

FILE

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EXHIBIT NO. _____

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of)
Columbus Southern Power Company for)
Approval of its Electric Security Plan; an)
Amendment to its Corporate Separation)
Plan; and the Sale or Transfer of Certain)
Generating Assets)

and)

In the Matter of the Application of)
Ohio Power Company for Approval of)
its Electric Security Plan; and an)
Amendment to its Corporate Separation)
Plan)

Case No. 08- 917 -EL-UNC

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Case No. 08- 918 -EL-UNC

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DIRECT TESTIMONY
OF
JAY F. GODFREY
ON BEHALF OF
COLUMBUS SOUTHERN POWER COMPANY
AND
OHIO POWER COMPANY

Filed: July 31, 2008

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INDEX TO DIRECT TESTIMONY OF
JAY F. GODFREY
PUCO CASE NO. 08-917-EL-UNC
PUCO CASE NO. 08-918-EL-UNC

<u>SUBJECT</u>	<u>PAGE</u>
PERSONAL DATA.....	1
PURPOSE OF TESTIMONY.....	3
AEP RENEWABLE ENERGY EXPERIENCE.....	4
AEP OHIO RENEWABLE ENERGY STRATEGY	10
EXPECTED RFP RESULTS.....	16
RENEWABLE ENERGY MARKET.....	17
CONCLUSION.....	22

1
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3 THE PUBLIC UTILITIES COMMISSION OF OHIO
4 DIRECT TESTIMONY OF
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8 OHIO POWER COMPANY
9 PUCO CASE NO. 08-917-EL-UNC
10 PUCO CASE NO. 08-918-EL-UNC

11 **PERSONAL DATA**

12 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

13 A. My name is Jay F. Godfrey. My business address is 155 W. Nationwide Boulevard,
14 Columbus, Ohio 43215.

15 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

16 A. I am employed as Managing Director – Renewable Energy by American Electric
17 Power Service Corporation (AEPSC), a wholly owned subsidiary of American
18 Electric Power Company, Inc. (AEP). AEP is the parent company of Columbus
19 Southern Power Company (CSP) and Ohio Power Company (OPCO), collectively
20 AEP Ohio or the Company. AEPSC supplies engineering, financing, accounting and
21 similar planning, commercial and advisory services to AEP's seven electric operating
22 companies, including those that comprise AEP Ohio.

23 **Q. PLEASE BRIEFLY DESCRIBE YOUR BUSINESS EXPERIENCE AND**
24 **EDUCATIONAL BACKGROUND.**

25 A. I have over thirteen years of commercial and financial management experience in the
26 wind energy industry. Prior to joining AEPSC's Commercial Operations Group in
27 2002 to work on wind energy transactions, I worked for seven years in various project

1 finance and wind project development roles for Enron Wind Corporation, since
2 acquired by General Electric (GE) and is operated as GE Energy. My other business
3 management experience includes serving as the Financial Controller of two publicly
4 held companies, in non-energy related fields, as well as other management positions.

5 Since joining AEPSC, I have been involved in the asset management and
6 project financing of AEP's two owned and operated wind projects, the 150 MW Trent
7 Wind Farm and the 160.5 MW Desert Sky Wind Farm, the development efforts for
8 potential green-field projects, and the procurement and management of AEP's
9 renewable energy purchase agreements. My experience includes negotiating wind
10 energy power purchase and sales agreements, renewable energy purchase agreements
11 (REPA), wind system operations and maintenance agreements, real estate agreements
12 related to wind projects, wind turbine purchase agreements, and project loan
13 documents. I also have experience evaluating the impact of various financial
14 parameters on renewable energy project investment returns. I am a past member of
15 the Board of Directors of the American Wind Energy Association (AWEA), the
16 Washington D.C. based trade association for the wind industry, and currently serve
17 on the Board of Advisors to that same Board. I earned a Bachelor's degree in
18 Business Administration from California State University - Chico and a Masters in
19 Business Administration from National University. In 2006, I completed the AEP
20 Leadership Program at The Ohio State University.

21 **Q. WHAT ARE YOUR CURRENT RESPONSIBILITIES?**

22 A. As Managing Director – Renewable Energy, I am responsible for managing AEP's
23 portfolio of renewable energy purchase agreements and related long-term emission

1 reduction offset agreements. I direct the team which structures and issues the
2 renewable energy RFPs and model REPAs, reviews and responds to questions posed
3 by potential bidders, evaluates proposals and I lead the negotiation and finalization of
4 the REPAs with the winning bidder(s). In addition, I am also responsible for the
5 acquisition of potential new wind project development sites within AEP's service
6 territory.

7 **Q. HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE ANY**
8 **REGULATORY COMMISSIONS?**

9 A. I have filed testimony before the Public Utility Commission of Texas in PUC Docket
10 Nos. 31326 and 32624; the Indiana Utility Regulatory Commission in Cause No.
11 43328; and the Michigan Public Service Commission in Case No. U-15361.

12

13 **PURPOSE OF TESTIMONY**

14 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

15 A. The purpose of my testimony in this proceeding is to demonstrate AEP's system-wide
16 experience in renewable energy, AEP Ohio's procurement strategy to address the
17 renewable energy benchmarks outlined in Am. Sub. S.B. No. 221 (S.B. 221) for the
18 period 2009 through 2011 and demonstrate that the expected results of the 2008 AEP
19 Ohio Renewable Energy Resources Request for Proposals (RFP) will produce the
20 lowest reasonable costs to achieve those benchmarks outlined in S.B. 221.

1 **AEP RENEWABLE ENERGY EXPERIENCE**

2 **Q. DOES AEP HAVE SUBSTANTIAL EXPERIENCE IN THE SALE,**
3 **PROCUREMENT, DEVELOPMENT, OWNERSHIP AND OPERATION OF**
4 **RENEWABLE ENERGY RESOURCES TO SERVE ITS NATIVE LOAD**
5 **CUSTOMERS?**

6 A. Yes. AEP has been involved with various aspects of wind energy resources for over
7 13 years and has over 100 years of experience owning and operating hydro-electric
8 facilities. In 2008, AEPSC issued four RFPs totaling approximately 700 MW for
9 various sources of renewable energy. This experience provides AEP with unique
10 insight as an owner, operator, developer, seller and purchaser of renewable energy
11 resources.

12 **Q. PLEASE DESCRIBE AEP'S EXPERIENCE WITH THE DEVELOPMENT,**
13 **CONSTRUCTION, OWNERSHIP, AND OPERATION OF RENEWABLE**
14 **ENERGY PROJECTS.**

15 A. AEP has been involved in the development of several wind energy projects. In fact,
16 AEP is a pioneer in utility wind power research and development. In 1995, Central
17 and South West Corporation (CSW), which merged with AEP in June 2000, built the
18 first utility-scale wind farm in Texas. Its 6 MW Fort Davis wind facility was the first
19 project completed under the United States Department of Energy (DOE) and Electric
20 Power Research Institute (EPRI) Turbine Verification Program and was developed to
21 encourage the manufacture of wind turbines in the United States. At the time, Fort
22 Davis' 500 kW wind turbines were the largest U.S.-manufactured wind turbines.

1 In 2001, AEP completed the construction of the Trent Wind Farm, also known
2 as the Trent Mesa Wind Project. A wholly owned wind power plant, the Trent Mesa
3 Wind Project consists of one hundred GE Wind Energy wind turbines rated at 1.5
4 MW each for a total capacity of 150 MW. AEP identified and developed the site,
5 oversaw the construction of and owns and operates the Trent Mesa Wind Project.

6 AEP also owns and operates the Desert Sky Wind Farm. Initially developed
7 by Enron Wind (now GE Energy), the project was completed in December of 2001.
8 AEP purchased the Desert Sky Wind Farm in December of 2001. The wind farm
9 consists of one hundred seven GE Energy wind turbines rated at 1.5 MW each, for a
10 total nameplate capacity of 160.5 MW. The energy from both the Trent Mesa and
11 Desert Sky Wind Farm is sold to unaffiliated utilities under long-term contracts.
12 AEPSC continues its wind development efforts, on behalf of its regulated affiliates to
13 assess the future feasibility of developing another wind energy project.

14 AEP also owns, operates or controls hydroelectric generation facilities
15 representing 950 MW of generation capacity which includes the 585 MW Smith
16 Mountain Lake pumped storage hydroelectric facility.

17 **Q. PLEASE DESCRIBE AEP'S EXPERIENCE NEGOTIATING AND**
18 **PROCURING LONG-TERM REPAs PRIOR TO 2007.**

19 **A.** The AEP West operating companies have entered into a number of long-term
20 contracts to purchase the energy output from four wind generation facilities located in
21 Oklahoma and Texas.

22 The first REPA entered into by the AEP West companies was by CSW. In
23 1999, CSW executed a 20-year agreement with an affiliate of FPL Energy, Inc. (FPL

1 Energy) to purchase energy produced at the Southwest Mesa Wind Farm. The
2 Southwest Mesa Wind Farm consists of one hundred seven NEG Micon 700 kW
3 wind turbines for a total maximum rated capacity of 74.9 MW.

4 In April 2005, Public Service Company of Oklahoma (PSO), another wholly
5 owned subsidiary of AEP, entered into a 20-year contract with FPL Energy to
6 purchase wind energy from the Weatherford Wind Energy Center, which is located in
7 Oklahoma. The Weatherford Wind Energy Center initially consisted of seventy-one
8 GE wind turbines rated at 1.5 MW each. In June 2006, PSO and FPL Energy entered
9 into another 20-year contract for the purchase of an additional 40.5 MW of power
10 from the Weatherford Wind Energy Facility, as an additional twenty-seven 1.5 MW
11 GE wind turbines were installed at the facility, bringing the total capacity to 147 MW.

12 In 2005, PSO entered into two 10-year contracts to purchase a total of 151.2
13 MW of power from Horizon Wind Energy's Blue Canyon II wind farm. The Blue
14 Canyon II facility is located in Oklahoma, and consists of eighty-four 1.8 MW Vestas
15 wind turbines.

16 In 2006, PSO entered into a 25-year purchase agreement to receive up to 94.5
17 MW of wind-generated power from the Sleeping Bear Wind Project. Located in
18 Oklahoma, the Sleeping Bear Wind Project consists of forty-five 2.1 MW Suzlon S88
19 wind turbines. The Sleeping Bear Wind Project became commercially operational in
20 late 2007.

21 **Q. DOES AEP HAVE EXPERIENCE PURCHASING ANY RENEWABLE**
22 **RESOURCES OTHER THAN WIND GENERATION?**

1 A. Yes, in 2001 Appalachian Power Company (APCo) contracted to purchase the output
2 of the Summersville Hydro Project, which is an 80 MW hydro generation facility
3 located in West Virginia.

4 In 2007 AEP Ohio issued an RFP for 50,500 Renewable Energy Certificates
5 (RECs) generated from certain sources of renewable energy technologies. This
6 solicitation resulted in the Company entering into a REC purchase agreement for
7 RECs derived from landfill gas generation facilities located in Indiana. The
8 contracted AEP Ohio RECs are the source for the AEP Ohio Green Pricing Option
9 program.

10 Also in 2007, AEP entered into a long term agreement to purchase
11 approximately 4.6 million emission reduction offsets between 2010 and 2017
12 generated from capturing methane on livestock farms. This agreement is part of the
13 first large-scale livestock methane destruction program established in the United
14 States and is consistent with renewable goals as set forth in the AEP 2008 Corporate
15 Sustainability Report. This report is further discussed in the direct testimony of
16 Companies' witness Mr. Hamrock.

