

**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,	)	Case No. 08-888-EL-ORD
4901:5-5, and 4901:5-7 of the Ohio	)	
Administrative Code, pursuant to Chapter	)	
4928, Revised Code, to Implement Senate Bill	)	
No. 221.	)	

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**REPLY COMMENTS  
OF  
THE AMERICAN WIND ENERGY ASSOCIATION,  
WIND ON THE WIRES, OHIO ADVANCED ENERGY, AND ENVIRONMENT OHIO**

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**I. INTRODUCTION**

The Public Utilities Commission of Ohio (“Commission”) issued for comment its Staff’s proposed 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 in its Entry of August 20, 2008. The American Wind Energy Association (“AWEA”), Wind on the Wires (“WOW”), Ohio Advanced Energy (“OAE”)<sup>1</sup>, and Environment Ohio (“EO”), collectively the “Joint Commenters,” filed comments on September 9, 2008. Joint Commenters now present their responses to other comments filed in this proceeding.

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<sup>1</sup> See letter attached hereto as Exhibit A from Ohio Advanced Energy members and supporters regarding the importance of proper implementation of SB 221.

## II. REPLY COMMENTS

### A. Rule 4901:1-40 – Definitions

#### (E) “Biomass energy”

The Joint Commenters stress their support for the comments of Vertus Technologies Industrial LLC (“Vertus”), which proposes excluding forest and agricultural crops from the definition of “biomass energy” in proposed Rule 4901:1-40-01(E). As Vertus points out, “If the definition of ‘biomass energy’ does not exclude agricultural or tree crops, the Alternative Energy Portfolio Standard (“AEPS”) will have the unintended consequence of contributing to higher food prices and encouraging tree cutting for the sole purpose of energy production.”<sup>2</sup>

Borrowing from the definition of “biomass energy” set forth in Ohio Revised Code Section (“R.C.”) 4728.01(A)(35), proposed Rule 4901:1-40-01(E) defines the term similarly, but adds “forestry waste and residues,” “vegetation waste,” and “right of way trimmings” among other wastes and by-products. Joint Commenters do not object to the inclusion of these additional potential fuel sources. However, in order to avoid creating a perverse incentive to clear cut forests or protected lands and to encourage unsustainable land-use practices, Joint Commenters emphasize that this rule should not create a market incentive to clear natural areas. Therefore, the definition of “biomass energy” should *exclude* forest and agricultural crops. Taking the recommendation of Vertus a step further, Joint Commenters also propose excluding forest and agricultural crop residues or byproducts derived from federal lands or from land that were not cleared prior to enactment of SB 221. To this end, Joint Commenters recommend the definition of “biomass energy” set forth in their initial comments.

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<sup>2</sup> *Comments of Vertus Technologies Industrial, LLC*, p. 2.

**(F) “Clean coal technology”**

Ohio Revised Code Section 4928.01(A)(34)(c) defines “Clean coal technology” as including any technology with the:

**\*\*\* design capability to control or prevent the emission of carbon dioxide, which design capability the commission shall adopt by rule\*\*\*.**  
(Emphasis added).

Thus, the General Assembly has required the Commission to establish specific design capability standards to govern whether a given coal technology application should be designated “clean coal.” As noted in their comments, however, Joint Commenters find the proposed definition to be inadequate because it fails to include any design capability standards whatsoever.

The Joint Commenters support the comments of Global Energy, Inc. which explains that a “clean coal” facility with the “design capability to remove” pollutants does not by itself require the facility to actually capture or sequester carbon dioxide or other such pollutants in order to meet the standard. The Staff’s proposed language ignores the Commission’s legislative mandate to define this term with particularity. Without modification, the proposed definition will undoubtedly result in conventional coal facilities being inappropriately labeled “clean coal” with only minimal additional “design capability.” As such, the Joint Commenters continue to encourage the Commission to consider the more detailed definition of “clean coal” put forth by the Ohio Consumer and Environmental Advocates.

**(G) “Co-firing”**

“Co-firing” is defined in proposed Rule 4901:1-40-01(G) as “simultaneously using multiple fuels in the generation of electricity.” Rather than be broadened as Duke Energy Ohio, Inc. (“Duke Energy”) advocates, this definition must be clarified to specify exactly what portion of the output from a co-firing facility qualifies toward the alternative energy targets.

As suggested in other provisions of the proposed rules, such as proposed Rule 4901:1-40-04(A)(6), the definition of “co-firing” necessarily limits qualifying output to the proportion of fuel input attributable to an advanced or renewable energy resource. In essence, the fuel source ought to dictate what proportion of electricity output from the co-firing facility qualifies as advanced or renewable energy. The proposed rules should be clarified to state:

- (G) “Co-firing” means simultaneously using multiple fuels in the generation of electricity. THE PROPORTION OF FUEL INPUT ATTRIBUTABLE TO ADVANCED OR RENEWABLE ENERGY RESOURCES SHALL DICTATE THE PROPORTION OF ELECTRICITY OUTPUT FROM THE FACILITY THAT CAN BE CONSIDERED ADVANCED OR RENEWABLE ENERGY.

This language parallels the Commission’s proposed qualification on the use of biomass energy as a qualifying renewable energy resource in proposed Rule 4901:1-40-04(A)(6).

**(K) “Demand-side management”**

The Joint Commenters agree with and support Nucor Steel Marion, Inc.’s (“Nucor Steel”) technical modification to the definition of “demand-side management” set forth in proposed Rule 4901:1-40-01(K). The reference to a purported definition of demand-side management in proposed Rule 4901:1-39-01 appears to be incorrect because that rule does not include such a definition. The only definition of “demand-side management” found in any existing or proposed rule is found in proposed Rule 4901:5-5-01(F). The Joint Commenters support Nucor Steel that proposed Rule 4901:1-40-01(K) should use the definition found in Rule 4905:5-5-01. As such, Joint Commenters propose the following modification:

- (K) “Demand-side management” has the meaning set forth in rule ~~4901:1-39-01~~ 4901:5-5-01(F) of the Administrative Code.

