AMERICAN ELECTRIC POWER

American Electric Power
1 Riverside Plaza
Columbus, OH 43215-2373
AEP.com

April 15, 2011

Ms. Renee J. Jenkins
Secretary of the Commission
Public Utilities Commission of Ohio
180 East Broad Street
Columbus, Ohio 43215-3793

**Matthew J. Satterwhite**
Senior Counsel –
Regulatory Services
(614) 716-1915 (P)
(614) 716-2014 (F)
mjsatterwhite@aep.com

**RE:** *In the Matter of the Annual Alternative Energy Compliance Plan Under Rule 4901:1-40-03(C), Ohio Administrative Code, by Columbus Southern Power Company*, Case No. 11-2423-EL-ACP and *In the Matter of the Annual Alternative Energy Compliance Plan Under Rule 4901:1-40-03(C), Ohio Administrative Code, by Ohio Power Company*, Case No. 11-2424-EL-ACP.

Dear Ms. Jenkins:

I am submitting the enclosed 2010 Alternative Energy Compliance Plan on behalf of Columbus Southern Power Company and Ohio Power Company (collectively, "AEP Ohio"), pursuant to Rule 4901:1-40-03(C), Ohio Administrative Code (OAC).

Thank you for your attention to this matter.

Respectfully Submitted,

/s/ Matthew J. Satterwhite
Matthew J. Satterwhite

# Alternative Energy Portfolio Compliance Plan

## Introduction

In Case No. 08-888-EL-ORD, the Public Utilities Commission of Ohio (Commission) approved Rules for the Alternative Energy Portfolio Standard for electric utilities (Rules). The Rules became effective on December 10, 2009. Applying Amended Substitute Senate Bill 221 (S.B. 221), the Rules require that each electric utility within the jurisdiction of the Commission adhere to specific advanced and renewable energy benchmark percentages. Each electric utility and electric services company is required to file an annual plan for compliance with future annual advanced- and renewable-energy benchmarks, utilizing a 10-year planning horizon. This plan is to be filed by April fifteenth of each year. Per Ohio Administrative Code (OAC) 4901:1-40-03(C), the report shall include the following items:

1. Baseline for the current and future calendar years.
2. Supply portfolio projection, including both generation fleet and power purchases.
3. A description of the methodology used by the Companies to evaluate their compliance options.
4. A discussion of any perceived impediments to achieving compliance with required benchmarks, as well as suggestions for addressing any such impediments.

Columbus Southern Power Company (CSP) and Ohio Power Company (OPCo) (collectively, "the Companies" or "AEP Ohio") submit this 2010 Advanced and Renewable Energy Plan for Compliance.

## Projected Baselines

Tables 1 and 2 below show the development of the 2010 CSP benchmarks as well as the actual retail sales for years 2008, 2009, and 2010, which are used for the development of the 2011 benchmarks. Tables 3 and 4 below show the development of the 2010 OPCo benchmarks as well as the actual retail sales for years 2008, 2009, and 2010, which are used for the development of the 2011 benchmarks. Baselines have been calculated using actual retail sales versus weather-normalized sales as reported in the 2009 Compliance Report. The use of actual sales is in keeping with the Green Rules. The restatement of the 2009 Baseline resulted in non-material differences as described in the 2010 Annual Compliance Plan Status Report.