17 **Q. PLEASE DESCRIBE AEP'S SUCCESSFUL EFFORTS DURING 2007 WITH**
18 **WIND ENERGY RFPs.**

19 A. On April 2, 2007, AEPSC issued two RFPs for wind energy on behalf of two AEP
20 wholly- owned- subsidiaries Indiana Michigan Power Company (I&M) for 100 MW
21 and APCo for 260 MW. Both RFPs sought wind generation projects capable of being
22 operational by December 31, 2008 to fulfill a portion of their respective energy and
23 capacity requirements. All aspects of the APCo and I&M RFPs, other than the type

1 of renewable resource requested, were similar to the 2008 AEP Ohio Renewables
2 RFP, which will be discussed later in my testimony.

3 **Q. WHAT WAS THE RESULT OF THE APCO AND I&M WIND ENERGY**
4 **RFPs?**

5 A. The APCo and I&M RFPs resulted in the execution of three REPAs. APCo executed
6 a REPA for 75 MW of the output from the 150 MW Camp Grove wind project. The
7 Camp Grove wind project, which is located in Stark and Marshall Counties, Illinois,
8 is connected to Commonwealth Edison's transmission grid and began delivering
9 energy and RECs to APCo in January of 2008.

10 APCo also executed a REPA for 100 MW of output from BP's 400 MW
11 Fowler Ridge Wind Farm currently under construction in Benton County, Indiana. In
12 addition, I&M entered into a similar agreement for 100 MW of output from BP's 400
13 MW Fowler Ridge Wind Farm. The Fowler Ridge Wind Farm will be connected to
14 AEP's 345 kV transmission lines in Indiana and is expected to begin delivering
15 energy and RECs to APCo and I&M by the end of 2008. Both the Fowler Ridge and
16 Camp Grove wind projects are interconnected to PJM, which is a Regional
17 Transmission Organization (RTO).

18 **Q. PLEASE DESCRIBE THE AEP RENEWABLES RFPs ISSUED IN 2008.**

19 A. AEPSC issued a total of four renewable energy RFPs on behalf of five utility
20 operating companies totaling up to 700 MW of renewable energy capacity in 2008.
21 These RFPs include the 2008 AEP Ohio Renewables RFP, which will be discussed
22 later in my testimony.

1 On April 1, 2008, APCo issued an RFP requesting bids which will be
2 expected to result in APCo obtaining up to 100 MW of new nameplate renewable
3 energy resources capable of being operational by December 31, 2010. APCo expects
4 to contract for the output of renewable energy resources acquired pursuant to the RFP
5 by means of one or more long-term REPA(s).

6 On April 18, 2008, Southwestern Electric Power Company (SWEPCO), a
7 wholly owned subsidiary of AEP, issued an RFP requesting bids which will result in
8 SWEPCO obtaining a minimum of 65 MW and up to 100 MW of new nameplate
9 renewable energy resources capable of being operational by December 31, 2010.
10 SWEPCO expects to contract for the output of renewable energy resources acquired
11 pursuant to the RFP by means of one or more long-term REPA(s).

12 On May 1, 2008, Public Service Company of Oklahoma (PSO), a wholly
13 owned subsidiary of AEP, issued an RFP requesting bids which will result in PSO
14 obtaining up to 200 MW of new nameplate renewable energy resources capable of
15 being operational by December 31, 2010. PSO expects to contract for the output of
16 renewable energy resources acquired pursuant to the RFP by means of one or more
17 long-term REPA(s).

18 **Q. HAVE AEP OHIO'S AFFILIATED OPERATING COMPANIES BEEN**
19 **ALLOWED TO RECOVER THE COSTS ASSOCIATED WITH**
20 **RENEWABLE ENERGY PURCHASES BY THEIR RESPECTIVE STATE**
21 **REGULATORY COMMISSIONS?**

22 **A.** Yes. As described previously, REPAs have been executed on behalf of operating
23 companies in Oklahoma, West Virginia, Indiana, Michigan, and Texas. Each of the

1 operating companies in these states have been allowed to recover the costs associated
2 with executed REPAs, by their respective regulatory commissions, as follows: Cause
3 No. 200300633 and Cause No. 200500224 in Oklahoma; Case No. 0701731-E-PC in
4 West Virginia; Cause No. 43328 in Indiana; Case No. U-15361 in Michigan; and
5 Docket No. 18845 in Texas.

6
7 **AEP OHIO RENEWABLE ENERGY STRATEGY**

8 **Q. WHAT IS THE RENEWABLE ENERGY BENCHMARK AS OUTLINED IN**
9 **S.B. 221?**

10 **A.** As detailed in the direct testimony of Companies' witness Mr. Castle, the renewable
11 energy benchmark requires that renewable energy resources are operational by 2025
12 such that at least 12.5% of retail energy sales is produced from renewable sources
13 which include wind and solar. There is a further sub-requirement that solar constitute
14 at least 0.5% of retail sales. The testimony of Mr. Castle describes the annual
15 benchmarks, beginning in 2009, for the Renewable and Solar requirement and sub-
16 requirement, respectively. The benchmarks for renewable energy resources were
17 established as a part of the alternative energy benchmarks that require 25% of the
18 retail energy sold to come from alternative sources, which are comprised of advanced
19 and renewable energy resources, by 2025.

20 **Q. BRIEFLY OUTLINE AEP'S STRATEGY IN MEETING THE RENEWABLE**
21 **BENCHMARKS SET FORTH IN S.B. 221 FOR 2009, 2010, AND 2011.**

22 **A.** AEP Ohio plans to meet the renewable energy benchmarks for 2009, 2010, and 2011
23 primarily through the execution of long-term REPAs as a result of the 2008 AEP

1 Ohio Renewables RFP, which is similar to those issued in recent years on behalf of
2 I&M, APCo, PSO, and SWEPCO. AEP Ohio will likely have a need to satisfy a
3 portion of its renewable energy obligations by using RECs purchased from the broker
4 market. As previously mentioned, AEPSC is also pursuing the development of sites
5 for potential self-build renewable resource options that could address subsequent
6 benchmarks.

7 **Q. PLEASE DESCRIBE THE 2008 AEP OHIO RENEWABLE ENERGY**
8 **RESOURCES RFP.**

9 A. On May 28, 2008 AEP Ohio issued a Request for Proposals (RFP) seeking bids that
10 are expected to result in obtaining up to approximately 300 MW of nameplate
11 Renewable Energy Resources that have a placed-in-service date of January 1, 1998 or
12 after, which are or will be interconnected to PJM and are capable of being operational
13 no later than December 31, 2010.

14 The solicitation also allows AEP Ohio to begin the process of reasonably
15 meeting the terms of the renewable energy resource benchmarks as outlined in S.B.
16 221. The 2008 AEP Ohio Renewables RFP is provided as EXHIBIT JFG-1 to my
17 direct testimony.

18 **Q. BRIEFLY DESCRIBE THE TYPE OF RENEWABLE ENERGY RESOURCES**
19 **REQUESTED IN THE 2008 AEP OHIO RENEWABLES RFP.**

20 A. The 2008 AEP Ohio Renewables RFP stipulated that the generation output of a
21 facility, including energy, capacity, ancillary services (if any), and environmental
22 attributes, including renewable energy credits (RECs), would be sold to AEP Ohio by
23 means of one or more 20-year, long-term REPAs. To qualify, bidders must have

1 submitted proposals for renewable energy resources that are based on commercially
2 proven generation technologies which include: solar photovoltaic or solar thermal
3 energy; wind energy; hydroelectric energy as certified by the Low Impact Hydro
4 Institute; geothermal energy; biologically derived methane gas; and certain biomass
5 energy projects. These resources are consistent with those outlined in S.B. 221 as
6 qualified renewable energy resources. Also consistent with S.B. 221, proposals were
7 accepted for renewable energy credits (RECs) that were derived from renewable
8 energy resources as described in this paragraph, in lieu of bundled (energy, capacity,
9 RECs) renewable energy proposals.

10 **Q. PLEASE DESCRIBE THE TIMELINE FOR THE 2008 AEP OHIO**
11 **RENEWABLES RFP.**

12 A. As previously mentioned, AEP Ohio issued a Renewables RFP on May 28, 2008. On
13 June 12, 2008, AEPSC, as agent for AEP Ohio, held a pre-bid meeting via a
14 conference call. During the pre-bid meeting, AEPSC gave an on-line presentation
15 that outlined the RFP and answered questions posed by prospective bidders. All
16 proposals were due to the office of AEPSC by July 15, 2008. AEPSC expects to
17 complete contract negotiations and execute agreements no later than December 2008.

18 **Q. WAS THERE AN EFFECTIVE METHOD FOR COMMUNICATION WITH**
19 **POTENTIAL BIDDERS IN THIS RFP PROCESS?**

20 A. Yes. A press release announcing the 2008 AEP Ohio Renewables RFP was posted on
21 the corporate website for AEP (www.AEP.com). A press release announcing the
22 RFP was also provided to the following entities for posting in their online and/or print
23 publications: PR Newswire, Reuters, Solar Industry Magazine, the Department of

1 Energy's Green Power Network, American Wind Energy Association, and North
2 American Wind Power. AEP Ohio established a website to assist in providing open
3 communication to all potential RFP bidders. All documents pertaining to the RFP
4 were posted on the AEP Ohio RFP website (www.AEPOhio.com/go/RFP). This
5 website contained the pre-bid presentation as previously discussed and provided the
6 ability for potential bidders to submit questions and view the responses to questions.

7 **Q. WHAT DID THE 2008 AEP OHIO RENEWABLES RFP REQUIRE BIDDERS**
8 **TO SUBMIT?**

9 A. Bidders were required to submit proposals for renewable energy resources in which
10 the interconnection point will be the PJM bus to which the generation is electrically
11 connected. The RFP outlined all required information to be submitted for evaluation
12 purposes, which included items such as transmission interconnection status, financing
13 plan, proposed equipment and creditworthiness.

14 In addition, bidders were required to offer "all-in" pricing, which includes all
15 fixed and variable costs associated with capital expenditures, operation and
16 maintenance (O&M), and any other costs associated with delivering the full output of
17 the facility to the PJM delivery point. The pricing was required to be bid in "time-of-
18 day" periods that paid the seller more for energy produced during peak demand
19 periods (weekdays, summer and winter afternoons) and less during periods of
20 generally low demand (spring and fall months and nights and weekends) and included
21 an annual escalation of 2.25%, commencing in 2012, during the 20-year term of the
22 REPA.

1 The RFP included a model REPA, which defined items such as terms and
2 conditions of service, commercial operation and construction of the facility, delivery
3 and metering, O&M, performance assurance, insurance, permitting and licensing,
4 Supervisory Control and Data Acquisition (SCADA) requirements, billing and
5 settlement terms, and credit and collateral requirements. The model REPA was
6 designed to serve as the basis of the contract between the Seller (awarded bidder(s))
7 and CSP and/or OPCO.

8 **Q. WHY HAS AEPSC SOUGHT TO EXECUTE 20-YEAR RENEWABLE**
9 **ENERGY PURCHASE AGREEMENTS ON BEHALF OF AEP OHIO?**

10 **A.** The 20-year REPA allows AEPSC, as agent for all of its operating companies seeking
11 renewable energy resources, to secure the lowest-available prices for reliable
12 renewable resources and to ensure that this energy will be economically accessible to
13 its native load customers in the coming years. As Ohio and other states throughout
14 the PJM service territory continue to implement Renewable Portfolio Standards
15 (RPS) and goals, the availability of renewable energy may be constrained in the
16 coming years. Although these same standards and goals will also spur growth in the
17 number of renewable energy providers throughout the PJM service territory, there is
18 no guarantee that the supply of renewable energy resources will remain abreast of the
19 demand.