**(M) “Double-counting”**

Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company (hereinafter “FirstEnergy”) advocates removing the definition of “double-counting” from the proposed rules. Columbus Southern Power Company and Ohio Power Company (hereinafter “AEP”), Dayton Power and Light Company (“DP&L”), or Duke Energy differ from FirstEnergy and agree that a definition is appropriate.<sup>3</sup> In fact, AEP recognizes that the “concept of prohibiting double counting for RECs may be reasonable in order to ensure that a particular certificate is only used once.”<sup>4</sup> DP&L recognizes that a “prohibition against double-counting is appropriate to make sure that the same resource is not counted toward compliance by two different entities.”<sup>5</sup> Joint Commenters concur with DP&L and urge the Commission to adopt rules preventing inappropriate “gaming” of the AEPS.

**i. Double-counting, energy efficiency**

Proposed Rule 4901:1-40-01(M) defines “Double-counting” as:

Utilizing renewable energy, renewable energy credits, or **energy efficiency savings** to (1) satisfy multiple regulatory requirements, (2) support multiple voluntary product offerings, (3) substantiate multiple marketing claims, or (4) some combination of these. (Emphasis added.)

The reason the phrase “energy efficiency savings” is included in the definition of double-counting is that SB 221 allows “energy efficiency” to contribute towards compliance with both the energy efficiency and advanced energy benchmarks. However, proposed Rule 4901:1-40-04(B)(7) limits qualifying advanced energy resources to “energy efficiency, **above and beyond** that used to comply with” the energy efficiency benchmarks. (Emphasis added.) In essence, the

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<sup>3</sup> Although each of these parties proposes modifications to this definition, none propose deleting the definition in its entirety.

<sup>4</sup> *Initial Comments of Columbus Southern Power Company and Ohio Power Company* (“AEP Comments”), p. 9. As explained in greater detail below, the Joint Commenters oppose AEP’s comments challenging the applicability of double-counting to both energy efficiency and renewable energy.

<sup>5</sup> *Initial Comments and Objections of The Dayton Power and Light Company* (“DP&L Comments”), p. 17.

combined effect of proposed Rules 4901:1-40-01(M) and 4901:1-40-04(B)(7) prohibits a utility from counting the same energy efficiency program toward compliance with both the energy efficiency and the advanced energy benchmarks.

All of the utilities commenting on this proposed rule opposed the “above and beyond” limitation. The energy efficiency benchmarks require utilities to implement energy efficiency programs that achieve gradual efficiency-based energy reductions that total 22% or more by 2025. During that same time period, the advanced energy benchmarks require at least 12.5% of a utility’s “total, annual average, and normalized kilowatt-hour sales” to be derived from advanced energy resources. Double-counting would let a utility satisfy its entire advanced energy benchmark (12.5%) solely through the use of energy efficiency measures.

If the Commission adopts the utilities’ recommendation and permits double-counting of energy efficiency savings, it is absolutely critical that proposed Rule 4901:1-40-07 (setting forth the cost cap calculation) is clarified. For purposes of calculating the advanced energy cost cap, the Commission must specify that this calculation will not merely include the up-front cost of implementing the energy efficiency program. Instead, the calculation also shall take into account “net” costs relating to energy savings. In this way, energy efficiency will actually bring down the cost of “advanced energy” for purposes of the cost cap.

For example, assume that a utility implements a new energy efficiency program that has a program cost of \$1 million and a customer investment cost of an additional \$1 million. Again, assume that this \$2 million investment will “pay itself off” some number of years prior to the end of the life of the efficiency measures supported by the program, and that gross customer savings from the program over the life of the measures are \$3 million. In this instance, the cost cap

calculation should recognize net savings of \$1 million levelized over the lifetime of the program's measures.

**ii. Double-counting, voluntary offerings**

As noted above, proposed Rule 4901:1-40-01(M) defines "Double-counting" as:

Utilizing renewable energy, renewable energy credits, or energy efficiency savings to (1) satisfy multiple regulatory requirements, **(2) support multiple voluntary product offerings**, (3) substantiate multiple marketing claims, or (4) some combination of these.

DP&L claims that the reference to voluntary product offerings is misplaced if "intended to preclude the use of RECs to meet the SB 221 requirement and to offer green power to customers directly through a green energy tariff."<sup>6</sup> DP&L then argues that if a "utility could meet the [AEPS] targets solely through the voluntary participation of customers willing to pay for RECs under a green tariff program, that should be an outcome that would be applauded, not barred." This argument is unpersuasive and runs counter to general consumer protection practices in the voluntary green energy field.

The Joint Commenters have no objection to voluntary programs whereby utilities allow consumers to purchase RECs. But it would be unfair and deceptive for utilities to credit these RECs to the mandatory requirements of the AEPS as the customer would gain no real value for their payment into the voluntary program. No reasonable consumer would voluntarily pay increased rates for a "green program" merely to cover the costs of a utility's already mandatory compliance with the mandatory renewable energy standard. Rather, consumers participate in voluntary REC programs with the reasonable understanding that their contribution will result in additional renewable energy, above and beyond that already required by law. Under the DP&L proposal, in contrast, these voluntary consumer payments would not result in a single additional

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<sup>6</sup> DP&L Comments, p. 18.

solar panel, wind turbine, or “green electron.” This would be false advertising, not a result to be “applauded.”

Joint Commenters note that DP&L’s proposal would violate a number of best practice guidelines, including the National Association of Attorneys General’s environmental marketing guidelines. Published in 1999, these guidelines expressly recognize that “if the same electricity or its attributes are sold more than once to consumers, the claim is deceptive.”<sup>7</sup> In other states, attorneys general have even determined that advertising the sale of RECs to a customer implicitly promises renewable energy investment. Thus, if the utility then uses customers’ resources merely to meet its statutory obligation, this misrepresentation could violate consumer protection laws.<sup>8</sup> The Commission should not sanction this practice and instead should support the position outlined in the proposed rule.

