 40 C.F.R. 52.21(b)(50); O.A.C. 3745-31-01(DDDD)(2). The U.S. Supreme Court recently confirmed that CO₂ is an air pollutant, *Massachusetts v. EPA*, 127 S.Ct. 1438 (2007), and CO₂ is subject to and/or actually regulated under various provisions of the Clean Air Act. 42 U.S.C. §§ 7411, 7521; 40 C.F.R. Part 75. As such, CO₂ emissions cannot be considered an unregulated pollutant.

31; Couppis Test. at Q 26). The Staff made the same assertions. (Staff Report at 28, 40). Yet each of those witnesses acknowledged that they failed to evaluate the impacts of CO2 emissions and global warming in such assessments of environmental impacts. (Tr. Vol. II at 29-30, 94-95, 97, 161; Tr. Vol. V at 96). For example, the following cross examination took place with regards to the opinion of Randy Meyer, AMP's Director of Environmental Affairs, that the AMP plant represents the minimum adverse environmental impact in light of other alternatives:

Q: Now, in reaching this opinion you didn't consider proposed impacts on global warming from CO2 emission from the proposed AMPGS; is that right?

A: No, we did not consider it.

Q: And what about the global warming impacts. Any alternatives proposed to AMPGS?A: We did not consider it.

• • • •

Q. Did you consider the environmental impact of CO2 emission and include that consideration in the Power Siting Board application?

A: No. I believe I answered that before.

Q: And you didn't consider global warming impacts in any of the supporting documents or permit applications referenced in the Power Siting Board application; is that right?

A: That's correct.

(Tr. Vol. II at 94-95, 97).

Because AMP has ignored the environmental impacts of the AMP Coal Plant's CO2 emissions and resulting climate change, the applicant has failed to meet its burden of

demonstrating that it has evaluated the environmental impacts of the proposal or that the proposal would have less adverse environmental impacts than other alternatives.³

AMP's asserts that it "considered" CO2 emissions in deciding to use Powerspan control technology for sulfur dioxide control, because it might someday be able to capture CO2 (Tr. Vol. II at 120-22). That assertion, unsupported by any substantive analysis or demonstrable commitment, does not satisfy the statutory standards here. For one thing, such "consideration" fails to constitute the evaluation of impacts required by the Statute especially where, as here, AMP has made no commitment to actually reduce its CO2 emissions.

In addition, AMP's statements about using Powerspan to capture CO2 are little more than speculation. On their face, AMP's statements are not binding commitments that would actually minimize the Plant's impacts. Toward this point, AMP has not made any binding commitment to capture and sequester CO2 emissions from the Coal Plant (Tr. Vol. II at p. 150 lines 9-14, p. 151 line 22 to p. 152 line 2), and has not even evaluated the feasibility of sequestering such emissions even if they were captured. (Tr. Vol. II at p. 154 lines 7-14).

In terms of CO2 emissions specifically, AMP admits that it has selected Powerspan only for sulfur dioxide control – not CO2 control. While there may be some overlap of the two technologies, Powerspan for CO2 control would require the installation of additional technology that AMP is simply proposing to leave space for in case they someday decide to install it. (Tr. Vol. II at p. 188 line 9 to p. 189 line 16; AMP Ex. 1 at 22 Q; AMP Application at Sec. OAC 4906-13-01 p. 11; Staff Ex. 1 at 31). Also, Powerspan has yet to be tested outside of a laboratory for CO2 capture – the first real world test on a 1 MW slipstream begins in 2008, and a 125 MW

³ AMP has also failed to meet its burden here because its witnesses are not qualified to express expert opinions about the environmental impacts of the AMP Coal Plant. Mr. Couppis acknowledged that he did not carry out or rely on an assessment of environmental impacts in reaching his opinion. (Tr. Vol. II at p. 26 lines 2-15). Mr. Kiesewetter has no expertise in assessing environmental impacts. (Tr. Vol. II at p. 164 lines 7-22).

demonstration project is not expected to start until 2012. (Tr. Vol. II at p. 150 lines 3-5). While the Citizen Groups hope those tests are successful, questions remain about whether Powerspan will be able to capture CO2 from a 960 MW power plant and, if so, at what cost. (Tr. Vol. I p. 187 line 21 to p. 188 line 15; Citizen Groups Ex. 6 p. 31 line 3 to p. 32 line 22). In fact, AMP itself admits that Powerspan is not commercially ready for CO2 capture. (Tr. Vol. II p. 127 lines 3-5, p. 150 lines 6-8).

Without a binding commitment to actually capture and sequester CO2, AMP's suggestion that it might use Powerspan to capture CO2 is little more than speculation. The Board cannot rely on AMP's mere speculation as a substitute for the evaluation and minimization of CO2 impacts required by the Power Siting Statute. O.R.C. § 4906.10(A)(2), (3).