20 In addition, the 20-year REPA also provides a direct benefit to the consumer.
21 The 20-year agreement, which is also the expected life of the technology, allows
22 renewable energy resource providers to procure long-term financing, thereby
23 amortizing the cost of their projects over a longer period. Such financing has the

1 effect of reducing the upfront costs and allows for a more economically levelized
2 price over the term of the contract.

3 **Q. DOES THE 2008 AEP OHIO RENEWABLES RFP REQUIRE SUCCESSFUL**
4 **BIDDERS TO REGISTER THE RENEWABLE FACILITY WITH A**
5 **TRACKING SYSTEM?**

6 **A.** Yes. All winning bidders to the 2008 AEP Ohio Renewables RFP, with whom AEP
7 Ohio executes a contract, are required to register their renewable projects with the
8 PJM Environmental Information Services Generation Attribute Tracking System
9 (GATS) and periodically transfer the RECs generated by the project to an AEP Ohio
10 REC account. GATS tracks the generation of RECs from resources registered and
11 located within PJM. The GATS database contains information for each individual
12 generation unit. It creates generator-specific electronic certificates that identify the
13 generation attributes necessary for electricity suppliers to satisfy state policies and to
14 document claims to renewable energy. Data in the GATS include: megawatt-hours
15 produced, emissions data (primarily from the U.S. Environmental Protection Agency
16 and supplemented from other sources), fuel source, location, state program
17 qualification and ownership of attributes for each megawatt-hour tracked. GATS is
18 also the system used to transfer RECs from one PJM member counter-party to
19 another. GATS can be used as the system of registry for RECs to be specified by the
20 Public Utilities Commission of Ohio as set forth in S.B. 221.

1 **EXPECTED RFP RESULTS**

2 **Q. WHAT RESPONSE DID THE COMPANY RECEIVE TO THE 2008 AEP**
3 **OHIO RENEWABLES RFP?**

4 A. Pricing proposals were due July 15, 2008. Twenty-seven entities expressed interest in
5 bidding in the Renewables RFP. A total of thirteen qualifying proposals were
6 received, of which six were solar and seven were wind, representing approximately
7 50 MW and 1,200 MW, respectively.

8 **Q. HOW WERE THE PROPOSALS EVALUATED?**

9 A. In accordance with the process outlined in the RFP, AEPSC first reviewed each
10 proposal to determine if all of the required information was provided and solicited
11 responses where sufficient data was lacking. AEPSC then ranked all of the
12 conforming proposals based on pricing structure and is currently developing a "short
13 list" of proposals from bidders based on both price and non-price factors. Price
14 factors, which were weighted approximately 60%, included energy pricing and the
15 cost comparison to deliver the energy. Non-price factors, which were weighted
16 approximately 40%, included the location of the project relative to AEP Ohio's
17 service territory, developer experience, viability of schedule, lead time to full
18 operation, creditworthiness, financing plan, proximity to and availability of
19 transmission, lead time of any required transmission upgrades, property and site land
20 rights and control, feasibility of future facility expansion, nameplate capacity,
21 technology, analysis of energy production forecasts, and nature and quantity of
22 exceptions to the model REPA included in the RFP.

1 Q. WHAT PRICE RANGE DID YOU OBSERVE IN RESPONSE TO THE 2008
2 AEP OHIO RENEWABLES RFP?

3 A. The volume weighted average of the bids for wind energy resources submitted to
4 AEP Ohio in response to the RFP was approximately \$80 per MWh for the years
5 2009, 2010 and 2011 after which the 2.25% per annum escalation takes effect. The
6 volume weighted average of the bids for solar energy resources submitted to AEP
7 Ohio in response to the RFP exceeded \$300 per MWh for the years 2009, 2010 and
8 2011 after which the 2.25% per annum escalation takes effect. Pricing is sensitive to
9 components such as equipment availability, O&M costs, financing, and wind or solar
10 regime in that particular area. AEPSC believes that the robust response to the
11 competitive RFP will result in the acquisition of the least cost renewable resources for
12 AEP Ohio in accordance with S.B. 221.

13
14 **RENEWABLE ENERGY MARKET**

15 Q. WHAT HAS AEP OBSERVED AS THE LEAST COST RENEWABLE
16 RESOURCE IN ITS RECENT RFPs?

17 A. In response to the recent Renewable Resources RFPs issued on behalf of SWEPCO,
18 APCo and PSO, which were open to all renewable resources, wind has been the least
19 cost technology. The costs of electricity from utility-scale wind energy projects
20 versus conventional fossil-fuel generation continued to narrow over the past 20 years.
21 In the early 1980s, when the first utility-scale wind turbines were installed, wind-
22 generated electricity cost as much as 30 cents per kilowatt-hour. In the interim, the
23 costs for natural gas and coal have continued to increase. The cost differential

1 continues to decline as additional and larger wind projects are built and advanced
2 technology is introduced into the market.

3 **Q. PLEASE PROVIDE AN OVERVIEW OF THE MARKET DYNAMICS**
4 **AFFECTING THE COST OF RENEWABLE ENERGY AND, IN**
5 **PARTICULAR, THE COST OF WIND ENERGY.**

6 A. Currently, wind energy is generally acknowledged as the most economical new
7 source of renewable energy in the U.S. As with all forms of electric generation, wind
8 generation has recently experienced a significant increase in the delivered price of
9 energy. Market signals observed through the RFP process indicate that the price of
10 wind energy in PJM has increased by over 15% per megawatt hour between the
11 lowest cost projects slated for 2008 completion and the lowest cost projects for 2009
12 or 2010 completion. The single most important factor driving the increase in the
13 price of wind energy is the rising cost of turbines are predominantly driven by
14 increasing commodity costs. These rising commodity costs are also adversely
15 impacting other forms of new generation technologies.

16 The major factor driving differences in the delivered prices for wind energy
17 between states or regions is the actual wind resource at each individual site. For
18 example, the wind resource in the U.S. generally increases the further west one
19 moves, extending until one reaches the Rocky Mountain range. With the possible
20 exception of selected ridgelines in the Appalachian Range, the best wind resources in
21 PJM are in Illinois and Indiana as observed from the results of the four RFPs issued
22 by AEPSC in PJM over the past 16 months.

1 **Q. PLEASE PROVIDE AN OVERVIEW OF THE MARKET DYNAMICS**
2 **AFFECTING THE COST OF SOLAR RENEWABLE ENERGY**
3 **RESOURCES?**

4 A. Currently, solar energy is generally acknowledged as one of the most expensive new
5 sources of renewable energy in the U.S. Market signals as observed through the RFP
6 process indicate that the price of solar energy slated to be on-line in 2010 is in line
7 with market estimates of approximately \$300 per MWh. Solar equipment constraints
8 and component costs are a large contributor to the higher solar prices. It is expected
9 that with continued technology development and expanded world-wide
10 manufacturing capacity, prices will decline over time.

11 The major factor driving differences in the delivered prices for solar energy
12 between states or regions is the actual solar resource at a particular site. According to
13 the National Renewable Energy Laboratory Resource Assessment Program, solar
14 resources in the U.S. generally increase the further south and west one moves, with
15 the best resources being centered around the Arizona, eastern California, and southern
16 Nevada desert region.

17 **Q. DO YOU EXPECT THAT RENEWABLE ENERGY RESOURCES LOCATED**
18 **IN OHIO AND UTILIZED TO SATISFY THE REQUIREMENTS OF S.B. 221**
19 **WILL COST MORE THAN OTHERS FOUND IN PJM?**

20 A. As previously mentioned in my testimony, wind is currently the least cost renewable
21 technology. However, given the restricted geographical region and the prevailing
22 wind regime, AEP Ohio expects Ohio-based wind energy projects will generally be
23 more expensive than other wind energy projects that can be found within PJM. With

1 regards to solar energy, AEPSC has little comparative information for the expected
2 variance in solar prices between PJM, as a whole, and Ohio-based solar projects.
3 Nonetheless, AEP Ohio intends to procure a mix of renewable resources, including
4 Ohio-based renewable resources, as required by S.B. 221.

5 **Q. DOES AEP OHIO PARTICIPATE IN A COMPETITIVE AND ROBUST RTO**
6 **MARKET THAT OFFERS ACCESS TO RENEWABLE ENERGY**
7 **RESOURCES?**

8 A. Yes, as a member of PJM, AEP-System East and its associated operating companies,
9 including AEP Ohio, have access to a robust and competitive wholesale electricity
10 market. Serving approximately 51 million people, PJM encompasses several major
11 U.S. load centers and dispatches more than 165,000 megawatts of generation capacity
12 over 56,000 miles of transmission lines. PJM's unique interstate geography and
13 electrical topography provides its members with access to not only PJM's regional
14 power markets, but to markets in adjoining systems west, northeast and south of
15 PJM's borders as well.

16 The development of competitive robust RTOs such as PJM has created a
17 fertile environment for the growth and expansion of renewable energy resources. As
18 an RTO, PJM offers renewable energy generators expansive market opportunities in
19 13 states and the District of Columbia. Wind developers, waste coal generators and
20 landfill gas generators are just some of the non-traditional market participants or
21 entities that have been connecting to the PJM electrical grid in an effort to not only
22 capture value in the wholesale market, but to also provide market participants with a
23 greater array of energy resources from which to choose. As a result, renewable

1 energy technologies fueled by biomass, methane gas, solar photovoltaic cells,
2 pumped storage, solid or wood waste are emerging and realizing the advantages of
3 the robust competitive marketplace that PJM offers to a variety of energy resources.

4 **Q. APPROXIMATELY HOW MANY RENEWABLE ENERGY GENERATORS**
5 **PARTICIPATE IN THE PJM MARKET?**

6 A. More than 200 renewable generators actively participate in PJM, with almost a third
7 of them being conventional hydroelectric generators. Another third are captured
8 methane generators and the remaining third are wind, solar, pumped storage, biomass,
9 fuel cells, municipal solid waste, waste coal, wood by-product, and other renewable
10 energy resources.

11 **Q. BRIEFLY DISCUSS THE MAGNITUDE OF PJM GENERATION**
12 **INTERCONNECTION REQUESTS FROM RENEWABLE ENERGY**
13 **RESOURCES.**

14 A. As of June 30, 2008, the magnitude of active PJM generation interconnection requests
15 is over 90,000 MW. Renewable energy resources account for approximately 35,000
16 MW of the total interconnection requests, with wind generation accounting for
17 approximately 97% of the total renewable interconnection requests. This
18 demonstrates the significance of renewable energy resources as an increasing part of
19 PJM's fuel mix. Presently, PJM's queues for renewable energy resources include
20 interconnection requests for facilities fueled by wind, hydro, biomass, wood, waste
21 and methane. Solar renewable energy resources are often connected at the
22 distribution level and thus may not be reflected in the aforementioned PJM
23 interconnection queue.

1 **Q. IN YOUR OPINION, WHAT DOES THE MAGNITUDE OF RENEWABLE**
2 **INTERCONNECTION REQUESTS IN THE PJM SYSTEM IMPLY ABOUT**
3 **THE GROWING IMPORTANCE OF RENEWABLE ENERGY**
4 **RESOURCES?**

5 A. Approximately 40% of PJM's active generation interconnection requests are for
6 renewable energy resources. Approximately 97% of the total renewable energy
7 resource interconnection requests are wind generation projects. Energy prices, supply
8 uncertainties and RPS-driven environmental concerns are drivers in supporting the
9 need for diverse sources of clean energy. The magnitude of the requests for PJM
10 interconnection submitted by renewable generators further illustrates this point.