### **iii. Double-counting, federal/state requirements**

Both AEP and DP&L suggest that the definition of “double-counting” should be clarified to “ensure that it does not apply to prohibit a utility or electric services company from counting an advanced energy resource towards compliance with multiple requirements that may be imposed by different government entities.”<sup>9</sup> While it may or may not be appropriate to count state alternative energy portfolio standard requirements toward any hypothetical federal requirements, that decision may be made at the federal level. Until that time, Ohio policymakers should wait until actual federal legislation is enacted so that the scope and rules of the federal requirement can be accurately assessed prior to making any determination on this question.

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<sup>7</sup> [http://www.eere.energy.gov/greenpower/markets/pdfs/naag\\_0100.pdf](http://www.eere.energy.gov/greenpower/markets/pdfs/naag_0100.pdf), p. 4.

<sup>8</sup> Further support is derived from a 2005 report of the National Renewable Energy Laboratory entitled “Emerging Markets for Renewable Energy Certificates: Opportunities and Challenges.” This report noted that, “[f]or consumer protection, tracking systems make it easier to prevent double sales of RECs, or double use (using the same REC to satisfy a mandate, for example, and selling the same REC to consumers in a voluntary market).” <http://apps3.eere.energy.gov/greenpower/resources/pdfs/37388.pdf>, p. 41.

<sup>9</sup> *Initial Comments and Objections of the Dayton Power and Light Company* (“DP&L Comments”), p. 17.



Of course, the Joint Commenters adamantly oppose the use of “double-counting” by the same utility in more than one state. For example, a utility should not be allowed to use the same REC for compliance purposes under the respective standards of both Pennsylvania and Ohio (as is accomplished by the proposed rule).

**(DD) “Renewable energy credit,” Offshore Wind Development**

The Joint Commenters strongly support the development of offshore wind power in Lake Erie and throughout the country. As the comments of Cuyahoga County explain:

Ohio has a once in its history opportunity to become the offshore wind center of this county, to have the first wind installations in fresh water in the world, to boost what has been a stumbling economy in Ohio, to enhance the health and welfare of its citizens in the northeast region and throughout Ohio, to help reduce our reliance on fossil fuels, and to enhance its position in the world economy in a market that has been largely European.<sup>10</sup>

SB 221 also specifically acknowledges that offshore wind power can be used to satisfy the AEPS.<sup>11</sup> In order to further promote this development, Cuyahoga County suggests quadrupling the value of RECs awarded for a certain amount of power produced from offshore wind farms.

While Joint Commenters recognize the benefits of offshore wind power, this proposal appears to lack a specific statutory basis. It is noteworthy that the General Assembly saw fit to create a specific statutory carveout for solar power in SB 221, but did not create a carve-out for offshore wind power. As such, until the General Assembly addresses this policy question, the Joint Commenters recommend that RECs for offshore wind power be given equal weight to land-based projects.

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<sup>10</sup> *Initial Comments of Cuyahoga County, Ohio*, p. 6.

<sup>11</sup> R.C. 4928.01(A)(35) (identifying a “wind turbine located in the state's territorial waters of Lake Erie” as a renewable energy resource).

**B. Rule 4901:1-40-02(B) – Blanket authority to waive alternative energy requirements**

The Joint Commenters emphasize their continuing opposition to proposed Rule 4901:1-40-02(B), which appears to give the Commission blanket authority to waive any requirement of the AEPS for unspecified “good cause.” This overly broad language clearly oversteps the specific and comprehensive method for excused compliance that the General Assembly specifically sets forth in R.C. 4928.64, and may increase the cost of implementing the AEPS by decreasing the predictability of the standard. Support for this position is also found in the comments of the Greenfield Steam & Electric Co.<sup>12</sup> and the Ohio Consumer and Environmental Advocates.<sup>13</sup>

**C. Rule 4901:1-40-03(C) – 15-year planning requirement**

Joint Commenters support proposed Rule 4901:1-40-03(C) which requires utilities to submit annual alternative energy compliance plans based on a “fifteen-year planning horizon,” the same duration as the AEPS. While this 15-year horizon is for planning purposes only and will not be binding on the utility companies, it will allow the Commission to forecast how those utilities are preparing to satisfy the AEPS and will help the advanced and renewable energy industries develop long-term strategies. One of the primary consumer benefits of the AEPS is enhanced risk-hedging of the price of fossil fuels and the fifteen year planning horizon is consistent with a full assessment of the value of that hedge.

**D. Rule 4901:1-40-04(A) – Qualified resources, renewable energy**

Proposed Rule 4901:1-40-04(A) sets out the list of technologies that qualify as “renewable energy,” and thus are eligible for the renewable tier of the alternative energy

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<sup>12</sup> Letter filed by Greenfield Steam & Electric, p. 1. See, also, *Reply Comments by the Ohio Consumer and Environmental Advocates*.

<sup>13</sup> *Comments by the Ohio Consumer and Environmental Advocates*, pp. 41-43.

portfolio standard. Among these resources are “fuel cells” in proposed Rule 4901:1-40-04(A)(7), and a “[s]torage facility” that complies with the two requirements set forth in proposed Rule 4901:1-40-04(A)(8).

**i. Fuel cells**

Proposed Rule 4901:1-40-04(A)(7) identifies as a renewable resource the energy from a “fuel cell for which the feedstock is a renewable resource.”<sup>14</sup> This distinction among types of fuel cells appears necessary because SB 221 classifies “fuel cells” as both advanced and renewable energy. While the Joint Commenters strongly support the development of fuel cell technologies, they do not support the comments of both Rolls-Royce and the Ohio Fuel Cell Coalition which recommend eliminating the distinctions.

This interpretation would inappropriately allow fuel cells generating energy from non-renewable sources such as natural gas, coal, and nuclear facilities to be given credit toward the “renewable” tier of the AEPS.

Such an interpretation apparently would result in one fuel cell producing energy credits under either or both the advanced and renewable standards. The Joint Commenters do not believe SB 221 intended for such “double credit,” and support resolving this ambiguity in accord with the proposed rule.