C. The AMP Coal Plant's CO2 Emissions Would Have Significant Environmental Impacts.

While AMP and the Staff failed to evaluate the impacts of the AMP Coal Plant's emission of more than 7.3 million tons of CO2 per year, it is clear that such emissions would have significant environmental impacts. For example, as summarized in Exhibit DAS-4 to Mr. Schlissel's testimony, recent scientific studies from the Intergovernmental Panel on Climate Change, National Science Academies, and other scientists have concluded that:

- Significant global warming is occurring
- Most of the warming can likely be attributed to human activity
- Scientific evidence of climate change includes unusually high temperatures and increased storm intensity, the melting of the polar ice caps and glaciers, coral bleaching, and sea level rise
- Increased understanding of climate change is revealing that in many cases the risks are more serious than previously thought

- Impacts from global warming will increase if the globe warms approximately 1 to 3 degrees Celsius, with serious risks of large scale, irreversible impacts such as possible destabilization of the Antarctic ice sheets becoming more likely with a more than 3 degree Celsius increase
- Significant reductions in greenhouse gas emissions are needed to lessen the magnitude and rate of climate change, and to avoid temperature increases of more than 2 to 3 degrees Celsius

(Citizen Group's Ex. 6, p. 15 lines 6-7, and Ex. DAS-4 pp. 14-16).

The Board Staff have also acknowledged that CO2 emissions "have been associated with climate change" (Staff Ex. 1 at 29) and even AMP's own witness admits that avoiding CO2 emissions "provides environmental benefits." (AMP Ex. 18 at 10Q).⁴ Unfortunately, these and other impacts of CO2 emissions were not evaluated in this proceeding.

Judicial decisions underscore the need to consider the impacts of CO2 emissions. After reviewing substantial scientific evidence, a number of courts have found that global warming is occurring, that CO2 emissions are a primary contributor to global warming, and that global warming is likely to have significant environmental impacts. For example, the U.S. Supreme Court, in holding that CO2 is an "air pollutant" for purposes of the Clean Air Act, found that "the harms associated with climate change are serious and well recognized," and could potentially include "a precipitate rise in sea levels by the end of the century," "irreversible changes to natural ecosystems," "a significant reduction in water storage in winter snowpack in mountainous regions," and "an increase in the spread of disease." *Massachusetts v. EPA*, 127

⁴ The Citizen Groups made a number of efforts to present additional evidence regarding the impacts of CO2 emissions and global warming that were rejected. With their intervention papers, the Citizen Groups submitted reports regarding climate change causes and impacts from the Intergovernmental Panel on Climate Change ("IPCC") and the U.S. EPA. On December 4, 2007, after expert testimony was submitted, the ALJs ruled that such reports were relevant only to intervention and would not constitute evidence in the record. At the hearing, the Citizen Groups' motions to admit IPCC and U.S. EPA reports in response to testimony from AMP and the Staff witnesses that they had determined the environmental impacts of the AMP Coal Plant were denied. (Tr. Vol. II at 131-33; Vol. V at 121-127). In addition, NRDC's motion to present rebuttal testimony regarding CO2 impacts and climate change was denied. (Vol. VI at 93-102). The Citizen Groups reiterate and maintain their arguments that those exhibits should have been admitted and that their motion for rebuttal testimony should have been granted.

S.Ct. 1438, 1455-56 (2007). Similarly, in *Center for Biological Diversity*, 508 F.3d at 554-558, the court found that the impacts of vehicle CO2 emissions must be evaluated in setting automobile mileage standards because there is "compelling scientific evidence" regarding the possible impacts of CO2 and climate change. Also, in *Green Mountain Chrysler Plymouth Dodge Jeep v. Crombie*, 508 F.Supp. 2d 295, 341 (D.Vt. 2007), the court found that "it is widely accepted in the scientific community" that "global warming is taking place as a result of human emissions of carbon dioxide and other greenhouse gases, and that its consequences are likely to be harmful." As such, these probable environmental impacts must be fully evaluated by AMP and the Board, and binding steps to minimize such impacts must be required before certification can be granted for the proposed AMP Coal Plant.

II. Certification Must Be Denied Because AMP Did Not Properly Evaluate Alternatives to the Proposed AMP Coal Plant

The Board must deny certification to the AMP Coal Plant because the evaluation of alternatives required by the Power Siting Statute has not occurred. The Statute provides that certification can be granted only if AMP demonstrates that its proposed coal plant "represents the minimum adverse environmental impact" after a careful analysis of the availability, nature, and economics of alternatives. O.R.C. § 4906.10(A)(3). In order to satisfy this standard, AMP needed to complete a thorough analysis that looks at alternatives in combination, factors in the comparative environmental impacts of each alternative, and is based on an accurate assessment of the economics of each alternative. The record demonstrates that AMP did not do so.⁵

⁵ While AMP has at least gone through the motions of pretending to objectively evaluate alternatives to the proposed AMP Coal Plant, the Board Staff have not bothered to do so. Instead, in its findings regarding the proposal, the Staff left off the statutory language regarding alternatives and simply recommended a finding that the AMP Coal Plant represents the minimum adverse environmental impact. (Staff Ex. 1 at pp. 29, 40). As such, the Staff have not made the findings required for certification under the Statute.