11 **Q. PLEASE DESCRIBE THE MAGNITUDE OF PJM INTERCONNECTION**
12 **REQUESTS FOR RENEWABLE ENERGY RESOURCES WITHIN THE**
13 **STATE OF OHIO?**

14 A. As of June 30, 2008, the interconnection requests for renewable generators attempting
15 to interconnect into the PJM system that are located in Ohio include 2,577 MW of
16 wind generation, 10 MW of methane, 187 MW of biomass, and 50 MW of hydro.

17

18 **CONCLUSION**

19 **Q. IN CONCLUSION, DO YOU BELIEVE THAT AEP'S EXPERIENCE AND**
20 **PROCUREMENT STRATEGY PROVIDES THE ABILITY TO SATISFY THE**
21 **RENEWABLE BENCHMARKS SET FORTH IN S.B. 221 AT THE LOWEST**
22 **REASONABLE COST?**

1 A. Yes. AEP's system-wide experience in renewable energy as a wind generation
2 developer, owner, operator, purchaser and seller; its experience owning hydroelectric
3 generating facilities; and its experience conducting competitive robust RFPs for both
4 bundled energy and REC only products and negotiating long-term renewable energy
5 purchase agreements demonstrates that AEP Ohio has the ability to reasonably and
6 prudently achieve the renewable energy benchmarks outlined in S.B. 221, via owned
7 or purchased renewable energy, or through the purchase of RECs at the lowest
8 reasonable cost.

9 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

10 A. Yes, it does.



American Electric Power Service Corporation

as agent for

**Columbus Southern Power (CSP)
and
Ohio Power (OP)**

Collectively AEP Ohio

Request for Proposals

Totaling up to approximately

300 MW

of name-plate rated

Renewable Energy Resources

Capable of being on-line no later than 12/31/2010

Pre-Bid Meeting (Conference Call):

June 12, 2008 1:00 p.m. EPT

Bids Due:

July 15, 2008 12:00 noon EPT (Columbus, OH)

Issued

May 28, 2008

Web Address: www.aepohio.com/go/rfp/

Table of Contents

Section	Page
1. Introduction	1
2. Purpose and Scope	7
3. RFP Schedule and Procedure	10
4. Confidentiality of Information	13
5. Bidders' Responsibilities	14
6. Minimum Bid Eligibility Requirements	15
7. Proposal Content Requirements.....	16
8. Bid Evaluation and Selection Procedure	23
9. Post-Bid Negotiations and Awarding of Contracts	27
10. Regulatory Approvals	27
11. Extension of the Section 45 Production Tax Credit (PTC)	28

Appendices

Expression of Interest.....	Appendix A
Bid Summary.....	Appendix B
Bid Price Input Sheet	Appendix C-1
Energy Input Sheet	Appendix C-2
Confidentiality Agreement	Appendix D
Credit Information	Appendix E
Bidder Profile	Appendix F
Financing Plan	Appendix G
Renewable Energy Purchase Agreement (REPA)	Appendix H

1. Introduction

- 1.1 American Electric Power Service Corporation (AEPSC), a subsidiary of American Electric Power Company, Inc. (AEP) is administering this Request for Proposals (RFP) on behalf of Columbus Southern Power Company (CSP) and Ohio Power Company (OP), collectively AEP Ohio. AEPSC is requesting bids which will result in AEP Ohio obtaining up to approximately 300 MW of nameplate Renewable Energy Resources that have a placed-in-service date of January 1, 1998 or after, which are or will be interconnected to PJM and are capable of being operational no later than December 31, 2010.

The general schedule for the RFP process is shown below (See also Section 3.1):

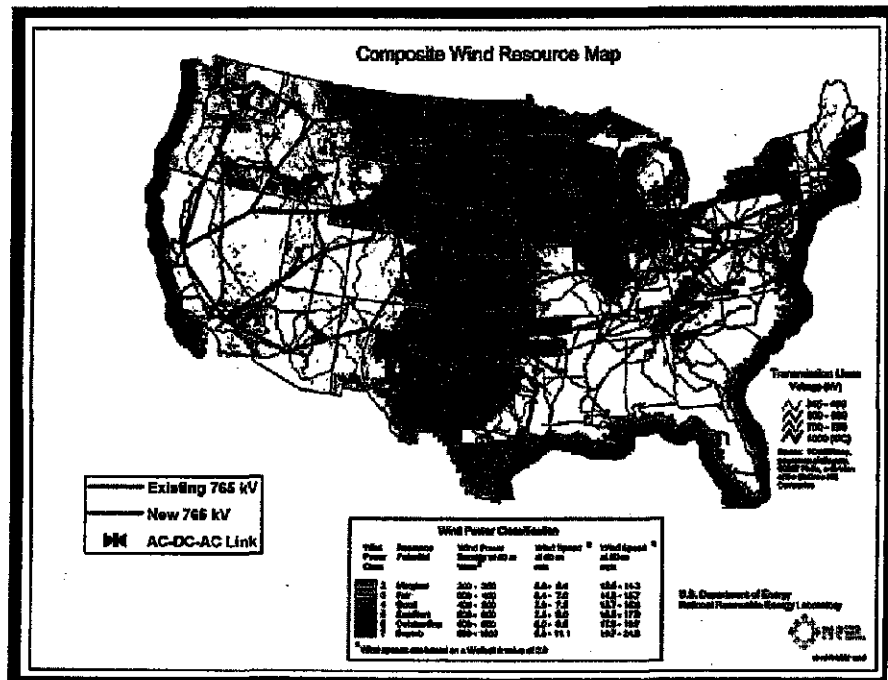
Issue RFP	5/28/2008
Pre-Bid Meeting (Conference Call)	6 /12/2008
Proposals Due	7/15/2008

- 1.2 American Electric Power is one of the largest electric utilities in the United States, delivering electricity to more than 5 million customers in 11 states. AEP ranks among the nation's largest generators of electricity, owning nearly 38,000 megawatts of generating capacity in the U.S.

AEP also owns the nation's largest electricity transmission system, a nearly 39,000-mile network that includes more 765 kilovolt extra-high voltage transmission lines than all other U.S. transmission systems combined. AEP's leadership on the further build-out of the nation's grid is evidenced by several notable transmission project initiatives which include AEP's I-765 proposal in SPP, a joint venture with MidAmerican Energy to build HV transmission lines in Texas in support of the Texas Competitive Renewable Energy Zone (CREZ) effort, and a joint venture with Allegheny Energy to build the 550 mile 765 kV PATH line in the PJM Interconnect. Additional information on the above initiatives, and more, may be accessed at:

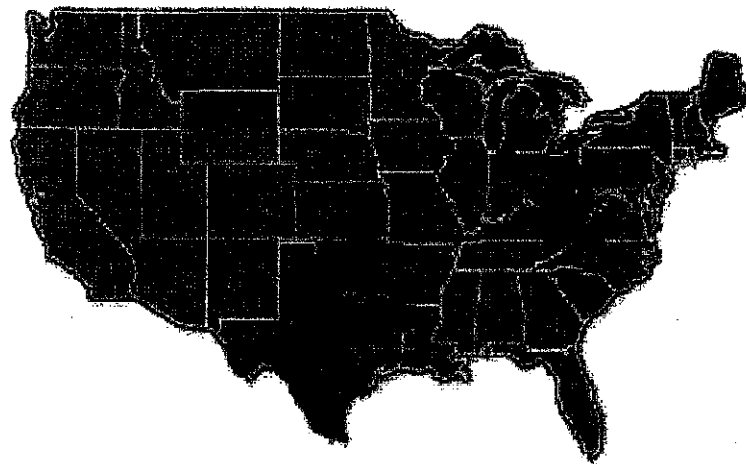
<http://www.aep.com/about/transmission/>








AEP also released its white paper titled "Interstate Transmission Vision for Wind Integration" in conjunction with a presentation at the American Wind Energy Association's WINDPOWER 2007 Conference and Exhibition in Los Angeles:
<http://www.aep.com/about/i765project/docs/WindTransmissionVisionWhitePaper.pdf>



AEP's utility units operate as AEP Ohio, AEP Texas, Appalachian Power (in Virginia and West Virginia), AEP Appalachian Power (in Tennessee), Indiana Michigan Power, Kentucky Power, Public Service Company of Oklahoma, and Southwestern Electric Power Company (in Arkansas, Louisiana and east Texas). AEP's headquarters are in Columbus, Ohio.

AEP Service Territory



	AEP Texas		Appalachian Power
	Public Service Company of Oklahoma (PSO)		AEP Ohio (CSP and OP)
	Southwestern Electric Power Co. (SWEPCO)		Kentucky Power
			Indiana Michigan Power

More information about AEP can be accessed by visiting www.aep.com

- 1.3 **AEP Ohio:** AEP Ohio provides service to approximately 1.5 million customers in Ohio and West Virginia. Currently AEP Ohio has 11,736 MW of coal, natural gas and hydro-electric generating capacity, over 9,000 miles of transmission and over 46,000 miles of distribution lines. AEP Ohio is comprised primarily of Columbus Southern Power Company (CSP) and Ohio Power Company (OP), which are subsidiaries of AEP. In addition to serving customers in Ohio, AEP Ohio also serves a small portion of West Virginia via Wheeling Power, which is not subject to this RFP. Headquartered in Gahanna, Ohio, AEP Ohio maintains regulatory and external affairs offices in Columbus, Ohio. CSP provides service to approximately 740,000 customers in Ohio. Currently, CSP has a total of 3,216 MW of coal and natural gas fueled electric generating capacity, over 2,400 miles of transmission and over 18,500 miles of distribution lines. OP has 8,520 MW of coal, natural gas and hydro-electric generating capacity, over 6,500 miles of transmission and more than 26,000 miles of distribution lines. CSP has an investment grade credit rating (Senior unsecured debt) of: BBB from S&P, A3 from Moody's and A- from Fitch. OP has an investment grade credit rating (Senior unsecured debt) of: BBB from S&P, A3 from Moody's and BBB+ from Fitch. More information about AEP Ohio can be accessed by visiting: www.aepohio.com

AEP Ohio Service Territory



Climate Strategy Over the past decade, American Electric Power has implemented a broad portfolio of voluntary actions to reduce, avoid or offset greenhouse gas (GHG) emissions. In addition, we continue to invest in new clean coal technology plants and R&D that will enable AEP and our industry to meet the challenge of significantly reducing GHG emissions over the long term. For example, AEP has proposed the construction of two new generating plants using Integrated Gasification Combined Cycle (IGCC) technology in West Virginia and Ohio. We received approval in West Virginia and are continuing the regulatory process in the hope of a similar decision in Virginia. We also received approval for a highly efficient new generating plant using the most advanced (e.g., ultra-supercritical) coal combustion technology in Arkansas. This project has received approvals in Arkansas and Louisiana; a decision from Texas is pending. We are also playing a leading role in bringing carbon capture and storage (CCS) technology to commercial scale. We are working on two different types of CCS for coal-fired power plants. The first commercial operation of CCS technology at an existing AEP plant is expected in 2012. While coal plays a critical role in meeting the daily electricity demand in the United States, we are working toward developing a more diversified energy portfolio. For example, in 2007, AEP added 12 natural gas units to its system and signed purchase agreements for 275 MW of wind energy. At the same time, AEP is on target to meet its Chicago Climate Exchange commitment to voluntarily reduce or offset 46 million metric tons of CO₂ by 2010. Between 2003 - 2007, we have reduced or offset 43 million metric tons of CO₂. We have done this by improving the efficiency of our power plants, retiring older, inefficient units, substantially reducing the leakage of sulfur hexafluoride (SF₆) from transformers, increased renewable energy resources and conserved trees and reforested lands in the United States and abroad. We continue to invest in credible, enforceable greenhouse gas offsets including forestry projects and methane capture and destruction. We published our second Corporate Sustainability Report in April 2008.