**ii. Storage facilities**

FirstEnergy asserts that the requirements imposed on storage facilities under proposed Rule 4901:1-40-04(A)(8) are inconsistent with the reference to “storage technology” set forth in

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<sup>14</sup> Joint Commenters refer to the definition of “renewable” as proposed in its initial comments. See *Comments of the American Wind Energy Association, Wind on the Wires, Ohio Advanced Energy, and Environment Ohio* (“Joint Commenters Initial Comments”), pp. 14-15.

R.C. 4928.64(A)(1)(c).<sup>15</sup> Joint Commenters strongly disagree and believe FirstEnergy's proposal inappropriately undermines the AEPS.

Ohio Revised Code Section 4928.01(A)(35) identifies as a renewable energy resource any "storage facility that will promote the better utilization of a renewable energy resource that primarily generates off peak." Consistent with this statutory reference, proposed Rule 4901:1-40-04(A)(8) identifies certain storage facilities as qualifying renewable energy resources. Under this proposed rule, a storage facility qualifies as a renewable energy resource if the following requirements are satisfied:

- (a) The electricity used to pump the resource into a storage reservoir must qualify as a renewable energy resource.
- (b) The amount of energy that may qualify from a storage facility is the amount of electricity dispatched from the storage facility and shall exclude the amount of energy required to initially pump the resource into the storage reservoir.

Such requirements are entirely consistent with the statutory requirement that a "storage facility" only qualify if it is used to "promote the better utilization of a renewable energy resource that primarily generates off peak."

FirstEnergy's proposal, however, seeks to modify the proposed rule to break any functional connection between the storage facility and the renewable energy resource it supports. In fact, FirstEnergy proposes that a storage technology *anywhere* on the grid, and which stores energy from any source whatsoever (renewable or otherwise), should be eligible for the sole reason that its existence could facilitate the integration of intermittent resources onto the grid. This contention is simply inconsistent with the renewable energy prong of SB 221.

If the Commission adopts FirstEnergy's argument, the entire output of a fossil-fuel generation facility would qualify as renewable energy resource if it simply mediated electricity

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<sup>15</sup> FirstEnergy Comments, p. 15.

through a “storage facility” before being put into the grid. For example, assume that a coal generation facility pumps the excess water used in its operations to a storage facility on a hill. Whenever the coal generation facility needs to balance its load (i.e. peak periods of electricity usage), it allows the stored water to fall down the hill and generate electricity. Under FirstEnergy’s proposal, the use of this “storage facility” would satisfy the renewable energy benchmark even though no renewable energy resource was involved in the process. Any number of storage facilities could qualify, with a potentially large impact on the amount of actual renewable energy developed under the standard. As such, Joint Commenters strongly oppose FirstEnergy’s recommendation because it is irreconcilable with SB 221’s intent to promote the use of renewable energy.

**E. Rule 4901:1-40-04(A) – Qualified resources, placed-in-service date**

AMP-Ohio and the City of Hamilton recommend allowing *all* existing renewable energy facilities in the state of Ohio to be credited to the renewable energy requirements of SB 221.<sup>16</sup> However, this argument contravenes R.C. 4928.64(A) [and proposed Rule 4901:1-40-04(A)], which specifically defines alternative energy (of which renewable energy is a subset) as facilities placed in service after January 1, 1998.

The General Assembly included January 1, 1998, placed-in-service criterion in the statute after much deliberation and painstaking negotiation among stakeholders (including the Joint Commenters) to strike a balance whereby the law would encourage new renewable energy generation but not “penalize” individuals who built renewable energy facilities in the recent past. Thus, the 1998 date was meant to include Ohio’s only utility scale wind farm, AMP-Ohio’s 4-

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<sup>16</sup> *Rulemaking Comments of American Municipal Power-Ohio, Inc.* (“AMP-Ohio Comments”), p. 5; and, *Initial Comments of the City of Hamilton, Ohio* (“Hamilton Comments”), pp. 3-4.

turbine wind project in Bowling Green, Ohio,<sup>17</sup> and other recently-sited renewable projects, but not count other projects that may have been built decades ago which, if counted, could moot the first several benchmarks in the legislation and delay the creation of a renewable and advanced energy marketplace. In addition, the national REC market known as “Green-e” requires renewable resources to have been built after 1997,<sup>18</sup> so the placed-in-service in the proposed rule is consistent with the national standard.

Therefore, the January 1, 1998, placed-in-service date must remain in the proposed rule in order to remain consistent with the statutory mandate in R.C. 4928.64(A) and the underlying goals of SB 221.

**F. Rule 4901:1-40-04(C) – Mercantile customer-sited resources, recycled materials**

The Joint Commenters strongly oppose Nucor Steel’s recommendation to add a “facility that recycles” to the examples of qualifying mercantile customer-sited resources set forth in proposed Rule 4901:1-40-04(C)(2).

Nucor Steel appears to propose that a facility which uses fossil fuels to reprocess steel be considered a renewable energy resource. Using this logic, any number of other facilities that use conventional energy to accomplish laudable public purposes would be transformed into generators of renewable energy. This idea, however, lacks any support whatsoever in SB 221.

Furthermore, a condition precedent for eligibility under the alternative energy portfolio standard is that a facility produces electricity. Based upon Nucor Steel’s comments, it is not clear these recycling facilities even produce electricity. Without a clear statement that the recycling facility produces electricity, Nucor Steel’s argument is unpersuasive.

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<sup>17</sup> This facility was placed-in-service in November 2003. See <http://www.greenenergyohio.org/page.cfm?pageId=103>.

<sup>18</sup> See [http://www.green-e.org/docs/energy/Appendix%20D\\_Green-e%20Energy%20National%20Standard.pdf](http://www.green-e.org/docs/energy/Appendix%20D_Green-e%20Energy%20National%20Standard.pdf).