## Columbus Southern Power Company Renewable Energy Benchmarks

### Table 1: Solar – CSP (MWh)

| Solar - CSP | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *(all units in MWh unless noted)* | | | | | | | | |
| | Retail Sales | Adjustments for Customer Choice | Adjustments for Economic Growth | Adjusted Baseline | | Preceding 3-Yr Average | Year-end Solar Target | Year-end Solar Benchmark |
| 2006 | 19,567,156 | (266,993) | (303) | 19,299,860 | | | | |
| 2007 | 22,009,241 | (165,849) | (1,491,166) | 20,352,225 | | | | |
| 2008 | 22,209,937 | (150,169) | (2,237,881) | 19,821,888 | | | | |
| 2009 | 20,677,981 | (149,480) | (1,847,596) | 18,680,905 | | 19,824,658 | 0.004% | 793 |
| 2010 | 21,239,443 | (773,330) | (1,847,596) | 18,618,518 | | 19,618,339 | 0.010% | 1,962 |
| 2011 | 21,269,791 | (2,714,579) | (1,445,645) | 17,109,566 | | 19,040,437 | 0.030% | 5,712 |
| 2012 | 21,272,782 | (3,732,467) | (1,445,645) | 16,094,670 | | 18,136,330 | 0.060% | 10,882 |
| 2013 | 21,578,722 | (3,946,979) | (1,445,645) | 16,186,098 | | 17,274,251 | 0.090% | 15,547 |
| 2014 | 21,591,912 | (3,987,299) | (1,445,645) | 16,158,967 | | 16,463,445 | 0.120% | 19,756 |
| 2015 | 21,569,626 | (4,025,797) | (1,445,645) | 16,098,184 | | 16,146,578 | 0.150% | 24,220 |
| 2016 | 21,556,949 | (4,063,896) | (1,445,645) | 16,047,407 | | 16,147,750 | 0.180% | 29,066 |
| 2017 | 21,576,284 | (4,104,346) | (1,445,645) | 16,026,293 | | 16,101,519 | 0.220% | 35,423 |
| 2018 | 21,658,165 | (4,145,656) | (1,445,645) | 16,066,863 | | 16,057,295 | 0.260% | 41,749 |
| 2019 | 21,701,378 | (4,187,254) | (1,445,645) | 16,068,478 | | 16,046,854 | 0.300% | 48,141 |
| 2020 | 21,685,556 | (4,229,344) | (1,445,645) | 16,010,567 | | 16,053,878 | 0.340% | 54,583 |

*Note: Retail Sales for 2011 through 2020 estimated.*

### Table 2: Non-Solar – CSP (MWh)

| Non-Solar - CSP | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *(all units in MWh unless noted)* | | | | | | | | |
| | Retail Sales | Adjustments for Customer Choice | Adjustments for Economic Growth | Adjusted Baseline | | Preceding 3-Yr Average | Year-end Non-Solar Target | Year-end Non-Solar Benchmark |
| 2006 | 19,567,156 | (266,993) | (303) | 19,299,860 | | | | |
| 2007 | 22,009,241 | (165,849) | (1,491,166) | 20,352,225 | | | | |
| 2008 | 22,209,937 | (150,169) | (2,237,881) | 19,821,888 | | | | |
| 2009 | 20,677,981 | (149,480) | (1,847,596) | 18,680,905 | | 19,824,658 | 0.246% | 48,769 |
| 2010 | 21,239,443 | (773,330) | (1,847,596) | 18,618,518 | | 19,618,339 | 0.490% | 96,130 |
| 2011 | 21,269,791 | (2,714,579) | (1,445,645) | 17,109,566 | | 19,040,437 | 0.970% | 184,692 |
| 2012 | 21,272,782 | (3,732,467) | (1,445,645) | 16,094,670 | | 18,136,330 | 1.440% | 261,163 |
| 2013 | 21,578,722 | (3,946,979) | (1,445,645) | 16,186,098 | | 17,274,251 | 1.910% | 329,938 |
| 2014 | 21,591,912 | (3,987,299) | (1,445,645) | 16,158,967 | | 16,463,445 | 2.380% | 391,830 |
| 2015 | 21,569,626 | (4,025,797) | (1,445,645) | 16,098,184 | | 16,146,578 | 3.350% | 540,910 |
| 2016 | 21,556,949 | (4,063,896) | (1,445,645) | 16,047,407 | | 16,147,750 | 4.320% | 697,583 |
| 2017 | 21,576,284 | (4,104,346) | (1,445,645) | 16,026,293 | | 16,101,519 | 5.280% | 850,160 |
| 2018 | 21,658,165 | (4,145,656) | (1,445,645) | 16,066,863 | | 16,057,295 | 6.240% | 1,001,975 |
| 2019 | 21,701,378 | (4,187,254) | (1,445,645) | 16,068,478 | | 16,046,854 | 7.200% | 1,155,374 |
| 2020 | 21,685,556 | (4,229,344) | (1,445,645) | 16,010,567 | | 16,053,878 | 8.160% | 1,309,996 |