A. AMP Failed to Consider Alternatives in Combination to Satisfy the Identified Energy Need

A major inadequacy in AMP's purported consideration of alternatives is the company's failure to evaluate the ability of a combination of alternatives to satisfy the need identified by AMP. In order to minimize costs, risk, and impacts in meeting identified energy needs companies should, as Mr. Schlissel explained, engage in resource planning that evaluates a range of supply and demand side resources in order to identify the best combination of those resources. (Citizen Groups Ex. 6 at p. 66 line 17 to p. 67 line 2). Such an evaluation of a combination of energy resources is also required by the Power Siting Statute because even if an individual resource is not able to satisfy all of the identified energy need, that alternative will be able to meet at least part of the need, thereby reducing the amount of power that might have to be obtained from a more polluting resource. *Cf. Davis v. Mineta*, 302 F.3d 1104, 1121-22 (10th Cir. 2002); *Simmons v. U.S. Army Corps of Engineers*, 120 F.3d 664, 669 (7th Cir. 1997) (NEPA required consideration of combination of multiple water sources as alternative to proposed reservoir).

A review of the Power Supply Plans that AMP's consultant, R.W. Beck, prepared shows that AMP did not fully analyze alternatives in combination. Instead, in the Power Supply Plans "certain alternatives" were screened out, renewables were capped at 10%, energy efficiency was excluded, and the combination of alternatives to be considered was predetermined. (Citizen Groups Ex. 6 at p. 68 line 15, p. 69 lines 1-4, 9-18). In addition, AMP's witnesses on a number of occasions dismissed efficiency, wind, and other renewables on the basis that those alternatives alone could not satisfy the entire 960 MW of need identified by AMP. (Tr. Vol. II at p. 168 line 23 to p. 169 line 9, p. 170 line 7 to p. 172 line 5, p. 200 line 19 to p. 201 line 9). The Statute,

however, requires that these alternatives be included as part of a combination of alternatives that could meet AMP's identified need with less environmental impact. O.R.C. § 4906.10(A)(3).

B. AMP Failed to Factor Environmental Considerations Into Its Evaluation of Alternatives.

AMP also failed to demonstrate compliance with the Power Siting Statute's alternatives requirement because the company did not factor environmental impacts into its consideration of alternatives. The Power Siting Statute does not allow an applicant to reject an environmentally preferable alternative simply because it might cost a little more. Instead, the Statute provides that the Board must determine whether there are less environmentally damaging alternatives, and to "consider" the economics of those alternatives in making this determination. O.R.C. § 4906.10(A)(3). This statutory language shows that the Board should balance the environmental impacts and economics of proposed alternatives, rather than prioritizing economics over the environment. If there is a cost difference between two power sources, the applicant and the Board must evaluate whether the differing environmental impacts of those sources outweighs that cost difference. For example, the proposal would weigh the economic impacts of air pollution emissions and water pollution in the evaluation of alternatives under the Statute.⁶

In failing to conduct the requisite analysis, AMP did not factor the lower environmental impacts of alternatives into its evaluations. AMP only presented a patchwork of its past and existing consideration of alternatives; it did not consider the lower environmental impacts of these alternatives – especially with respect to the proposed coal plant. In fact, the record is replete with testimony from AMP's witnesses that they did not consider or compare the air

⁶ The ALJs struck Mr. Furman's testimony that the environmental and health costs of air emissions should be factored into any economic analysis, and his provision of a specific analysis of such costs. (Tr. Vol. I at 45-49, striking Citizen Groups' Ex. 1 at p. 14 lines 12-24 and Ex. RCF-7). The Citizen Groups reiterate and maintain their objection to the striking of that testimony.

pollution impacts (Tr. Vol. II at p. 30 lines 14-20, p. 130 line 18 to p. 131 line 5), the public health impacts of such air pollution (Tr. Vol. II at p. 26 lines 8-15), coal mining impacts (Tr. Vol. II at p. 92 lines 7-12, p. 92 line 23 to p. 94 line 3, p. 158 lines 4-8, p. 162 lines 1-4), or CO2 impacts (Tr. Vol. II at p. 29 line 20 to p. 30 line 13, p. 88 lines 16-24) of the AMP Coal Plant or its alternatives. Therefore, AMP has failed to demonstrate that its proposed AMP Coal Plant represents the minimum adverse environmental impact in light of alternatives. O.R.C. § 4906.10(A)(3).

AMP appears to believe that it need not factor these environmental impacts into the present evaluation because some of those impacts may have been considered in other permitting contexts. (Tr. Vol. II at p. 49 line 13 to p. 50 line 2, p. 116 line 14 to p. 118 line 8, p. 166 line 12 to p. 167 line 8). But if all an applicant has to do to comply with O.R.C. 4906.10(A)(2) and (3) is show that the proposal would satisfy other regulatory requirements, those provisions of the Power Siting Statute would be virtual nullities. Instead, as explained above, the Statute plainly requires a showing that the proposed AMP Coal Plant complies with various enumerated state laws, <u>and</u> an evaluation of the proposal's probable environmental impact, O.R.C. § 4906.10(A)(2), <u>and</u> a determination that the facility represents the minimum adverse environmental impact in light of alternatives. O.R.C. § 4906.10(A) (3). That evaluation and determination can be made only if all environmental impacts, whether regulated under another statute or not, are considered in the proceeding and factored into the comparison of alternatives.