1.4 AEP Wind and Hydro Experience:

AEP's wind energy and hydro experience includes the ownership and long term purchase power commitments of the following projects listed below:

MW	Project	Commitment	Commercial Operation	AEP Subsidiary
5	Ft. Davis Wind Farm	R&D	(1996 - 2004)	Decommissioned
75	Southwest Mesa	PPA	1998	AEPEP / SWEPCO
150	Trent Wind Farm	Owner	2001	AEPEP
160.5	Desert Sky Wind Farm	Owner	2001	AEPEP
147	Weatherford	PPA	2005	PSO
151	Blue Canyon II	PPA	2005	PSO
94.5	Sleeping Bear	PPA	2007	PSO
47.5	Various Hydro Facilities	Owner/Operator		Ohio Power
879.6	Various Hydro Facilities	Owner/Operator/PPA		APCO
22.4	Various Hydro Facilities	Owner/Operator		I&M
75	Camp Grove	PPA	2007	APCO
100	Fowler Ridge	PPA	2008	I&M
100	Fowler Ridge	PPA	2008	APCO
Renewable Energy RFPs issued in 2008				
Up to (MW):				
100	RE RFP issued 4/01/2008	PPA	12/31/2010	APCO
65 - 100	RE RFP issued 4/15/2008	PPA	12/31/2010	SWEPCO
200	RE RFP issued 5/01/2008	PPA	12/31/2010	PSO
300	RE RFP issued 5/28/2008	PPA	12/31/2010	AEP Ohio

**75 MW of wind under long-term contract for
APCO from the Camp Grove Wind Farm:**



2. Purpose and Scope

2.1 Purpose and Background:

The purpose of this solicitation is to fulfill a portion of AEP's energy and capacity requirements via Renewable Energy Resources as well as satisfy a portion of the renewable goals addressed in AEP's 2007 and 2008 Corporate Sustainability Reports (<http://www.aep.com/citizenship/crreport/>). This RFP document solicits proposals to acquire energy and all associated capacity, ancillary services (if any) and environmental attributes including renewable energy credits (RECs) from Renewable Energy Resources that are capable of meeting the conditions of the RFP.

- 2.2 Product Description: This RFP seeks to acquire up to approximately 300 MW of nameplate rated Renewable Energy Resources, that have a placed-in-service date of January 1, 1998 or after, which are or will be interconnected to PJM and capable of being operational by December 31, 2010. AEP Ohio expects to contract for the output of Renewable Energy Resources acquired pursuant to this RFP by means of one or more 20-year, long term power purchase agreements.

- 2.2.1 Renewable Energy Resources: means commercially proven technologies for the production of electric energy. Generation technologies eligible to bid into this RFP include:

- Solar photovoltaic or solar thermal energy
- Wind energy
- Hydroelectric energy as certified by the Low Impact Hydro Institute
- Geothermal energy
- Biologically derived methane gas
- Biomass energy, including non-treated woody waste from pulping or wood manufacturing process
- Biofuels, derived from solid waste through fractionation, biological decomposition or other processes not principally involving combustion

Or

- Renewable Energy Credits (RECs) from Renewable Energy Resources described above.

2.2.2 Size: All bidders are asked to price a Renewable Energy Resource project with a minimum nameplate rating of 20 MW for Wind energy, Biomass energy and Geothermal energy; 1 MW for Solar photovoltaic or solar thermal energy and a minimum nameplate rating of 2 MW for all other Renewable Energy Resources.

2.2.3 Bid Price:

A. Bundled Renewable Energy Price: The bundled renewable energy product (energy + REC + capacity) must be bid on an "as-available" per MWh basis with no separate capacity payment. Production will be divided into three time periods: Premium-Peak, Peak and Off-Peak and is further described below. Respondents must bid an All-in Price for Peak \$___/MWh for the 2009/2010/2011 production years after which the annual escalation factor as described in (B) will be added to the Peak, Premium-Peak and Off-Peak price beginning in 2012 for the duration of the 20-year term. The 2009/2010/2011 Production Year Premium-Peak bid price shall be set at 120% of the 2009/2010/2011 Production Year Peak bid price. The 2009/2010/2011 Production Year Off-Peak price will be fixed at \$47/MWh. The above bid price must include all capital costs, fixed and variable O&M costs, and any other costs associated with delivering the full contracted energy output of the facility to the bid-specified Point of Delivery within the PJM territory; www.pjm.com.

20XX Production Year Bid Price

Period	Bid Price	Details
Premium-Peak	\$/MWh (120% of Peak)	Weekdays: Jan/Feb/Jul/Aug/Dec
Peak	\$ "Bid" / MWh	Weekdays: Mar/Apr/May/Jun/Sep/Oct/Nov
Off-Peak	\$47.00 / MWh	Nights, Weekends & NERC Holidays: Jan - Dec

Time of Day Definition (all times Eastern Prevailing Time (EPT)):

- *Premium Peak* – Defined as Monday through Friday, hour ending 8-23, for the months January, February, July, August and December (excluding NERC Holidays).
- *Peak* – Defined as Monday through Friday, hour ending 8-23, for the months March, April, May, June, September, October and November. (excluding NERC Holidays).
- *Off Peak* – Defined as Monday through Friday, hour ending 1-7 and 24; Saturday, Sunday and NERC Holidays, hour ending 1-24.

For NERC Holidays see: <http://www.nerc.com/~filez/rs.html>

B. Escalation: All bid prices shall assume an annual escalation of 2.25% during the 20-year term of the Renewable Energy Purchase Agreement (REPA) based on the 2009, 2010 and 2011 production year bid price. Wind and other As-Available resources will include the 2.25% escalation for all Time of Day categories (Premium Peak, Peak and Off Peak). For clarification, the price for production year 2012 will be 2.25% above the price in 2009, 2010 and 2011.

C. Other Pricing Options: Bidders may also offer additional pricing options and alternative pricing adjustments that may be viewed as more economic though all Bidders must provide bids in accordance with the terms and structure set forth in A and B above, in order to meet the threshold terms of this RFP.

2.2.4. All – in Price: Pricing must include all capital costs, fixed and variable O&M costs, and any other costs associated with delivering the full contracted energy output of the facility to the bid-specified Point of Delivery within the PJM Interconnect (PJM):
<http://www.pjm.com/index.jsp>.

2.2.5. Delivery and Location: This RFP requests proposals from Renewable Energy Resources in which the interconnection point will be the PJM bus to which the generator is electrically connected. Information submitted must include identification of proposed transmission and proposed interconnection points, identifying the transmission provider, the control area and the PJM queue number.

2.2.6. Associated Attributes: For purposes of this solicitation, the sale of renewable energy to AEP Ohio includes the transfer of all capacity, ancillary services (if any) and environmental attributes including associated renewable energy certificates (RECs) and any other current or future environmental attributes, including any greenhouse gas emission reductions associated with the quantity contracted from the facility from the project for the term of the REPA.

3. RFP Schedule and Procedure

3.1. Schedule: The following schedule and deadlines apply to this RFP. AEPSC reserves the right to revise this schedule at any time and at its sole discretion.

3.1.1 EPT or Eastern Prevailing Time means Eastern Standard Time or Eastern Daylight Savings Time, whichever is in effect in Columbus, Ohio on any date specified.

- 3.1.2 As shown on the following schedule, AEPSC will host a pre-bid meeting via conference call as follows:

Date: June 12, 2008

Time: 1:00 p.m. EPT

Dial in information and presentation to be posted on the RFP website prior to meeting at: www.aepohio.com/go/rfp

During the conference call, AEPSC will give a presentation outlining the Request for Proposals and answer questions from prospective bidders. A copy of the pre-bid meeting presentation will be available prior to the conference call on AEP Ohio's website at the web address listed above. All proposals are due by 12:00 p.m. EPT, July 15, 2008. AEPSC expects to complete contract negotiations and execute agreements no later than December 1, 2008.

Activity	Date	Time
RFP Issuance	May 28, 2008	
Pre-Bid Meeting (Conference Call)	June 12, 2008	1:00 pm EPT
Expression of Interest Forms Due	June 19, 2008	5:00 pm EPT
Confidentiality Forms Due (optional)	June 26, 2008	5:00 pm EPT
Proposals Due	July 15, 2008	12:00noon EPT
Notify Short-Listed Bidder(s)	September 1, 2008	
Select Preferred Bidder(s)	October 1, 2008	
Finalize / Sign Contract(s) (Subject to Regulatory Approvals)	December 1, 2008	

3.2 **Submittal of Proposals**

One original and two (2) copies bound (hardcopy) of all project proposals, including the CD of the required energy profile must be submitted at the following address no later than 12:00 p.m. EPT on Proposal Due Date.

American Electric Power Service Corporation

ATTN: Peggy Simmons (RFP Manager)

155 W. Nationwide Blvd

Columbus, OH 43215

pisimmons@aep.com

(614) 583-6009

(614) 583-1611 fax

The preparation and submission of all project proposals will be at the expense of the bidder. All proposals shall remain sealed until expiration of the solicitation period.

3.3 **Solicitation of Additional Proposals**

AEPSC reserves the right to solicit additional proposals, if it is deemed necessary to do so and the right to submit additional information requests to bidders during the bid evaluation process.

3.4 **Affiliate Bidding Policy**

Neither AEP nor any affiliates of AEP will submit bids in response to this RFP but may choose to purchase projects, enter into other REPA agreements and/or build a project during the time period contemplated to complete the RFP process. Appendix A requests bidders to certify that it has no affiliate relationship with AEP or any AEP affiliate.

3.5 **Information Policy**

For information regarding this RFP visit: <http://www.aepohio.com/go/rfp>.

AEPSC has established this information policy so that all bidders have access to the same information about the bidding process.

3.5.1 **Restricted Access:** A portion of the RFP website is password protected which will require the Bidder to fill in information regarding the proposed project including a PJM Interconnection queue number. The restricted access area will include:

- RFP questions and answers: To obtain additional information about this RFP, bidders may submit questions via the "Submit a Question" form available at the above website address. AEPSC shall publish all questions and answers on the RFP website; and
- Form Renewable Energy Purchase Agreement.

4. **Confidentiality of Information**

AEPSC will take reasonable precautions and use reasonable efforts to maintain the confidentiality of all bids submitted. Bidders should clearly identify each page of information considered to be confidential or proprietary. AEPSC reserves the right to release any proposals to agents or consultants for purposes of proposal evaluation. AEPSC's disclosure policies and standards will automatically bind such agents or consultants. Regardless of the confidentiality, all such information may be subject to review by the appropriate state authority, or any other governmental authority or judicial body with jurisdiction relating to these matters and may be subject to legal discovery. Under such circumstances, AEPSC will make all reasonable efforts to protect bidder's confidential information.