*Note: Retail Sales for 2011 through 2020 estimated.*

## Ohio Power Company Renewable Energy Benchmarks

### Table 3: Solar – OPCo (MWh)

| Solar - OPCo | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *(all units in MWh unless noted)* | | | | | | | | |
| | Retail Sales | Adjustments for Customer Choice | Adjustments for Economic Growth | Adjusted Baseline | | Preceding 3-Yr Average | Year-end Solar Target | Year-end Solar Benchmark |
| 2006 | 25,262,084 | - | (203) | 25,261,881 | | | | |
| 2007 | 27,727,743 | - | (1,492,228) | 26,235,514 | | | | |
| 2008 | 27,871,540 | - | (2,405,028) | 25,466,512 | | | | |
| 2009 | 24,936,379 | - | (2,061,805) | 22,874,575 | | 25,654,635 | 0.004% | 1,026 |
| 2010 | 26,199,752 | (13,997) | (2,061,805) | 24,123,951 | | 24,858,867 | 0.010% | 2,486 |
| 2011 | 26,614,982 | (57,384) | (1,659,851) | 24,897,746 | | 24,155,012 | 0.030% | 7,247 |
| 2012 | 26,974,267 | (439,691) | (1,659,851) | 24,874,725 | | 23,965,424 | 0.060% | 14,379 |
| 2013 | 27,037,900 | (752,146) | (1,659,851) | 24,625,903 | | 24,632,140 | 0.090% | 22,169 |
| 2014 | 26,929,736 | (758,894) | (1,659,851) | 24,510,991 | | 24,799,458 | 0.120% | 29,759 |
| 2015 | 26,669,627 | (765,489) | (1,659,851) | 24,244,287 | | 24,670,539 | 0.150% | 37,006 |
| 2016 | 26,578,437 | (771,219) | (1,659,851) | 24,147,367 | | 24,460,394 | 0.180% | 44,029 |
| 2017 | 26,579,472 | (776,210) | (1,659,851) | 24,143,411 | | 24,300,882 | 0.220% | 53,462 |
| 2018 | 26,617,271 | (780,642) | (1,659,851) | 24,176,778 | | 24,178,355 | 0.260% | 62,864 |
| 2019 | 26,548,029 | (784,600) | (1,659,851) | 24,103,578 | | 24,155,852 | 0.300% | 72,468 |
| 2020 | 26,472,484 | (788,108) | (1,659,851) | 24,024,524 | | 24,141,256 | 0.340% | 82,080 |

*Note: Retail Sales for 2011 through 2020 estimated.*

### Table 4: Non-Solar – OPCo (MWh)

| Non-Solar - OPCo | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *(all units in MWh unless noted)* | | | | | | | | |
| | Retail Sales | Adjustments for Customer Choice | Adjustments for Economic Growth | Adjusted Baseline | | Preceding 3-Yr Average | Year-end Non-Solar Target | Year-end Non-Solar Benchmark |
| 2006 | 25,262,084 | - | (203) | 25,261,881 | | | | |
| 2007 | 27,727,743 | - | (1,492,228) | 26,235,514 | | | | |
| 2008 | 27,871,540 | - | (2,405,028) | 25,466,512 | | | | |
| 2009 | 24,936,379 | - | (2,061,805) | 22,874,575 | | 25,654,635 | 0.246% | 63,110 |
| 2010 | 26,199,752 | (13,997) | (2,061,805) | 24,123,951 | | 24,858,867 | 0.490% | 121,808 |
| 2011 | 26,614,982 | (57,384) | (1,659,851) | 24,897,746 | | 24,155,012 | 0.970% | 234,304 |
| 2012 | 26,974,267 | (439,691) | (1,659,851) | 24,874,725 | | 23,965,424 | 1.440% | 345,102 |
| 2013 | 27,037,900 | (752,146) | (1,659,851) | 24,625,903 | | 24,632,140 | 1.910% | 470,474 |
| 2014 | 26,929,736 | (758,894) | (1,659,851) | 24,510,991 | | 24,799,458 | 2.380% | 590,227 |
| 2015 | 26,669,627 | (765,489) | (1,659,851) | 24,244,287 | | 24,670,539 | 3.350% | 826,463 |
| 2016 | 26,578,437 | (771,219) | (1,659,851) | 24,147,367 | | 24,460,394 | 4.320% | 1,056,689 |
| 2017 | 26,579,472 | (776,210) | (1,659,851) | 24,143,411 | | 24,300,882 | 5.280% | 1,283,087 |
| 2018 | 26,617,271 | (780,642) | (1,659,851) | 24,176,778 | | 24,178,355 | 6.240% | 1,508,729 |
| 2019 | 26,548,029 | (784,600) | (1,659,851) | 24,103,578 | | 24,155,852 | 7.200% | 1,739,221 |
| 2020 | 26,472,484 | (788,108) | (1,659,851) | 24,024,524 | | 24,141,256 | 8.160% | 1,969,926 |