C. AMP Underestimated the CO2 and Construction Cost for the AMP Coal Plant

AMP's evaluation of alternatives is also flawed because the construction and CO2 emission costs for the AMP Coal Plant have been underestimated. Cost is relevant here because the Statute requires an evaluation of the "economics of the various alternatives." O.R.C. § 4906.10(A)(3). Yet AMP's Power Supply Plans and Initial Project Feasibility Study both rely on estimates of CO2 and construction costs that are too low. The analysis of alternatives required by the Statute can only occur here if AMP's cost estimates accurately reflect the likely price of CO2 emissions and the risk of increased construction costs.

It is widely accepted that federal CO2 regulation is a matter of when, not if. (Citizen Groups Ex. 6 at p. 15 line 3 to p. 16 line 4, p. 20 lines 10-11). Such regulation would place a cost on the emission of CO2 from power plants and other sources. AMP appears to accept this reality, but has assumed a CO2 cost from the regulation of only \$10 per ton. As Mr. Schlissel explained in depth in his testimony, this \$10 per ton figure is outdated and significantly underestimates the cost of future CO2 regulation.

AMP's \$10 per ton estimate is apparently based almost entirely on a December 2004 report from the National Commission on Energy Policy ("NCEP") regarding the likely cost of NCEP's proposed CO2 regulation. (*Id.* at p. 28 line 12 to p. 29 line 12). That study is no longer relevant because numerous more stringent bills have been introduced in Congress since then, and NCEP itself has revised and considerably strengthened its proposal. (*Id.* at p. 29 line 5 to p. 30 line 9).

In his testimony, Mr. Schlissel forecasts a mid-range CO2 cost of \$15 per ton in 2015, \$25 per ton in 2020, \$30 per ton in 2025, and \$35 per ton in 2030. (Citizen Groups Ex. 6 at p. 41 lines 1-9, Figure 4). These forecasts were developed through an analysis of proposed CO2 legislation, state and international CO2 action, the potential for CO2 offsets and credits, and the likely trajectories of both CO2 emission constraints and technological progress. (Id. at p. 38 lines 5-12). AMP's \$10 per ton estimate is significantly lower than this mid-range forecast (*id*.

at p. 41 Figure 4), and than numerous other recent CO2 price forecasts. (Id. at p. 45 Figure 5 and p. 46 Figure 6). Mr. Schlissel's CO2 price forecast shows that AMP significantly underestimated the likely cost of the AMP Coal Plant and its more than 7.3 million tons of CO2 emissions per year in its Power Supply Plans, Initial Project Feasibility Study, and evaluation of alternatives. (Citizen Groups Ex. 6 at p. 50 line 11 to p. 51 line 3).

In terms of construction costs, AMP admits that construction cost increases "currently being experienced" for coal-fired power plants throughout the country "are staggering." (Citizen Groups Ex. 6 at p. 60 lines 3-10; *see also id.* at p. 53 line 5 to p. 59 line 3) Yet it appears that AMP has not adequately factored these staggering construction cost increases into its construction cost estimate for the proposed AMP Coal Plant. (*Id.* at p. 63 lines 8-18). Mr. Schlissel's testimony underscores this point. It shows that it is reasonable to expect that the AMP Coal Plant will cost more to build than the current \$2.912 billion estimate. (Citizen Groups Ex. 6 at p. 53 lines 3-5). Thus, increasing construction costs and their risks must be evaluated before an accurate assessment of the proposed coal plant and alternatives can be done.

III. Certification Must Be Denied Because AMP Has Improperly Rejected Less Polluting Alternatives and Therefore the Proposed AMP Coal Plant Cannot Be Found to Represent the Minimum Adverse Environmental Impact

In addition to the inadequacies with AMP's consideration of alternatives, the record shows that there are a number of less polluting alternatives that can satisfy some or all of the energy need that AMP has identified. AMP either ignored these alternatives, or rejected them on specious grounds. As such, the Board cannot find that the AMP Coal Plant represents the minimum adverse environmental impact.

A. AMP has entirely ignored energy efficiency as an alternative for satisfying part of the need that AMP has identified

One alternative that has been proven to reduce the environmental impact of meeting AMP's energy needs is energy efficiency. As Mr. Schlissel testified, a 2001 study of energy options in the Midwest found that 29% of energy demand could be met by 2020 through the implementation of energy efficiency programs. (Citizens Groups' Ex. 6 at p. 71 lines 3-8). The cost of such energy efficiency programs was estimated at an average of 2.4 cents per kilowatt hour. (*Id.*) Applied to the facts here, this is approximately one-third to one-half of AMP's underestimate of the cost of electricity from the proposed AMP Coal Plant. (AMP Ex. 11 at Attachment ES-2, p. 2 line 59 and p. 4 line 59). As Mr. Schlissel explained, a number of other states, cities, and utilities are planning to use energy efficiency to meet 15% or more of their energy needs. (Citizen Groups' Ex. 6 at p. 71 lines 13-21). Similar efforts by AMP would enable the company to build less additional power generation and, therefore, reduce the environmental impacts of its proposal.