**G. Rule 4901:1-40-04(D)(3) – Banking of Renewable Energy Credits**

The General Assembly provided some guidance about the life of a REC, stating that a utility may utilize a REC “in any of the five calendar years following the date of its purchase or acquisition.”<sup>19</sup> The proposed rule, however, merely reiterates the statutory language. Like the Joint Commenters, both FirstEnergy and AEP recommend clarifying the proposed rule.<sup>20</sup>

As emphasized by the Joint Commenters in their comments,<sup>21</sup> the Commission must clarify the event triggering the five-year clock. Joint Commenters reiterate that this event should be *upon the generation of the renewable energy*, since this is the point when the REC is “first acquired” by the owner of the generating system, or first purchased under a power purchase agreement. If so modified, this rule would allow market actors to easily calculate the expiration date of a REC and avoid the result apparently suggested by FirstEnergy and AEP where a REC could virtually never expire.

**H. Rule 4901:1-40-06(A) – Force Majeure**

SB 221 contains a *force majeure* provision that gives the Commission discretion in some cases to waive all, or part, of a utility’s compliance with the renewable energy benchmarks.<sup>22</sup> The statute sets forth the standard by which the Commission may determine a utility need not comply with a benchmark—namely whether an event beyond the utility’s control has rendered renewable energy resources to be unavailable in the marketplace.

The Industrial Energy Users-Ohio (“IEU-Ohio”) proposes that in making this determination, the Commission should consider (among other factors) the utility’s efforts to

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<sup>19</sup> R.C. 4828.65.

<sup>20</sup> FirstEnergy Comments, pp. 17-18; and AEP Comments, pp. 14-15.

<sup>21</sup> Joint Commenters Initial Comments, pp. 12-13.

<sup>22</sup> See R.C. 4928.64(C)(4)(b).

engage “customer-sited capabilities” to comply with the benchmark.<sup>23</sup> The Joint Commenters concur.

#### **I. Rule 4901:1-40-07(A) and (B) – Independent 3% Cost Caps**

While SB 221 set forth an annual schedule of renewable energy benchmarks and an advanced energy target in 2025, it also contains a mechanism to protect ratepayers from potential price spikes: the so-called “3% cost caps.” The comments of FirstEnergy and DP&L challenge proposed Rule 4901:1-40-07(A) and (B) for recognizing “two independent”<sup>24</sup> or “separate”<sup>25</sup> 3% caps: one for advanced energy and one for renewable energy. However, the creation of two separate and independent 3% cost caps is exactly what SB 221 sought to achieve, as evidenced by the language of the statute and the policy underlying the AEPS. The cost cap language states:

An electric distribution utility or an electric services company need not comply **with a benchmark** under division (B)(1)[advanced energy] or (2) [renewable energy] of this section to the extent that its reasonably expected cost of that compliance exceeds its reasonably expected cost of otherwise producing or acquiring the requisite electricity by three per cent or more. (Emphasis added.)

The reference to benchmarks is critical because renewable energy benchmarks are annual and therefore renewable energy production is compared to the cost cap every year. Assuming that FirstEnergy and DP&L are correct, and there is only a single 3% cost cap, the statutory reference to “benchmarks” suggests the advanced energy calculation is not even performed until 2025 because *the advanced energy standard contains no other interim benchmarks*. Therefore, for the years 2009-2024, the 3% cost cap would have virtually no applicability. The proposed rule adopts the only logical interpretation of the statute: there are two separate caps for the two different tiers of the AEPS.

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<sup>23</sup> *Initial Comments of Industrial Energy Users-Ohio*, p. 14.

<sup>24</sup> FirstEnergy Comments, p. 18.

<sup>25</sup> DP&L Comments, p. 22.



There is additional textual evidence in the statute that the General Assembly intended to create two separate caps. Again, R.C. 4928.64(C)(3) states:

\*\*\* an electric distribution utility or an electric services company “need not comply with a benchmark **under division (B)(1)[advanced energy] or (2) [renewable energy]** of this section to the extent that its reasonably expected cost of that compliance exceeds its reasonably expected cost of otherwise producing or acquiring the requisite electricity by three per cent or more.” (Emphasis added.)

The General Assembly chose to separate the tiers of the AEPS in the statute with the word “or,” which has been defined by the Ohio Supreme Court as a “function word indicating an alternative between different and unlike things.” *Columbia Gas Transmission Corp. v. Levin* (2008), 117 Ohio St.3d 122, 125. Continuing on, the Court explained that the “General Assembly’s use of the disjunctive ‘or,’ as opposed to the conjunctive ‘and,’ indicates that the classifications are intended to be read separately from each other.” *Id.* In reading these two provisions separately from one another, it is clear that the statute intends for two separate 3% costs caps to apply—one for advanced energy and one for renewable energy.

This interpretation also supports the overall purpose of the AEPS. In setting separate cost caps, the General Assembly understood that certain advanced energy technologies, such as advanced nuclear or IGCC coal plants, could cost billions of dollars and increase overall rates significantly.<sup>26</sup> Under these circumstances, the General Assembly sought to place renewable energy under its own cost cap so that it could be judged on its own merits and not be held hostage to the high costs and frequent cost overruns associated with other technologies.

For these reasons, the Joint Commenters strongly support the framework of the proposed rule which is consistent with R.C. 4928.64.

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<sup>26</sup> See Article attached as Exhibit B from CNNMoney.com dated November 20, 2007 and entitled “Indiana Utility Regulators Approve Duke Energy Clean Coal Power Plant.” This article explains that an IGCC coal plant proposed in Indiana will cost “approximately \$2 billion to construct” and increase rates about “16 percent” between 2008 and 2012.

**J. Rule 4901:1-40-07(B) – Cost Cap, Use of confidential information**

The comments of Constellation NewEnergy, Direct Energy Services, and Integrys Energy propose confidentiality protections for information indicating the “costs that an electric service company incurs in meeting its renewable energy obligation.”<sup>27</sup> Joint Commenters understand that in a proceeding involving the calculation of the 3% cost cap, there may be a need for certain information to remain confidential. But, issues of confidentiality are better addressed on a case-by-case basis using the Commission’s existing procedures for confidential treatment.