*Note: Retail Sales for 2011 through 2020 estimated.*

# Portfolio Projection

The Companies have developed a 10-year strategy in order to meet the renewable energy benchmarks set by S.B. 221. This strategy includes such items as purchasing Renewable Energy Credits/Certificates (RECs), securing long-term Renewable Energy Purchase Agreements (REPAs), pursuing ownership of certain renewable energy resource generation and the development of customer-sited distributed generation as further described in the Companies' Supplement to the 2010 Long-Term Forecast Report in Case No. 10-501-EL-FOR and Case No. 10-502-EL-FOR. The Companies' 10-year strategy portfolio primarily consists of a mix of solar photovoltaic, wind, and biomass energy resources.

The Companies have secured a number of In-State Non-Solar RECs via forward broker and bilateral REC transactions and have also executed two wind REPAs totaling 99 MWs of nameplate generation from an Ohio located wind farm, Timber Road, as further indicated in AEP Ohio's most recent Electric Security Plan (ESP) filing. As previously discussed in the 2009 Compliance Plan, the Companies also have secured additional Non-Solar generation through two wind REPAs with Fowler Ridge II located in Indiana. Further, AEP Ohio is awaiting Public Utilities Commission of Ohio (Commission) approval of a 49.9 MW solar project in the state of Ohio as discussed in Case No. 11-346-EL-SSO and Case No. 11-348-EL-SSO.

The Companies have secured some In-State Solar MWhs which are the result of AEP Ohio's two 70 kW Solar Facilities located at the Athens and Newark Service Centers. The Companies also entered into a 10.1 MW PPA with Wyandot Solar LLC, which began deliveries of solar energy to AEP Ohio in April of 2010. It is important to note that the 2010 Solar benchmarks included the additional 2009 carryover RECs from the approved *force majeure* benchmarks from Case No. 09-987-EL-EEC.

AEP Ohio considers detailed information regarding renewable energy MWhs, secured and non-secured, as competitively sensitive information. Providing such information could be detrimental to future purchase negotiations, and ultimately affect the cost borne by AEP Ohio's ratepayers.

# Methodology

## AEP Ohio Planning Methodology

AEP's New Technology Development group provides information as part of its annual renewable planning process and evaluates a wide range of renewable technologies. The evaluations involve a multifaceted effort using input from many AEP groups. Technologies are evaluated on cost, location, feasibility, commercial availability and applicability to AEP's service territory. After a high-level evaluation, economic screening is carried out considering each technology's estimated costs and effectiveness, leading to the development of a levelized incremental dollar-per-renewable-MWh cost. Costs and benefits considered in the screening includes project capital and O&M costs; avoided capacity and energy costs; alternative fuel costs; alternative emission rates and associated allowance costs; and available federal or state subsidies or incentives, if any. This levelized cost is used to rank the various technologies.

The renewable technologies ultimately screened include:

- biomass co-firing on existing coal-fired units
- separate injection of biomass on existing coal-fired units (up to 10 percent of the combined fuels' heat content)
- biodiesel used for unit startup and flame stabilization
- wind energy projects, with and without the federal production tax credit
- solar generation
- incremental hydroelectric production
- landfill gas with microturbine
- geothermal generation
- distributed generation

Although some of the renewable technologies listed above could be economic, AEP is constrained from doing some of these projects because the energy sources are not practical in AEP's service territory (e.g., geothermal). Similarly, biomass co-firing is constrained by a supply of suitable fuel and/or transportation options anticipated to be in proximity to the host coal units evaluated.

The ranking of alternatives was translated into a plan, using more cost-effective options first, but limited by practicality and implementation concerns. Wind energy, being already under development, predominates in the resulting plan due to its cost compared to other renewable resources, while solar energy, being currently more expensive, in the short term is chosen only to fulfill specific state requirements such as those specifically set forth in S.B. 221.

Federal subsidies and incentives affect the timing and the pricing of the planning methodology. The current deadline for wind projects to obtain Federal Production Tax Credits (PTCs) and the 30 percent Treasury grants made available through the American Recovery and Reinvestment Act (ARRA) end December 31, 2012 for both incentives.