AMP, however, admits that it has not evaluated energy efficiency or factored it into its decision to pursue the AMP Coal Plant. As Mr. Schlissel explained, one of the most significant flaws with the Power Supply Plans that AMP presented to its members is that the Plan did not consider energy efficiency as a resource option. (Citizen Groups' Ex. 6 at p. 68 lines 14-15). In addition, while AMP's witnesses testified that they concluded that the AMP Coal Plant represented the minimum adverse environmental impact in light of alternatives (AMP Ex. 1 at 26Q; AMP Ex. 2 at 31Q, AMP Ex. 3 at 27Q), they acknowledged that AMP did not evaluate energy efficiency as one of those alternatives. (Tr. Vol. II at p. 41 line 19 to p. 42 line 5, p. 84 lines 20-24, p. 162 lines 10-19). AMP's witness Larry Marquis, a Vice-President responsible for energy efficiency programs at AMP, testified that AMP does not have an efficiency program for

appliances or an efficiency incentive program for residential customers. (Tr. Vol. VI at p. 40 lines 16-22). Mr. Marquis acknowledged that he had not considered well-accepted energy efficiency programs that are being implemented by other companies, or that are from the U.S. Department of Energy and U.S. EPA's National Action Plan on Energy Efficiency or the American Council for an Energy Efficient Economy. (Tr. Vol. VI at p. 40 line 23 to p. 41 line 18).

In an effort to diffuse its lack of consideration of energy efficiency, AMP baldly asserts that energy efficiency could not satisfy all of the demand that is to be met by the AMP Coal Plant. (Tr. Vol. II at p. 167 lines 10-23 and p. 168 line 23 to p. 169 line 6; Tr. Vol. VI at p. 47 lines 12-22). This assertion does not squarely address AMP's failure to consider energy efficiency practices that are commonly implemented by power companies throughout the country. AMP's assertion simply does not justify its rejection of energy efficiency practices as an alternative.

As explained in Section II.A above, alternatives must be considered in combination in order to ensure that the least environmentally damaging approach to meeting the identified energy need is selected. So, just because efficiency may not replace all of energy need identified by AMP does not mean that efficiency's ability to replace a significant portion of that power should be ignored. AMP's statements to the contrary demonstrate that the applicant has not satisfied the statutory requirements here and that certification for the proposed coal plant must be denied.

B. AMP improperly rejected wind power as an alternative for satisfying part of the need that AMP has identified

While AMP notes that it currently operates one wind farm and is pursuing two others, the record shows that the applicant has not factored wind power into any evaluation of alternatives to the proposed AMP Coal Plant. The Power Supply Plans that AMP provided to its members note that **[REDACTED]**

; Citizen Groups Ex. 6 at p. 69 line 1).

[REDACTED]

Similarly, AMP's witness Mr. Kiesewetter admitted that in reaching his opinion that the AMP Coal Plant represented the minimum adverse environmental impact in light of other alternatives, he did not evaluate wind power as an alternative. (Tr. Vol. II at p. 162 lines 20-23).

AMP attempts to justify its rejection of wind power on the basis that it would cost more than the AMP Coal Plant. (AMP Ex. 4 at 30Q). AMP, however, has overestimated the capital cost and underestimated the capacity for wind (Citizen Groups Ex. 6 at p. 68 lines 21-24), thereby making wind appear less economic than it is. As explained in Section II.C above, AMP has also underestimated the likely cost of the AMP Coal Plant. Finally, there is no evidence that AMP factored in environmental considerations or CO2 costs in rejecting wind.

AMP also claims that it rejected wind because of its low capacity factor and inability to be dispatched. (Tr. Vol. II at p. 171 line 13 to p. 172 line 5). While these characteristics of wind power prevent reliance on wind alone to meet the power need identified by AMP, it does not foreclose the use of wind as one part of a combination of alternatives designed to satisfy the demand identified by AMP.

AMP also has failed to fully consider wind power as an alternative to the proposed coal plant. AMP currently operates one 7.2 MW wind farm near Bowling Green, Ohio and is pursuing only three others – the 5.4 MW wind farm near Berlin, Pennsylvania, 49.5 MW wind farm in Wood County, Ohio, and a farm in Clyde, Ohio. (AMP Ex. 17 at 13Q; Tr. Vol. VI at p. 37 line 23 to p. 39 line 9). The other wind studies mentioned in Mr. Marquis' testimony are being pursued at the initiative of individual AMP members, not AMP. (Tr. Vol. VI at p. 39 lines 7-16). Moreover, save the single exception of a 5.4 MW wind farm in Pennsylvania, AMP is apparently not pursuing any wind farms in neighboring states. Therefore, AMP has not demonstrated that it has adequately considered wind power as an alternative to the coal plant, as well as other alternatives.