- 4.1 A formal Confidentiality Agreement (CA) has been included as Appendix D. If a CA is desired by the bidder, the bidder must execute and submit this agreement

by 5:00 p.m. EPT, on the Confidentiality Form Due Date. Once the CA is executed and submitted by the bidder, AEPSC will complete the execution of the agreement and send a copy of the fully executed agreement to the bidder via mail.

5. Bidder's Responsibilities

5.1 Timely Submission of Bids

It is the bidder's responsibility to submit all requested material by the deadlines specified in this RFP.

5.2 Reliability of Completion

Bidders are responsible for the timely completion of the project and are required to submit proof of their financial and technical wherewithal to ensure the successful completion of the project.

5.3 Valid Proposal Duration

Bid pricing must be valid from the Proposal Due Date through October 1, 2008, upon which time proposals shall expire unless the bidder has been notified and selected as a final award recipient.

5.4 Interconnection to PJM Transmission System

- 5.4.1 The interconnection point will be the PJM bus to which the generator is electrically connected or the closest thereto monitored for Locational Marginal Pricing (LMP) by PJM.
- 5.4.2 Bidders will be required to submit generation interconnection applications to PJM for Feasibility, System Impact and Facilities Engineering Studies and follow the PJM process to obtain generation interconnection. Cost for electrical interconnection and upgrades are the bidder's responsibility.
- 5.4.3 Selected Projects may also be screened for current and future expected congestion and evaluated on the anticipated impact any congestion may

have on the expected value of the energy (LMP) delivered from the Bidder's Project vis-à-vis AEP Zone or AD Hub in PJM, which is inclusive of AEP-AEP Ohio load. The cost of this analysis, if any, will be borne by AEP Ohio.

5.5 Compliance with Federal and State Regulations

Short-listed bidders must provide documentation that will enable AEPSC to assess the bidder's ability to comply with all federal and state regulations, and to obtain all permits, licenses and approvals necessary to construct and operate the project. (In addition all requirements must be met for firm capacity including the need to provide a site specific generator that can be designated as a capacity resource.)

5.6 Clarification of Proposals

While evaluating proposals, AEPSC may request additional information about any item in the proposal. All requests will be made in writing, and the bidder will be required to respond to the request within three (3) business days of receipt of such request or AEPSC may choose to stop evaluating the bid.

6. Minimum Bid Eligibility Requirements

This section outlines the minimum requirements that all proposals must meet to be eligible to participate in this RFP. Proposals unable to meet the following criteria will be deemed to be ineligible and not be considered for further evaluation.

- 6.1** Proposals must include all applicable content requirements described in Section 7, including all requested information and completed forms.

- 6.2 Proposals must offer documentation that shows an acceptable level of development, credit, and technology risk, as determined by AEPSC's bid evaluation team.
- 6.3 Proposals must demonstrate that the bidder's project development members have successfully completed the development, financing and commissioning of at least one project in the United States with characteristics similar to the proposed project, and that it intends to use experienced suppliers and contractors to construct the project.

7. Proposal Content Requirements

This section describes AEPSC's expectations and requirements for the RFP bids. AEPSC expects bidders to provide any information that could impact the cost, construction schedule, reliability, dispatch frequency, or output capability of the project. If it appears that certain information is inadvertently omitted from a proposal, AEPSC may contact the bidder to obtain the information.

All proposals must include a table of contents and provide concise and complete information on all of the following topics:

7.1 Bidder's Information

Proposals must provide the name of the company, its address, and any company representative(s) (name, phone number and email address). (Appendix A)

7.2 Experience and References

Provide a general description of the bidder's background and experience in utility scale renewable energy power projects similar to its proposal, including any affiliated companies, holding companies, subsidiaries or predecessor companies presently or in the past engaged in developing renewable energy power supply

projects. In addition, provide three (3) or more references from projects where the bidder, or any of its affiliates, has completed the development and construction of a power project similar to the one proposed to AEPSC. If the bidder has fewer than three utility scale projects, it shall provide as many references as possible. (Appendix F)

7.3 Executive Summary

Provide an executive summary of the bid's characteristics and timeline, including any unique aspects and benefits.

7.4 Financial Wherewithal

If the bidder intends to maintain the Security Fund through a parental guarantee, the guarantor will need to provide a completed Credit Application. Bidders with guarantors should describe any current credit issues raised by rating agencies, banks, or accounting firms in this appendix. Also provide any letters from banks/institutions that demonstrate the ability of the bidder's guarantor to successfully finance the project. (Appendix E)

7.5 Legal Proceedings

List all lawsuits, regulatory proceedings, or arbitration in which the bidder or its affiliates or predecessors have been or are engaged that could affect bidder's performance of its bid. Identify the parties involved in such lawsuits, proceedings, or arbitration, and the final resolution or present status of such matters. (Appendix E)

7.6 Type and Terms of Offer

The proposal must include details on the terms of the proposed REPA, such as REPA price to the Delivery Point, escalators (if any) and any other relevant details.

7.7 Exceptions to REPA

A form REPA for Renewable Energy Resources is attached with this RFP (available to Registered Bidders), and bidders must submit any exceptions to the REPA with their proposal as a separate document including an explanation of such exception being requested. AEPSC will not accept a redline version of the form REPA in support of this requirement.

7.8 Facility Information

In addition to completing (Appendix B) - Bid Summary, proposals must also include narratives containing adequate detail to allow AEPSC to evaluate the merits and credibility of the proposed resources. Respondents must address the following topics:

7.8.1 Size – Proposals must provide the project acreage and nameplate rating (Appendix B)

A. Solar Photovoltaic or Solar Thermal Energy

Bidders must document the source of meteorological data used in the required generation production calculations provided. This may include theoretical modeling or a combination of on-site metered data. Bidders must provide the resource data measurement method used to derive the data (for example, whether it was collected on site, at a nearby station, or inferred from satellite data), must identify the number of years of solar data available and employed in the average expected hourly generation calculations as well as describe the accuracy of that data. If the measurement method relies entirely—or in part—on theoretical data, the bidder should include background information on the firm that conducted the study, the technology employed and any track record attesting to the accuracy of the methods used. Proposals that include thermal storage must describe the storage dispatch optimization logic inherent in their

production estimates. Proposals that include gas hybridization should exclude any non-solar energy production in their production estimates. Upon request, bidders must be prepared to provide AEPSC the underlying solar data supporting these estimates with the understanding that AEP Ohio may engage an external consultant for an independent verification and evaluation of the solar resource. The provided data shall be sufficient for these purposes.

B. Wind Energy

Wind energy proposals must provide the source and basis of the wind speed data used in the development of energy projections for the project. Explain the assumptions for wake losses, line losses, etc., and the location where the data was measured. Proposals must provide the wind turbine power curve adjusted for the site's specific air density. Provide an 8,760 calendar year net hourly forecast of representative wind data with measurement height referenced and any extrapolations used to estimate wind speeds at the proposed hub height. (Appendix B-3) Also provide the contact information, resume and experience of the consulting meteorologist engaged for wind measurement and energy projections from the proposed project. (Appendix B)

C. Hydroelectric Facility as certified by The Low-Impact Hydro Institute

Please provide a summary of all collected hydro data for the proposed or existing site and characterize the hydro project's proposed production levels. Describe land lease and rights issues. Provide a table or graph that illustrates the annual and monthly projection of hydro resources. The hydro facility will need to be certified by the Low Impact Hydro Institute and comply with the Endangered Species Act.

D. Geothermal Resources

Please provide a summary of all collected geothermal data for the proposed or existing site and characterize the geothermal resource quality, quantity and proposed production levels. Describe land lease and rights issues and describe test drilling performed (if applicable). Provide a table or graph that illustrates the annual and monthly projection of geothermal resources.

E. Biofuels derived from solid wastes through fractionation, biological decomposition, or other process that does not principally involve combustion

Proposals shall include information describing applicable gas quality, fuel types, fuel sources, fuel contracts, fuel procurement/transportation plans, fuel price risk and availability risk issues. Describe the quantity and type of all environmental permits for air and water compliance required to develop the project, and if such permits and approvals are not already in the bidder's possession, provide information regarding the plan to acquire such permits and associated approvals. Proposals should also include gas production forecast for resources identified, including decay rate of gas production from landfill or digester processes for closed or active sources, and forecast for future sources planned.

F. Biomass Energy / Biologically Derived Methane Gas / Energy Derived from nontreated by-products of the pulping process or wood manufacturing process including bark, wood chips, sawdust and lignin in spent pulp liquors

Proposals shall include information describing applicable fuel types, fuel sources, fuel contracts, fuel procurement/transportation plans, fuel price risk and availability risk issues. Proposals involving combustion type resources shall also include combustion process by-product emission rates, including SO_x, NO_x, CO₂, methane, nitrous oxide, CFCs, HCFCs, heavy

metals, halides, unburned hydrocarbons and other emissions in gaseous or liquid form, dissolved in another liquid or mixed with a solid for offsite disposal. Describe the quantity and type of all environmental permits for air and water compliance required to develop the project, and if such permits and approvals are not already in the bidder's possession, provide information regarding the plan to acquire such permits and associated approvals. Proposals should also include gas production forecast for resources identified, including decay rate of gas production from landfill or digester processes for closed or active sources, and forecast for future sources planned.

- 7.8.2 Energy Production Profile – All proposals must provide an 8,760 hourly energy production profile for a typical calendar year. (Appendix C) Explain the source of information, assumptions for wake losses, line losses, etc., and the location where the data was measured.
- 7.8.3 Location – Project location, the merits of the selected site, and the proposed land rights (including permitting issues). Provide copies or summaries of leases, easements, and/or other ownership documents that demonstrate that the bidder has control of the intended project properties and the legal right to construct, interconnect and operate the project as described.
- 7.8.4 Project Layout – Proposals must show anticipated placement of turbines and other project facilities, including transmission layouts and the Point of Delivery. (Appendix B)
- 7.8.5 Reliability of Proposed Technology – Proposals must provide the description, size, number and manufacturer of the generation equipment that will be used, including a summary of the commercial operating experience of the equipment chosen. Where applicable, Bidders should also indicate significant turbine warranty terms it expects to secure from

the proposed turbine supplier. If a final equipment selection has not been made, list the candidates under consideration and the status and schedule of the selection process. Also provide a description of the system intended to provide real-time telemetering data (i.e. wind speed, availability, production etc.) to the power purchaser. (Appendix B)

- 7.8.6 Interconnection – Proposals must include copies of all studies prepared or required by PJM. For bidders with project proposals located outside of PJM, proposals must include a description of how the energy will be delivered into PJM and demonstrate a high level of certainty that delivery arrangements can be consummated sufficiently in advance to assure delivery by no later than 12/31/10.
- 7.8.7 Project and Construction Schedule – Schedules must include major milestones such as completion of permitting, financing, regulatory requirements, major construction, testing, Commercial Operation Date, etc.
- 7.8.8 Financing Plan – Bidders must provide a proposed financing plan, including any letters of support, previous correspondence with banks / lenders intending to provide financing for the project. Also provide the proposed on-going debt-equity ratio to be carried by the project during construction and during operation.

8. Bid Evaluation and Selection Procedures

This section describes AEPSC's expectations and requirements for the RFP bids. AEPSC expects bidders to provide any information that could impact the cost, construction schedule, reliability, dispatch frequency, or output capability of the project. If it appears that certain information is inadvertently omitted from a proposal, AEPSC may contact the bidder to obtain the information.