PTCs for wind energy offer tax credit benefits to project developers equal to 2.1 cents per kilowatt-hour of renewable energy generated over the ten-year credit eligibility period. This would equate to a pre-tax (revenue requirement) benefit of over 3 cents per kilowatt-hour during that same period. Projects entering commercial service after those dates would require significantly higher income, producing significantly higher costs to the customers of the purchasing entity. Prospects for the extension of the PTC seem uncertain.

**Implementation**

The Companies' principal strategy to fulfill their renewable energy benchmark requirements, in the near-term, is to acquire the energy through long-term power purchase agreements, though they have also proposed an ownership opportunity in the most recent ESP filing (the proposed 49.9 MW Turning Point Solar Project). AEP Ohio will also continue to consider owning physical renewable energy assets in Ohio where regulatory certainty, available capital and opportunities for investment present themselves. Nevertheless, the Companies will continue to assess the opportunities for development of their own projects, the purchase of development assets from other developers, or the purchase of turn-key projects in the future to meet the goals in the statute. AEP Ohio intends to use the spot or broker market for RECs only to fill in gaps in fulfilling its compliance needs.

The results of the latest competitive renewable energy solicitation showed a number of proposed wind projects in Ohio that had relatively attractive prices due to their ability to qualify for 30 percent Treasury grants contained in the recent ARRA "stimulus bill." The bill stipulates that a certain percentage of the project begins construction in 2011 and the project to be on-line by December 31, 2012 in order to qualify for these subsidies. The key again is whether the Companies can obtain any type of regulatory certainty which would allow them to take advantage of the expiring subsidies which buy-down the cost of renewable energy.

# Impediments

**Non Solar Renewable Energy Resources**

The Companies are meeting the annual benchmarks and are on target to comply with Ohio's renewable energy standard, which requires that AEP Ohio supply 1.0 percent of their resources from renewable energy in 2011 (0.97 percent of which is non-solar) and 12.5 percent by 2024 (12.0 percent non-solar).

As the Companies stated in their 2009 Alternative Energy Compliance filing (filed April 15, 2010; Case No. 10-0484-EL-ACP and Case No. 10-0485-EL-ACP), compliance with the non-solar benchmarks set forth in S.B. 221 can be summed by supply versus demand. The demand side of the equation is very clear as the legislation states which entities are subject to the increasing benchmarks. However, a potentially

unintended consequence of S.B. 221 forces incumbent load-serving utilities in Ohio to over-comply with the benchmarks. Specifically, a utility's obligation to comply with the benchmarks is based, in part, on its three-year adjusted sales volume, even while the utility may lose load to Competitive Retail Energy Service (CRES) providers. While there are factors that influence demand, and the benchmarks are aggressive, the quantity of annual RECs needed by each entity can be easily derived, but the supply side of the equation is subject to much more volatile factors.

To help meet its 2010 compliance benchmarks, AEP Ohio issued a total of four Requests for Proposals (RFP) for 2010 in-state non-solar RECs. Very few bids were received in response to these solicitations. Many factors likely influenced this lack of bids, but significant among these factors is the fact that up to and including 2010 (three years into the S.B. 221 benchmarks), no new utility scale non-solar renewable energy projects came on-line. Although no new projects came on-line, a few previously operating biomass units in the state were approved by the Commission as renewable resources helping to mitigate what would have been an even worse supply demand imbalance. During 2010, the Companies had slightly better success transacting in the bilateral and broker market. Neither methodology, however, is an ideal long-term solution for compliance with the increasing benchmarks discussed above. Rather, the ability to commit to long-term contracts or investments, in the face of increasing benchmarks, is the preferred approach to secure reasonably priced reliable sources of renewable energy and to ensure that this energy will be economically accessible to its customers in the coming years. Simply put, significant new renewable energy generation resources are unlikely to be built in Ohio unless the developers of such proposed resources can execute long-term contracts for the future output of their projects.

In November 2010, AEP Ohio entered into a long-term contract for wind energy from the Timber Road wind project being built in Northwestern Ohio, which is subject to approval by the Commission. As further detailed in the Companies' ESP filing, they are seeking both approval of this contract and are also seeking approval of the process by which they can prudently enter into future long-term contracts and gain approval from the Commission.

In addition to AEP's wind and solar efforts, initial testing of biofuels at some coal units started in 2010. Biomass pellets were co-fired with coal at two AEP Ohio coal plants. Biodiesel used for unit startup and flame stabilization was also tested at one of the coal plants. Following the testing period, AEP received approval from the Ohio Environmental Protection Agency for the operational use of biodiesel at three coal units. In addition to traditional biofuels products, we continue to evaluate emerging fuel products and technologies.