C. AMP improperly rejected Natural Gas Combined Cycle ("NGCC") as an alternative for satisfying part of the need that AMP has identified

The record is clear that a natural gas combined cycle ("NGCC") plant would have a lower adverse environmental impact than the proposed AMP Coal Plant. For example, a presentation by the Electric Power Research Institute shows that on a pound per megawatt hour basis, an NGCC plant would emit substantially less nitrogen oxide ("NOX"), sulfur dioxide ("SO2"), and particulate matter ("PM"), than a pulverized coal plant. (Citizen Groups Ex. 1 at Ex. RCF-10). Similarly, a recent Department of Energy/National Energy Technology Laboratory comparison of NGCC, pulverized coal, and IGCC, found that an NGCC would have substantially lower emissions of SO2, NOx, PM, and mercury. (Citizens Groups Ex. 9 at p. 29).

[REDACTED]

AMP, however, claims that concerns about "the risk associated with high volatility of natural gas prices, which are projected to rise in the coming years" justify its rejection of NGCC. (AMP Ex. 1 at 16Q). Yet AMP's own testimony shows that the Energy Information Administration has projected natural gas prices to fall between now and 2013 and to remain below their current price until at least 2030. (AMP Ex. 4 at Ex. IC-4; Tr. Vol. II at p. 21 lines 17-24). Therefore, AMP's stated concern about natural gas price volatility is unsupported in the record and does not justify the rejection of NGCC as an alternative to the AMP Coal Plant.

AMP also contends that it rejected NGCC because the levelized cost for the AMP Coal Plant would be approximately 14% lower than the levelized cost for an NGCC plant. (AMP Ex. 4 at 26Q; AMP Ex. 1 at 16Q). That cost estimate, however, does not justify the rejection of NGCC for a four main reasons. First, as explained in Section II.B above, the Statute does not permit an alternative to be rejected based solely on cost. Instead, if a less environmentally damaging alternative costs more, an assessment must be made of whether the environmental benefits of the alternative outweigh the additional cost. No such assessment occurred here.

Second, AMP failed to compare the cost of the AMP Coal Plant with buying into existing NGCC capacity (Citizen Groups Ex. 6 at p. 69 lines 5-6), which would avoid some of the capital costs related to building new NGCC capacity. This is especially surprising given that AMP is pursuing the 544 MW Fremont Energy Center NGCC plant, but is proposing to use that plant only for intermediate power, rather than the base load power that would be met with the AMP Coal Plant. (AMP Ex. 16 at 13Q). The Board should require an analysis of whether similar purchases of existing NGCC are possible and cost competitive with the proposed AMP Coal Plant.

Third, in comparing the AMP Coal Plant to an NGCC plant, AMP assumed a CO2 cost of only \$10 per ton. (AMP Ex. 4 at 26Q). As explained in Section II.C above, CO2 costs will almost certainly be much higher. Because the AMP Coal Plant would emit more CO2 than an NGCC plant, higher CO2 prices would reduce or even eliminate any cost advantage for the AMP Coal Plant.

AMP offered rebuttal testimony from Mr. Clark that purports to show that

[REDACTED]

The Citizen Groups

object to Mr. Clark's rebuttal testimony regarding cost because they were denied the opportunity to conduct discovery regarding that testimony and, therefore, had no way to meaningfully evaluate that assumption.⁷ It is important to note, however, that Mr. Schlissel testified that only "very high" CO2 prices are likely to lead to a "significant several percent increase" in natural gas prices. (Tr. Vol. IV at p. 110 line 20 to p. 111 line 11). Therefore, there is evidence suggesting that

[REDACTED]

⁷ While AMP made Mr. Clark available for an informal discussion with Citizen Groups' counsel the day before Mr. Clark's cross-examination,

D. AMP improperly rejected Integrated Gasification Combined Cycle ("IGCC") as an alternative for satisfying the need identified by AMP

Even looking at just coal-fired power plants, the record shows that the Board must deny certification because the proposed AMP Coal Plant is far from the least environmentally damaging coal plant possible. In particular, as shown in Mr. Furman's testimony, in comparison to the proposed Meigs plant, Integrated Gasification Combined Cycle ("IGCC") is an available and cost competitive coal technology that leads to significantly lower emissions of sulfur dioxide, nitrogen oxide, and other air pollutants and provides commercially proven opportunities to control carbon dioxide emissions.⁸ While AMP claims to have rejected that alternative because of concerns about reliability and cost, the record shows that those concerns are unfounded.

An IGCC would be less environmentally damaging than the proposed AMP Coal Plant because an IGCC would have lower air pollution emissions than the proposed Plant. For example, as Mr. Furman's testimony shows, in comparison to the proposed AMP Coal Plant, the recently permitted Taylorville IGCC plant in Illinois would emit:

- Only 33% of the nitrogen oxides ("NOx")
- Only 10% of the sulfur dioxides ("SO2")
- Only 54% of the particulate matter ("PM")
- Only 66% of the mercury
- Only 34% of the sulfuric acid mist ("H2SO4")
- Only 22% of the carbon monoxide ("CO")

⁸ As discussed in Section I above, in order to satisfy the minimum adverse environmental impact standard of the Power Siting Statute, an IGCC plant would still need a binding requirement to capture and sequester it CO2 emissions. The fact that an IGCC can achieve greater pollution control levels than the proposed AMP Coal Plant, however, demonstrates that the AMP Coal Plant does not represent the minimum adverse environmental impact and that, therefore, the Board must deny certification here.