- 8.1 The objective of the AEPSC bid evaluation is to identify the proposal or proposals which best meet the needs identified in this solicitation. The evaluation process will include an assessment of both economic and non-economic criteria. The economic evaluation will be conducted primarily using spreadsheet analysis tools. Non-economic factors will be assessed through a due diligence process that will gauge the relative risks and benefits of the proposal. A bid evaluation team will evaluate and select bids, and subject matter experts may directly contact bidders during the bid evaluation stage.

Bids will be evaluated using a multi-step process as follows:

- A. The information provided in each initial bid will first be evaluated for completeness and consistency with the proposal content and bid requirements outlined in this RFP.
- B. As a result of this screening review, AEPSC will eliminate bids that do not meet the requirements described in this RFP from further consideration. Given the short amount of time allotted to evaluate the bids, AEPSC will limit follow up contacts to clarify bids or request additional information only to those bids that meet the requirements described in this RFP. The bid evaluation process will include an assessment of both price and non-price factors.

AEPSC will utilize a "first-price sealed bid format" to generate a short-list from which it will determine those proposals that will lead to post-bid negotiations. Under this format, AEPSC will utilize the initial pricing structure submitted by

the bidder to select the short-listed entities. AEPSC will not accept updated pricing from bidders during the evaluation period. AEPSC will negotiate both price and non-price issues during the post-bid negotiations. Preliminary due diligence will also be conducted at this stage to identify any flaws associated with the bid that are unacceptable to AEPSC, such as an exceptionally high level of development, credit, or technology risk. As a result of this screening, AEPSC may either eliminate bids from further consideration, or contact bidders to clarify information or request additional information.

8.2 AEPSC reserves the right not to engage in post-bid negotiations with any bidder that has not made the short-list. Selection for the short-list and post-bid negotiations does not constitute a "winning bid proposal". Only execution of a definitive agreement by both AEPSC and the bidder on mutually acceptable terms will constitute a "winning bid proposal".

8.3 The price and non-price factors described below will be added together. The highest-scoring proposals will be selected for further consideration on a short-list and then for post-bid negotiations.

8.3.1 Price Factors: Price factors will be weighted up to 60% in the determination of which proposals will be selected for further consideration. Each proposal will be evaluated to determine the overall cost. Factors that could impact this overall cost include, but are not limited to, the cost of energy delivery to AEP's load, capacity value, value of the associated RECs and reactive energy capability, if any. The total evaluated cost of the proposal will then be compared with other bids for overall value to AEP Ohio and their customers.

8.3.2 Non-Price Factors: The non-price factors will be weighted at least 40%, and the evaluation of these factors will involve a due diligence process

aimed at gauging the relative risks of the following factors (in no particular order of preference):

A. **Location** – The location of the project relative to CSP's and OP's service territory.

B. **Developer experience** – To help ensure a timely and successful completion of the proposed project, AEPSC strongly prefers bidders with a successful history of developing similar projects in the United States.

C. **Proposed date of Commercial Operation** – To help ensure maximum benefits to CSP's and OP's customers, AEPSC prefers proposals that provide substantial assurances that the project will be on-line no later than December 31, 2010.

D. **Time and feasibility** – AEPSC will review the timelines for acquiring, and the feasibility of obtaining, all required permits and land rights (including those required for new transmission facilities).

E. **Creditworthiness** – AEPSC prefers bidders that can reasonably demonstrate the ability to obtain credit support in the future from credit support providers (banks, parent companies, financial institutions). These credit support providers should demonstrate a high level of creditworthiness, as gauged from the Credit Application in Appendix E.

F. **Proximity and availability of transmission** – Bidders must provide the status and schedule for completion of the necessary transmission arrangements to provide the delivery of energy at the bid-specified Point of Delivery.

- G. **Property and site control** – AEPSC would prefer bids that demonstrate a high level of site control through executed land leases/easements.
- H. **Project capacity** – All proposals must offer the minimum sizes as set forth in 2.2.2.
- I. **Proven generation technology** – AEPSC will evaluate proposed technology and the commercial terms of the generation equipment supply agreement.
- J. **Level of dispatch** – AEPSC may view more favorably any dispatch flexibility provided by the bidder's proposal.
- K. **Probability of financing** – In the evaluation of proposals, AEPSC will assess the reasonableness of the proposed financing plan, project budget, pro forma financials and whether the bidder has demonstrated success in financing past projects in the United States.
- L. **Confidence in long-term energy projections** – AEPSC will factor the experience of the parties involved in making the energy projections, as well as the quality and quantity of on-site data provided, as a non-price factor.
- M. **Exceptions to REPA** – Renewable Energy Resources: AEPSC will evaluate the Exceptions to the REPA as it relates to the ability of the two parties to potentially execute an agreement.
- N. **Regulatory Considerations** - AEPSC will take into consideration projects most likely to receive regulatory approval for cost recovery.

9. Post-Bid Negotiations and Awarding of Contracts

- 9.1 AEPSC intends to negotiate both price and non-price factors during post-bid negotiations with a bidder or bidders whose proposal is or are selected for further discussions at the completion of the bid evaluation process. AEPSC would also include any additional factors that may impact the total cost or schedule of the project, and would also update its economic and risk evaluation until such time as AEPSC and the bidder(s) execute a definitive agreement(s) acceptable to AEPSC in its sole and absolute discretion.
- 9.2 Neither AEPSC nor CSP nor OP is obligated to enter into a definitive agreement with any bidder responding to this RFP and may terminate or modify this RFP at any time without liability or obligation to any respondent. AEPSC also reserves the right to negotiate with only those bidders who propose transactions that AEPSC believes propose the best combination of value to AEP Ohio and its customers.

10. Regulatory Approvals

- 10.1 Bidder agrees to cooperate, to the fullest extent necessary, to obtain any and all State, Federal, or other regulatory approvals required for the effectiveness of the REPA.
- 10.2 The REPA shall be also be dependent upon CSP and OP obtaining sufficient assurance that the costs of power and energy purchased pursuant to the REPA will be recognized for recovery in the rates charged to its jurisdictional customers. The determination of what constitutes "sufficient assurance" shall be at the sole discretion and judgment of AEPSC.

11. Extension of the Section 45 Production Tax Credit (PTC)

- 11.1 AEPSC understands the financial importance of the PTC in making renewables more affordable. In order to mitigate this uncertainty, AEPSC expects to make extension of the PTC a Condition Precedent to effectiveness of any agreement between AEPSC, CSP or OP and the Bidder.

Appendix A

Expression of Interest Form

Email to: pisimmons@aep.com

Due: By 5:00 p.m. EPT, June 19, 2008

Note that completion of all information is required.

This response is an indication of our interest in the AEPSC/AEP Ohio Request for nameplate renewable energy facilities capable of being operational by December 31, 2010. This response also establishes contact information for future communications regarding this RFP.

Company: _____

(legal name of entity of intended signatory to a contract)

Contact Name: _____

Contact Title: _____

Address: _____

City: _____

State: _____ Zip: _____

Phone Number: _____

Fax Number: _____

E-mail address: _____

Resource type:

- ☐ Solar photovoltaic or solar thermal ☐ Wind energy
☐ Hydroelectric facility ☐ Geothermal ☐ Biomass
☐ Fuel derived from solid wastes (not principally combustion)
☐ Biologically derived methane gas
☐ Energy derived from nontreated by-products of the pulping process or wood manufacturing process

AEP Affiliates Certification

Bidder does not have an affiliate relationship (whether by ownership, joint venture or other association) with AEP or any AEP affiliate; and the proposed bid is for power generated by facilities that are not owned by, or otherwise associated with AEP, or any AEP affiliate

Authorized Signature and Date _____

Appendix B-1

Bid Summary

Project Name _____

Unique Bid Name _____

Estimated Commercial Operation Date (mm/dd/yy) _____

Name Plate (MW) _____

Expected Annual Availability (%): _____

Expected Annual Production (MWh) _____

Have turbines/equipment for this project been secured, purchased?

Site Information:

Site Address/Legal Description _____

Site Geographic Location: Longitude: _____ Longitude: _____

County: _____ City: _____ State: _____ Zip: _____

Site Control: _____ Already Own Site

_____ Site Purchase Pending

_____ Currently lease site % (acres) leased _____

Is there potential for expansion? Y ___ N ___

What is possible additional acreage available? _____

Please attach a copy of all leases, easements or other ownership documentation.

Transmission Interconnection:

Point of Delivery:

Point of Interconnection with, [Insert Utility] _____

County: _____ City: _____ State: _____ Zip: _____

Substation Name: _____

Interconnection Voltage: _____

Appendix B-2

Has a PJM feasibility study been performed for the proposed project? Y___ N___

Please attach a copy of all PJM interconnection studies and / or the expected completion date. _____

PJM Interconnection queue #: _____

Please attach a layout that depicts turbines, other collection system facilities, transmission interconnection and the point of delivery.

Permits:

Have you contacted permitting agencies regarding this project, and identified the necessary permits?

City: Yes: ___ No: ___ County: Yes: ___ No: ___ State: Yes: ___ No: ___

Federal: Yes: ___ No: ___

On an additional sheet, list and describe all city, county, state and federal permits required for this project. Include: status, duration, planned steps, critical milestones and acquisition timeline.

Reliability of Proposed Technology:

Has final equipment selection been made Y___ N___

If yes, provide the major equipment information:

Quantity_____ Size _____ Manufacturer_____

Please attach a summary of the equipment warranty terms.

If no, please provide the major equipment manufacturer candidates:

1. _____

2. _____

Please attach a description of the status and scheduled selection process.

Appendix B-3 (for wind projects only)

Please provide a description of the system intended to provide real time telemetry data.

Wind Data:

Wind speed data:

Source: _____ Basis: _____

Measurement height: _____

Please attach an 8760 calendar year net hourly forecast and address an extrapolations used.

Consulting meteorologist information

Name: _____

Address: _____

Contact Number: _____

Please attach the resume of this consulting meteorologist.

Appendix C -1

Bid Price Input Sheet

(For alternative bid pricing submit a separate sheet)

2009 / 2010/ 2011 Production Year Bid Price

Period	Bid Price	Details
Premium-Peak	\$ _____ /MWh (Peak Bid Price x 1.2)	Weekdays: Jan/Feb/Jul/Aug/Dec
Peak	\$ _____ / MWh	Weekdays: Mar/Apr/May/Jun/Sep/Oct/Nov
Off-Peak	\$ 47.00 / MWh	Nights, Weekends & NERC Holidays: Jan – Dec
<i>Insert a Bid Price for each time period. Premium Peak is 120% of the Peak Bid and Off-Peak is set a \$47.00/MWh. For alternative bid pricing please include a separate sheet following the same format labeled "Alternative Bid Price Input Sheet". See 2.2.3 B for further details on price escalation beginning in 2012 of 2.25% per year.</i>		

Premium Peak – Defined as Monday through Friday, hour ending 8-23, for the months January, February, July, August and December (excluding NERC Holidays).

Peak – Defined as Monday through Friday, hour ending 8-23, for the months March, April, May, June, September, October and November (excluding NERC Holidays).

Off Peak – Defined as Monday through Friday, hour ending 1-7 and 24; Saturday, Sunday and NERC Holidays, hour ending 1-24.

These prices will be binding through October 1, 2008

Appendix C -2
Energy Input Sheet
(See attached Excel spreadsheet)

Appendix D

Mutual Confidentiality Agreement

Email to: pisimmons@aep.com
Attn: Peggy Simmons
American Electric Power Service Corporation
155 West Nationwide Boulevard
Suite 500
Columbus, OH 43215
Fax: (614) 583-1611
Due: June 26, 2008 at 5:00 p.m. EPT

This Mutual Confidentiality Agreement ("Agreement") dated as of _____, 2008 ("Effective Date") is made and entered into by and between American Electric Power Service Corporation ("AEPSC"), as agent for Columbus Southern Power and Ohio Power, collectively AEP Ohio and *insert full legal name, a(n) insert state of formation insert type of company* ("Bidder").