AEP issued two biomass RFPs in January of 2010. The first was for 100 percent biomass fuel and the second was for pre-blended biomass and coal. There was a wide variety of responses with significant spreads in cost, quantity, and quality of the fuel. In addition, most responders did not currently have production facilities built for fuel that could be produced to the specification. The producers were looking for a long-term

supply off-take agreement in order to finance the project. An arrangement of this nature simply does not work for fuel that has not been tested, qualified, or permitted to burn on an operational basis. Only one producer currently had the ability to produce biomass pellets that met the AEP specification. AEP completed some testing at Picway plant during the summer and planned for a long-term test at Muskingum River plant. Prior to the Muskingum River test officially starting, the fuel supplier had what was reported as a catastrophic failure with the main pelletizing equipment rendering it useless. AEP Ohio contacted suppliers and found a small home heating pellet company that was able to supply minimal quantities for testing. In addition to the physical supply issues, price points remain high over the long-term as compared with other alternative compliance options. AEP issued a follow-up RFP in December of 2010. There were a very small number of offers and the offers were priced such that the implied REC cost was an amount over the Alternative Compliance Payment.

AEP also conducted testing of biodiesel fuel at Picway plant. Based upon the successful testing, AEP issued an RFP in September 2010 for biodiesel supply to the truck-delivered plants in Ohio. A contract is in place for biodiesel at Conesville, Muskingum River and Picway plant to start in 2011.

**Solar Renewable Energy Resources**

The Companies are meeting the annual benchmarks and are on target to comply with Ohio's renewable energy standard, which requires that they supply 0.03 percent of their load with solar energy in 2011 and 0.5 percent by 2024. For 2010 compliance, the Companies relied on their previous execution of the 10.1 MW Wyandot PPA, which represented the only significant renewable energy project (solar or non-solar) commissioned in the state since the advent of the S.B. 221 benchmarks in 2008. The output from the Wyandot PPA will satisfy the Companies' needs through most of 2012.

As discussed in AEP Ohio's Supplement to the 2010 Long-Term Forecast Report and the most recent ESP filing, the Companies have embarked on a unique self-build opportunity in the form of the 49.9 MW Turning Point Solar Project. The project is designed to come on-line in phases over approximately three years.

**Self-Build**

Small scale renewable self-build options do not involve many of the long lead-time items as do commercial or utility scale renewable self-build options. However, the small scale renewable self-build options are not the most cost effective means to meet the aggressive benchmark obligations.

To participate in the ownership of larger, utility scale renewable resources, such as the proposed Turning Point Solar Project, in the near term, there are several items in addition to capital that need to be considered such as site control, transmission access, property tax and permitting to name a few. The most important of these items is the need for regulatory certainty for long-term recovery of all costs associated with developing,

constructing, financing and operating these assets, which are being considered in order to meet the benchmarks established under S.B. 221. Cost recovery on such projects without a rate base mechanism in place is not practical.

**REC Market**

The impediments mentioned above have a direct correlation to the available REC supply. In theory, it is expected that over time the value or cost of a REC will diminish and more closely resemble REC costs in the rest of the PJM market area. The effective cost of a REC should be the long-term difference between the cost of bringing on new incremental renewable energy resources over the expected wholesale power prices. In markets where there are aggressive renewable energy resource targets, specific In-State requirements and concentrated load centers, there is the potential for demand to outweigh supply of RECs and thus lead to the potential for pricing distortions. The Companies intend to use the spot or broker market for RECs only to fill in gaps in fulfilling their compliance needs.

**Conclusion**

In conclusion, renewable energy resource options provide for environmentally friendly energy solutions. When considering renewable energy resources, the challenges include, selecting an option that minimizes costs to customers, regulatory approval within the state of Ohio and any external factors influencing the planning cycle such as the existence, if any, of federal subsidies. The combination of commitments to new solar and non-solar projects has allowed AEP Ohio the opportunity to provide a more diversified renewable portfolio. And, as AEP Ohio awaits approval from the Commission of certain of these projects in the current ESP, beyond the near-term compliance period, there is the potential that some of the challenges mentioned above may remain.

Summary: Annual Report --Annual Alternative Energy Compliance Plans electronically filed by Mr. Matthew J Satterwhite on behalf of Columbus Southern Power Company and Ohio Power Company