• Only 30% of the volatile organic compounds ("VOC")

(Citizen Groups' Ex. 1 at p. 21 and RCF-14; Tr. Vol. I at 195-98). Similarly, comparisons of IGCC versus pulverized coal technology from the U.S. EPA, Department of Energy/National Energy Technology Laboratory, and the Electric Power Research Institute each found that the IGCC technology would achieve significantly lower emission rates for NOx, SO2, PM, and/or mercury than would a pulverized coal plant. (Id. at p. 17 lines 14-25, p. 18 lines 1-20, and Ex. RCF-10 and RCF-11).⁹

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The primary reason AMP has provided for rejecting IGCC technology is the purported lower reliability of such technology. (AMP Ex. 1 at 15Q; AMP Ex. 2 at 18Q). As AMP's witness has acknowledged, however, with the use of a backup fuel (such as natural gas), the reliability of an IGCC plant is comparable to that of a pulverized coal plant. (Tr. Vol. II at p. 156 lines 17-21). In fact, a number of operating coal gasification and IGCC plants have achieved greater than 90% availability with the use of backup fuel. (Citizen Groups Ex. 1 at p. 32 line 14 to p. 33 line 23). In addition, the ability of an IGCC to operate on a range of fuels provides it

⁹ The Citizen Groups reiterate and maintain their objection to the ALJs' striking of a number of Mr. Furman's exhibits and related text, particularly Ex. RCF-12 and RCF-13 and accompanying text on pages 19 and 20 of Citizen Groups' Ex. 1. Thos exhibits and text provide further evidence that other recent permit applications, draft permits, and final permits for IGCC plants have lower emission rates than those found in the draft air permit for the proposed AMP Coal Plant.

¹⁰ AMP's witness Randy Meyer has testified that emission rates for an IGCC plant are similar to the rates proposed for the AMP Coal Plant. (AMP Ex. 2 at 18 Q). The record shows, however, that Mr. Meyer based this opinion on an exhibit, RM-5, that AMP withdrew because Mr. Meyer had not prepared the exhibit or personally verified any of the data. (Tr. Vol. II at pp. 106-108). In addition, Mr. Meyer's testimony compared the AMP Coal Plant to only the two operating IGCC plants that were built in the late 1990s. (AMP Ex. 2 at 18 Q; Tr. Vol. II at 86-87). As Mr. Furman testified, more weight should be given to recently proposed IGCC plants because they represent the capabilities of current IGCC technology, including the use of Selexol for SO2 control and SCRs for NOx control, which neither of the two existing IGCC plants in the U.S. use. (Citizen Groups' Ex. 1 at p. 19 lines 4-6, 9-13, 24-25 and p. 20 lines 1-4).

with an advantage over a typical pulverized coal plant that can operate only on coal. (Tr. Vol. II at p. 157 lines 3-7, Citizen Groups Ex. 1 at p. 33 lines 1-4).

AMP also states that it rejected IGCC because its capital costs are 10-20% higher than those of a pulverized coal plant. (AMP Ex. 1 at 15Q). This justification is inadequate for a few reasons. First, a number of studies have found that there is only a 5-11% difference in the cost of electricity from an IGCC versus a pulverized coal plant. (Citizen Groups Ex. 1 at Ex. RCF-5).

Second, once the cost of carbon capture and sequestration is factored in (which, as discussed in Section I, should be required if a coal plant is going to be certified) an IGCC plant is projected to have a significantly lower cost of electricity than a pulverized coal plant. (Citizen Groups Ex. 1 at p. 11 line 19 to p. 12 line 6, p. 12 line 12 to p. 13 line 9, Ex. RCF-5, RCF-6; Citizen Groups Ex. 9 at p. 37). AMP suggests that an IGCC with carbon capture and sequestration would not have a cost advantage over the AMP Coal Plant because Powerspan could capture CO2 for around \$20 per ton. That \$20 per ton figure is based solely on laboratory tests of the technology. (Citizen Groups Ex. 6 at p. 31 lines 3-16). Most other studies have provided much higher estimates for the cost of capturing CO2 from pulverized coal plants. (Id. at p. 34 line 1 to p. 35 line 10). In addition, AMP's consultant acknowledges that it did not independently evaluate the \$20 per ton figure. (Tr. Vol. II at p. 150 line 22 to p. 151 line 8; Tr. Vol. V at p. 13 lines 10-19). Finally, the \$20 per ton figure does not include the cost of sequestration. (Tr. Vol. II at p. 154 lines 2-14). Therefore, if Powerspan proves successful at capturing CO2, it is likely to cost significantly more than \$20 per ton to use that technology to capture and sequester CO2 from the AMP Coal Plant

Finally, even assuming that the AMP Coal Plant has a small cost advantage over an IGCC plant, there has been no assessment of whether that cost advantage is outweighed by the

significantly lower pollution emissions that the IGCC could achieve. Therefore, the Board cannot find that AMP has properly rejected the less polluting IGCC alternative.