**K. Rule 4901:1-40-07(C) – Cost Cap, Measurement**

Proposed Rule 4901:1-40-07(C) states:

Calculations involving the cost cap *may* consist of comparing the projected generation rate of an electric utility or electric services company, exclusive of any reasonable costs associated with satisfying an alternative energy portfolio requirement, to the projected generation rate of an electric utility or electric services company including any reasonable costs of satisfying an alternative energy portfolio standard requirements.  
(Emphasis added).

The Joint Commenters believe the substantive test laid out by the proposed rule—comparing generation rates with and without the alternative energy portfolio standard—is a straightforward implementation of the statutory provision and appears to offer a clear test for the application of the cap.

Both FirstEnergy and Duke Energy challenge the 3% cost cap calculation. FirstEnergy claims that the cost cap calculation should measure the “difference in costs on the specific generation required to meet the benchmark, not between total generation with and without alternative energy resources.”<sup>28</sup> (Emphasis omitted.) The Joint Commenters oppose this standard, as it lacks a statutory basis and appears designed to trigger the cost cap prematurely

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<sup>27</sup> *Initial Comments of Constellation NewEnergy, Direct Energy Services, and Integrys Energy*, p. 8.

<sup>28</sup> FirstEnergy Comments, pp. 18-19.

and inappropriately so that the utilities need not invest in alternative energy technologies. The purpose of the cost cap is to protect ratepayers from significant increases in their electric bills, and the fairest way to accomplish this is to assess the cost to ratepayers overall rather than isolating “specific generation” associated with meeting a benchmark.

**L. Rule 4901:1-40-07(D) – Cost Cap, Unavoidable Surcharges**

The comments of IEU-Ohio make the point that the Staff should modify this proposed rule to state that “if full cost recovery is being achieved through one mechanism, it shall not be available through any other mechanism.”<sup>29</sup> The Joint Commenters agree with this recommendation.

Proposed Rule 4901:1-40-07(D) states:

- (D) ...[a]ny costs included in a commission-approved unavoidable surcharge for construction expenditures or environmental expenditures of generation resources may be excluded from consideration as a cost of compliance under the terms of the alternative energy portfolio standard.

Joint Commenters emphasize that this provision suggests if the Commission approves an unavoidable, non-bypassable surcharge to pay for costs associated with environmental upgrades to existing coal plants (such as scrubbers or carbon sequestration), those costs would be *simply ignored* when determining the cost of conventional energy generation.

This would, of course, have the effect of artificially masking the actual cost of generating conventional energy—concealing the billions of dollars that may be required to clean coal or capture and sequester carbon underground. By comparison, the cost of generating renewable energy would seem artificially and unfairly much more costly, causing the 3% cost cap to be prematurely triggered.

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<sup>29</sup> IEU-Ohio Comments, p. 15.

There is no statutory basis for discounting the actual costs of conventional energy in this manner, ignoring environmental and construction costs. Therefore, this section should be deleted in its entirety.

**M. Rule 4901:1-40-07(D), Cost Cap, Competitive Procurement**

The proposed “cost cap” rule requires utilities to “pursue all reasonable compliance options” prior to requesting relief under the cap. Implicit in the requirement that a utility pursue all reasonable compliance options is a requirement that the utility procure renewable energy through competitive selection to ensure the least cost, thereby maximizing renewable energy investments before triggering the cost cap. The Joint Commenters agree with and support the comments of LS Power Associates, L.P. in this regard.

As the Joint Commenters stated in initial comments, utilities should have the option to “self-build” renewable energy, but only after a fair and transparent competitive selection process in which the utility demonstrates it can produce the renewable energy at the most competitive price.

**N. Rule 4901:1-40-07(E) – Cost Cap, Partial Compliance**

The Joint Commenters strongly support proposed Rule 4901:1-40-07(E), which states:

If the Commission makes a determination that a three percent provision is triggered, the electric utility or electric services company shall comply with each benchmark **up to the point** that the three per cent increment would be reached for each benchmark. (Emphasis added.)

The principle clearly established in this section is that of “partial compliance”—meaning that a utility must comply with whatever portion of a benchmark can be satisfied prior to the 3% cost cap being triggered.

FirstEnergy unreasonably claims that the principle of partial compliance is “inappropriate and inconsistent with the statutory language, which states that if the three per cent cap is reached,

the utility need not comply with the benchmarks.”<sup>30</sup> In essence, FirstEnergy claims that as soon as the Commission-determined cost cap would be triggered in a given year, the utility no longer has to comply with any portion of the benchmark. For example, if a utility’s costs of complying with the renewable energy benchmark exceeded the cost of otherwise producing the electricity by 3.0001% (thereby triggering the 3% cap), FirstEnergy believes zero renewable energy resources should have to be implemented. This illogical assertion flies in the face of SB 221.

The statute referenced in FirstEnergy’s comments is R.C. 4928.66(C)(3), which states:

An electric distribution utility or an electric services company **need not comply** with a benchmark under division (B)(1) or (2) of this section **to the extent** that its reasonably expected cost of that compliance exceeds its reasonably expected cost of otherwise producing or acquiring the requisite electricity by three per cent or more. (Emphasis added.)

By selectively quoting from the statute, FirstEnergy rests its argument on the phrase “need not comply.” FirstEnergy ignores the specific and unambiguous mandate in the same sentence that a utility need not comply with a benchmark “to the extent” that doing so triggers the 3% cost cap. Thus, compliance is mandated up to the point (i.e. “to the extent”) the cost cap would be triggered and the utility “need not comply” with one hundred percent of the benchmark. The proposed rule is clearly consistent with the statute and the proposed rule implements the statute in a straightforward manner.

**O. Rule 4901:1-40-07(F) – Cost Cap, “Catch-up” Provision**

The Joint Commenters strongly support proposed Rule 4901:1-40-07(F), which states:

The Commission retains the right to **increase** a future year’s compliance obligation **by the amount of any undercompliance in a previous year** that is attributed to the three per cent cost cap provision. (Emphasis added.)