Recitals:

I. Bidder is or is considering submitting a proposal (the "Proposal") in response to a Request for Proposals (the "RFP") issued by AEPSC for renewable energy as described in the RFP. If submitted, the Proposal will become the property of AEPSC and shall be held confidential under terms of the RFP.

II. It may become desirable that AEPSC and Bidder exchange other confidential information pursuant to questions, responses or other communications that are not contained in the Proposal and which the parties desire to protect as confidential.

III. In addition, if the Proposal, if submitted, is selected by AEPSC, then Bidder and AEPSC will negotiate about a proposed agreement between AEPSC and Bidder to implement the Proposal (the "Proposed Agreement"). Bidder and AEPSC want

to keep all negotiations concerning the Proposed Agreement, including the Proposed Agreement itself and all drafts of the Proposed Agreement, confidential.

IV. The parties are willing to exchange such confidential information pursuant to the terms of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties agree as follows:

Section 1. Definitions.

- 1.1 (a) "Confidential Information" means any information that is disclosed by the Disclosing Party to the Receiving Party or its Representatives in connection with the RFP or any Proposed Agreement (collectively, the "Transaction"), whether before or after the date hereof and irrespective of the format in which the information is provided. For avoidance of doubt, "Confidential Information" includes:
- (i) Written information or machine-readable data, including questions, responses or communications in connection with AEPSC's RFP or any Proposed Agreement, notes, reports, assessments, specifications, drawings, financial statements and projections, software and databases, customer information, sales and marketing strategies, and any other written information or machine-readable data;
 - (ii) Orally conveyed information, including but not limited to demonstrations that are directly related to written or other tangible Confidential Information;
 - (iii) Any hardware, including but not limited to samples, devices and any other physical embodiments delivered to the Receiving Party;
 - (iv) Any Evaluation Material; or
 - (v) The existence of this Agreement, the terms of this Agreement and any Proposed Agreement, including all drafts of the Proposed Agreement and all negotiations concerning the Proposed Agreement, that may arise stemming from the Bidder's Proposal.

(b) "Confidential Information" does not include information which:

- (i) is, or subsequent to disclosure becomes, part of the public domain through no fault of the Receiving Party;
- (ii) is lawfully disclosed to the Receiving Party by a third party which, to the knowledge of the Receiving Party, does not have a confidentiality obligation to the Disclosing Party;
- (iii) was lawfully in the possession of the Receiving Party prior to disclosure by the Disclosing Party; or
- (iv) is lawfully and independently developed by the Receiving Party without use of the Confidential Information disclosed by the Disclosing Party.

1.2 "Disclosing Party" means the party disclosing Confidential Information.

1.3 "Evaluation Material" means notes, reports or other documents which reflect, interpret, evaluate, include or are derived from the Confidential Information.

1.4 "Receiving Party" means the party receiving Confidential Information.

1.5 "Representatives" means a party's employees, officers, directors, attorneys, accountants, consultants, advisors and agents (including potential lenders, equity partners, underwriters, or other parties involved in the Transaction for the party), and the party's affiliates and the employees, officers, directors, attorneys, accountants, consultants, advisors and agents thereof.

Section 2. Confidentiality. Except as provided in Section 5, the parties hereby agree that the Confidential Information will be kept confidential during the term of this Agreement. The parties also agree that without the prior written consent of the Disclosing Party, the Confidential Information will not be disclosed by the Receiving Party, in whole or in part, to any other person except as provided herein. Each party shall use the same

care in protecting the other's Confidential Information as it uses to protect its own confidential information, provided that neither party shall use less than reasonable efforts to protect the other's Confidential Information. Notwithstanding the foregoing, the Receiving Party may (a) disclose Confidential Information to its Representatives whose access is necessary to conduct the evaluations and negotiations in connection with the Transaction, or for supervisory, regulatory or similar purposes, and who have been informed of and have agreed to abide by the confidentiality restrictions contained in this Agreement and (b) make a limited number of copies of the Confidential Information in order for the Receiving Party to adequately use the Confidential Information subject to the terms and conditions of this Agreement. Each party agrees to be responsible for the actions, uses and disclosures of any of its Representatives in accordance with the terms and restrictions of this Agreement.

Section 3. Ownership and Use of Confidential Information. All Confidential Information (except Evaluation Material) shall remain the property of the Disclosing Party. No license or other rights under any patents, trademarks, copyrights or other proprietary rights is granted or implied by the disclosure of the Confidential Information. Neither party shall use the Confidential Information for any purpose other than for evaluation of and negotiations relating to the Transaction.

Section 4. Disposition of Confidential Information. The Receiving Party, upon written request from the Disclosing Party, shall promptly return or destroy all Confidential Information in its possession; provided, however, with respect to Evaluation Materials, the Receiving Party may at its discretion destroy such Evaluation Material. If requested by the Disclosing Party, the Receiving Party shall provide the Disclosing Party with a certification that all Confidential Information and Evaluation Material has either been returned or destroyed, as appropriate. Notwithstanding the foregoing, the Receiving Party may retain one copy of the Confidential Information solely for archival purposes and for the purpose of demonstrating compliance with this Agreement. The return or destruction of the Confidential Information shall not extinguish any rights or obligations under this Agreement with respect to the Confidential Information.

Section 5. Legally Required Disclosures. If the Receiving Party or its Representatives become subject to a bona fide requirement or request by any regulatory,

governmental, judicial or supervisory authority (by subpoena, oral deposition, interrogatories, request for production of documents, civil investigative demand, administrative order or otherwise), to disclose any of the Confidential Information, or if such disclosure is necessary in order to obtain or maintain regulatory or governmental approvals, applications or exemptions, the Receiving Party will provide the Disclosing Party with as much advance notice as and to the extent as permitted and practicable to afford the opportunity to seek an appropriate protective order or other appropriate remedy to prevent the disclosure. The Receiving Party or any of its Representatives being compelled to disclose such Confidential Information shall reasonably cooperate with the Disclosing Party, at its expense, to enable the Disclosing Party to obtain a protective order or other reliable assurance that confidential treatment will be accorded the same. If such protective order or other appropriate remedy is not obtained, the Receiving Party or any of its Representatives being compelled to disclose such Confidential Information may disclose the information without liability hereunder provided that the party may only furnish that portion of the Confidential Information which is legally required or necessary.

Section 6. Term. If the Bidder's Proposal and/or related negotiations do not result in a final agreement, then this Agreement is effective for three (3) years from the Effective Date stated above. If the negotiations result in a final agreement, then this Agreement is effective until three (3) years after the termination of the final agreement.

Section 7. No Warranties. The Disclosing Party makes no representations or warranties as to the reliability, accuracy or completeness of the Confidential Information. The Disclosing Party shall not be subject to any liability to the Receiving Party based on the Receiving Party's use of the Confidential Information.

Section 8. Remedies. The parties acknowledge that improper or unauthorized use or disclosure of Confidential Information could cause irreparable harm to the Disclosing Party and that monetary damages would not be an adequate remedy for a breach of this Agreement. In the event of any breach or threatened breach of this Agreement, the non-breaching party shall be entitled to pursue injunctive and other equitable relief, and the breaching party agrees to waive any requirement for the posting of a bond in connection

with such remedy. Such injunctive and equitable relief shall not be deemed to be the exclusive remedy for a breach of this Agreement, but shall be in addition to all other available remedies. In no event shall either party be liable to the other for any incidental, indirect, special, punitive or consequential damages (including without limitation damages for lost profits).

Section 9. Relationship of Parties. Neither party shall have any obligation to commence or continue discussions or negotiations, to exchange any Confidential Information, to reach or execute any agreement with the other party, to refrain from engaging at any time in any business whatsoever, or to refrain from entering into or continuing any discussions, negotiations or agreements at any time with any third party, until each party executes a definitive agreement. Until such definitive agreement is executed, neither party shall have any liability to the other party with respect to the Transaction except as set forth in this Agreement. Neither party shall have any liability to the other party in the event that, for any reason whatsoever, no such definitive agreement is executed.

Section 10. General.

- 10.1 Governing Law.** This Agreement shall be construed and enforced in accordance with the laws of the State of [New York].
- 10.2 Entire Agreement.** This Agreement constitutes the entire Agreement between the parties, supersedes any prior understandings or representations relating to the confidential treatment of the Confidential Information, and shall not be modified except by a written agreement signed by both parties.
- 10.3 Assignability.** This Agreement may not be assigned by either party without the prior written consent of the other party; provided, however, that AEPSC may assign this Agreement to one or more of its affiliated companies.

- 10.4 Severability.** All provisions of this Agreement are severable, and the unenforceability of any of the provisions of this Agreement shall not affect the validity or enforceability of the remaining provisions of this Agreement.
- 10.5 No Waiver.** Failure of either party to insist upon strict performance of any of the terms and conditions shall not be deemed to be a waiver of those terms and conditions.
- 10.6 Counterparts and Faxed Signatures.** This Agreement may be executed in counterparts, and in the absence of an original signature, faxed signatures will be considered the equivalent of an original signature.
- 10.7 Notices.** Notices shall be in writing and shall be sent to the addresses listed below, either by personal delivery, by the U.S. Mail, overnight mail, fax or other similar means. All notices shall be effective upon receipt. The parties have signed this Agreement effective as of the later signature date set forth below.

**American Electric Power Service
Corporation, as agent for
Columbus Southern Power Company
and Ohio Power Company, collectively
AEP Ohio**

BIDDER: insert full legal name

By: _____

By: _____

Print Name: _____

Print Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Bidder Address:

Attn: _____

Appendix E

Bidder's Credit-Related Information

Provide the following data to enable AEP to assess the financial viability of the bidder as well as the entity providing the credit support on behalf of the bidder (if applicable). Include any additional sheets and materials with this Appendix as necessary. As necessary, please specify whether the information provided is for the bidder, its parent or the entity providing the credit support on behalf of the bidder.

Full Legal Name of the Bidder: _____

Type of Organization: (Corporation, Partnership, etc.) _____

Bidder's Percent Ownership in Proposed Project: _____

Full Legal Name(s) of Parent Corporation _____

Entity Providing Credit Support on Behalf of Bidder (if applicable) _____

Address for each entity referenced (provide additional sheets, if necessary) _____

Type of Relationship _____

Current Senior Unsecured Debt Rating from each of S&P and Moody's Rating Agencies (specify the entity these ratings are for) _____

Bank References & Name of Institution: _____

Bank Contact: Name, Title, Address and Phone Number: _____

Pending Legal Disputes, if any (describe): _____

Financial Statements: (Please provide copies of the Annual Reports for the three most recent fiscal years and quarterly report for the most recent quarter ended, if available. If available electronically, please provide link.

Appendix F

Bidder Profile

Please list Bidder's Affiliate companies:

Please attach a summary of Bidder's background and experience in Renewable Energy Resource projects.

References:

1. Company

Contact Name;

Contact Number:

Project:

2. Company

Contact Name;

Contact Number

Project:

3. Company

Contact Name;

Contact Number

Project:

Appendix G

(Financing Plan)

Appendix H

Renewable Energy Purchase Agreement (REPA)

A copy of the Form REPA is available to Registered Bidders.
Bidders may register by logging into www.aepohio.com/go/rfp/