E. Supercritical pulverized coal would have fewer adverse environmental impacts than the AMP Coal Plant, but AMP refuses to commit to it

Certification must also be denied because the record shows that AMP has proposed a subcritical pulverized coal plant, which is the least efficient and most polluting type of pulverized coal plant. As Mr. Furman explained in his testimony, the AMP Coal Plant, as proposed, would have a 31.56% efficiency, which qualifies it as a sub-critical plant. (Citizen Groups' Ex. 1, p. 37, lines 13-19). Pulverized coal plants, however, can be built with efficiencies of 38% or higher, (*id.* at p. 37, lines 22-24 and p. 38 lines 1-5, Ex. RCF-30), and a number of such more efficient supercritical plants are in existence. (*Id.* at p. 39 lines 10-15, Ex. RCF-31, RCF-32). While supercritical plants have higher capital costs than a subcritical, they require less coal to produce the same amount of power and, therefore, lead to a lower cost of electricity. (*Id.* at p. 38 lines 4-7, 24-25). Because supercritical plants burn less coal, they emit less pollution (including CO2) and have lower coal mining impacts, per kilowatt hour of electricity produced. (*Id.* at p. 38 lines 6-13). As such, the AMP Coal Plant does not represent the minimum adverse environmental impact and cannot be certified as proposed.

AMP's witnesses acknowledge that a supercritical plant is feasible and would lead to "less emissions and other environmental impacts as a result of higher efficiency." (AMP Ex. 2 at 29 Q; see also AMP Ex. 3 at 23 Q, AMP Ex. 4 at 35 Q and 37 Q). As a result, they request that the Board provide them the "latitude" or "option" to build a supercritical or a subcritical. (AMP Ex. 3 at 22 Q and 23 Q; AMP Ex. 2 at 29 Q). The Statute, however, does not leave the decision

of whether to minimize environmental damage to the whim of the applicant. Instead, the Statute requires that the least environmentally damaging alternative be chosen. O.R.C. § 4906.10(A)(3). There is no dispute that a supercritical plant would have fewer environmental impacts than the proposed AMP Coal Plant and, therefore, the Board must deny certification or, at a minimum, require that if a pulverized coal plant is going to be built, it must be a supercritical unit with an efficiency of at least 38%.

IV. Mr. Clark's Rebuttal Testimony is Not Entitled to Confidentiality

The Citizen Groups also move to challenge AMP's designation of portions of Mr. Clark's rebuttal testimony (AMP Ex. 16C), and the related hearing testimony, as confidential.¹¹ While AMP contends that this testimony is a confidential trade secret (Tr. Vol. VI at p. 13 line 1 to p. 14 line 9), such status can be claimed only where the information has "independent economic value" and where reasonable efforts were made to keep it secret. *State ex rel. Besser v. Ohio State Univ.*, 89 Ohio St. 3d 396, 399 (2000). Under the terms of the Protective Order, and the requirements of O.A.C. §§ 4906-7-01(B)(8)(c) and 4906-7-07(H)(4)(c), AMP bears the burden of demonstrating that these factors are satisfied. AMP cannot do so here.

The portions of Mr. Clark's rebuttal testimony for which the Citizen Groups are challenging the claim of confidentiality are

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¹¹ The Citizen Groups reserve their right to challenge in the future AMP's claim of confidentiality for other testimony and documents in this proceeding.

State ex rel. Rea v. Ohio Dep't of Educ., 81 Ohio St. 3d 527, 532, 692 N.E.2d 596, 601 (1998) ("[O]nce material is publicly disclosed, it loses any status it ever had as a trade secret.")

For example, Mr. Clark's direct testimony, which was not deemed confidential by AMP, details the estimated cost of the AMP Coal Plant and claims that such cost is 8% lower than other coal plants and 14 % lower than an NGCC plant. (AMP Ex. 4 at 23Q to 26Q, 31Q). AMP has also presented cost estimates for the AMP Coal Plant at its members' city council meetings, which were presumably open to the public. (AMP Ex. 12 at CWS00261). In addition, estimates of capital, financing, fuel, and allowance costs are included in the Initial Project Feasibility Study, which was provided to the public by one of AMP's own members in response to a public records request. The executive summary of that Study, including cost data, has been filed as non-confidential AMP Ex. 11 and was also filed with the Citizen Groups' intervention motion. As such, AMP has not tried to keep secret [REDACTED]

, and has no claim that it would be harmed by disclosure of this data now.

V. Conclusion

Before AMP can build its expensive AMP Coal Plant that would contribute to climate change and adversely impact air quality for the next 50 years, the Power Siting Statute requires AMP to carefully evaluate those impacts and determine whether there are alternatives that would have less impacts. The record, however, shows that the climate change impacts of the AMP Coal Plant's CO2 emissions have not been evaluated, that alternatives have not been thoroughly

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and objectively considered, and that the AMP Coal Plant does not represent the minimum adverse environmental impact for meeting the energy need identified by AMP. Therefore, the Statute requires the Board to deny certification so that cleaner alternatives can be pursued.

Respectfully Submitted,

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January 28, 2008

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that an original and 10 copies of the foregoing Public Version of the Initial Post-Hearing Brief of the Natural Resources Defense Council, Ohio Environmental Council, and Sierra Club has been filed with the Ohio Power Siting Board and served on the following via electronic mail at the e-mail addresses listed below on this 28th day of January. 2008.

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