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<sup>30</sup> FirstEnergy Comments, p. 19.

Commonly referred to as a “catch up,” this rule allows the Commission flexibility to “increase a future year’s compliance” to account for the prior year’s undercompliance if the cost cap were triggered. Of course, any such increase also would be subject to the cost cap. In this way, the utilities remain on target with the benchmarks established in SB 221 and the cost cap continues to protect consumers.

FirstEnergy, AEP, and DP&L all oppose allowing the Commission to require a “catch up” on the ground that it is “not consistent with”<sup>31</sup> or “unsupported by”<sup>32</sup> SB 221. DP&L also claims that the “catch up” imposes an “undefined future obligation that may be imposed at some undefined future date to provide even more alternative energy than is required by statute.”<sup>33</sup> This is nonsense. The General Assembly locked the year-end alternative energy benchmarks into the statute. This proposed rule does not require a utility to generate even one more additional kilowatt-hour of renewable energy than is already mandated by SB 221. Instead, it simply requires a utility to “catch up” to the required percentage of advanced and renewable energy provided the cost cap is not triggered.

For example, in 2017, a utility must generate 5 ½ percent of its electricity using qualified renewable energy resources. Even assuming that the cost cap were triggered in the prior two years (meaning the benchmarks did not have to be fully satisfied in 2015 or 2016), the statute continues to mandate that the utility generate 5 ½ percent from renewable energy resources in 2017. The General Assembly placed these percentages in statute, such that Ohio’s utilities would achieve 25% of their electricity from alternative energy resources by 2025, and the utilities may not modify them through specious arguments.

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<sup>31</sup> AEP Comments, p. 15.

<sup>32</sup> DP&L Comments, p. 23.

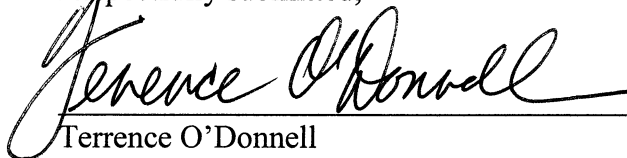
<sup>33</sup> Id.

FirstEnergy also claims that the statute provides an exclusive remedy for undercompliance in the form of compliance payments.<sup>34</sup> However, the statutory compliance payments apply only to “avoidable undercompliance” as determined in a Commission proceeding. Compliance payments are in effect a statutory penalty. The proposed “catch-up,” however, does not trigger a compliance payment. It merely provides that where there is unavoidable undercompliance—the inability to satisfy the benchmarks as a result of the 3% cost cap—the utility must catch up in future years. The proposed rule properly addresses this subject.

## **CONCLUSION**

The Joint Commenters appreciate the opportunity to work with the Commission to implement the alternative energy portfolio standards in SB 221, and respectfully request that this Commission adopt their recommendations in this proceeding.

Respectfully submitted,



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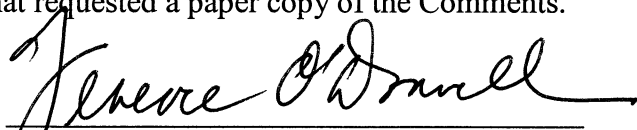
Attorneys for the American Wind Energy Association,  
Ohio Advanced Energy, Wind on the Wires, and  
Environment Ohio

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<sup>34</sup> See R.C. 4928.64(C)(2).

**CERTIFICATE OF SERVICE**

Pursuant to the Commission's Entry dated August 20, 2008, the undersigned hereby certifies that a copy of the foregoing Reply Comments was served this 26<sup>th</sup> day of September 2008 via regular mail upon the parties of record that requested a paper copy of the Comments.

  
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# The Business Voice of Advanced Energy


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September 26, 2008

Dear Public Utilities Commissioners of Ohio:

Harnessing Ohio's natural strengths and manufacturing expertise in advanced and renewable energy technology has the potential to power our state economy for the next generation and make us world leaders in the energy revolution now underway. This is a critical moment for Ohio's fragile economy and as active members of Ohio's business community, we wish to highlight to you the importance of ensuring we capitalize on the energy opportunity before us.

The Governor and the General Assembly saw the benefits of developing Ohio's clean energy resources and passed S.B. 221 to harness this opportunity. The result: Ohio's landmark alternative energy portfolio standard, requiring electric utilities to obtain 25% of their loads from alternative energy by 2025, with annual benchmarks and an enforcement mechanism for all of the renewable energy procured along the way. As you implement this law through administrative regulations, we ask that you work to maximize the benefits to our state that this law can provide, which include:

**Job Creation:** Currently, there are more than 100 companies in Ohio that are already an active part of the renewable energy supply chain and dozens more that are involved in producing and installing energy efficiency equipment. From the solar manufacturing pioneers in Northwest Ohio, to the wind developers in Ohio's rural areas, this economic sector is experiencing exponential growth, and the S.B. 221 rules should not stand in the way.

**Energy Independence:** Energy imports cost Ohioans billions of dollars. By increasing our clean, homegrown energy resources we can keep more Ohio dollars in state.

**A Healthier Environment:** Wind turbines and solar panels produce energy without utilizing polluting fuels or leaving behind toxic emissions or waste. By increasing the energy we produce from these resources, and reducing overall consumption through energy efficient technologies, we will create a healthier and cleaner future for our State.

Advanced Distributed Generation  
American Wind Energy Association  
Babcock & Brown  
Bay, Inc.  
Bio-Gas Technologies Ltd.  
Central Ohio Chapter, NECA, Inc.  
The Cleveland Foundation  
Doty & Miller Architects & Planners, Inc.  
Dovetail Solar & Wind  
EBO Group Companies  
Edison Welding Institute  
EMTEC  
Energent Solutions LLC  
GrafTech International, Ltd.  
Green Energy Design  
Honeywell Obstruction Lighting  
Horizon Wind  
Hull & Associates, Inc.  
IBEW Local Union 683  
Invenergy Wind, LLC  
JW Great Lakes Wind  
McMaster Energy Enterprises  
Melink Corporation  
Owens Corning  
Parker Hannifin Corporation  
Pilkington  
Renewable Energy Systems, Americas Inc.  
Rudolph Libbe  
Solar Fields, LLC  
SunEdison, LLC  
University Of Toledo  
Watt Works  
WebCore Technologies, Inc.  
Xunlight Corporation

September 9, 2008

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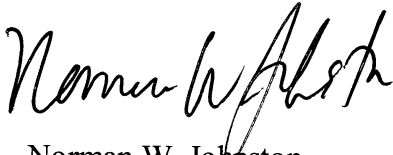
This future can become a reality if you ensure that the policies laid out in S.B. 221 are properly implemented. That is why our member companies and allies listed on this letter urge you to implement strong renewable energy and energy efficiency programs that are fair, transparent, and signal to the advanced energy community that Ohio is "open for business." The rules you adopt should not include unnecessary barriers or loopholes that would undermine the policies the Governor and General Assembly carefully crafted in S.B. 221, and the rules should provide a predictable and stable environment for those developing and financing advanced and renewable energy projects.

Business trade groups including Ohio Advanced Energy, the American Wind Energy Association, and Wind on the Wires, along with broader interests including Environment Ohio and the Ohio Consumer and Environmental Advocates, have provided detailed reply comments to you regarding the proposed rules. The comments are also supported by the national organization "Vote Solar." We support these comments which relate to advanced energy and energy efficiency, and urge you to make the proposed changes to ensure Ohio is positioned to build a robust advanced energy economy.

Please contact Terrence O'Donnell with Bricker & Eckler LLP, at 614.227.2345 should you require anything further. We look forward to working with you to build Ohio's clean energy economy.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Norman W. Johnston". The signature is fluid and cursive, with the first name "Norman" being the most prominent.

Norman W. Johnston  
Chairman, Ohio Advanced Energy  
CEO, Solar Fields LLC



Indiana Utility Regulators Approve Duke Energy Clean Coal Power Plant  
November 20, 2007: 03:14 PM EST



PLAINFIELD, Ind., Nov. 20 /PRNewswire-FirstCall/ -- The Indiana Utility Regulatory Commission granted Duke Energy permission today to construct a technologically advanced clean coal power plant in Edwardsport, Ind.

(Logo: <http://www.newscom.com/cgi-bin/prnh/20040414/DUKEENERGYLOGO> )

If the project proceeds, it will be the first commercial-scale coal gasification power plant built in the United States in the last 10 years. The approximately 630-megawatt plant will use advanced integrated gasification combined cycle (IGCC) technology.

"In the Midwest, coal is plentiful and low-cost, and finding ways to burn it cleanly is fundamental to meeting our customers' demand for power," said Duke Energy Indiana President Jim Stanley. "The Edwardsport facility could very well be the cleanest coal-fired power plant in the world once it's completed. It fits Indiana's energy plan to turn homegrown natural resources into an economic engine and be self-reliant for power. It's part of our overall plan to meet growing customer needs with cleaner coal technology, energy efficiency, and renewables."

An air permit is still necessary from the Indiana Department of Environmental Management. If that permit is approved, Duke Energy could begin construction early next year and start producing power from the site by early 2012.

The company has selected its existing power plant site in Edwardsport, Ind., as the location for the new plant. Upon completion of the project, the existing plant -- with coal and oil units built between 1944 and 1951 -- will be retired. The new plant will be able to produce nearly four times as much power as the existing plant at Edwardsport, with much less environmental impact, including 45 percent less carbon dioxide emissions per net-megawatt hour.

The plant will cost approximately \$2 billion to construct. That cost will be offset by more than \$460 million in local, state and federal tax incentives. The plant will result in an average electric rate increase of approximately 16 percent phased in from 2008 through 2012.

An average of 800 to 900 construction workers over a three-year period, with a peak work force of 2,000, will be needed. Ongoing plant operations would employ approximately 100 people.

"We've received tremendous support for the project," Stanley said. "Knox County residents unified to embrace this project and move it forward. The federal, state and local tax incentives

help close the gap between the higher costs of building a cleaner coal gasification plant compared to traditional technology."

Integrated gasification combined cycle technology uses a coal gasification system to convert coal into a synthesis gas (syngas). The syngas is processed to remove sulfur, mercury and ash before being sent to a traditional combined cycle power plant, using two combustion turbines and a steam turbine to efficiently produce electricity.

The technology could also remove the carbon dioxide from coal during the syngas conversion process to enable it to be stored or sequestered in underground geologic formations. Indiana utility regulators also were supportive of Duke Energy studying capture and sequestration of a portion of the plant's carbon emissions. If the study is successful, carbon dioxide capture and sequestration equipment could be added to the plant.

"Coal gasification technology holds tremendous promise to reduce carbon dioxide emissions to address increasing concerns and evidence of global climate change," Stanley said.

Duke Energy Indiana's Wabash River Station is the site of the 260-megawatt Wabash River Coal Gasification project, which was one of the first demonstrations of using coal gasification to produce electricity.

Duke Energy's Indiana operations provide approximately 7,300 megawatts of safe, reliable and competitively priced electricity to more than 770,000 electric customers, making it the state's largest electric supplier.

Duke Energy, one of the largest electric power companies in the United States, supplies and delivers energy to approximately 4 million U.S. customers. The company has approximately 36,000 megawatts of electric generating capacity in the Midwest and the Carolinas, and natural gas distribution services in Ohio and Kentucky. In addition, Duke Energy has more than 4,000 megawatts of electric generation in Latin America, and is a joint-venture partner in a U.S. real estate company.

Headquartered in Charlotte, N.C., Duke Energy is a Fortune 500 company traded on the New York Stock Exchange under the symbol DUK. More information about the company is available on the Internet at: [www.duke-energy.com](http://www.duke-energy.com).

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**Case No(s). 08-0888-EL-ORD**

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